

CHILD LIFE PRACTICE & TRAUMA-INFORMED CARE: AN EXPLORATORY STUDY
OF THE ROLE OF CHILD LIFE SPECIALISTS

by

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Current and past research provides evidence that trauma has a serious impact on children and adolescents that can follow them well into adulthood. The idea of trauma-informed care was developed for healthcare professionals to be better able to provide care for those who have experienced trauma and minimize negative associated symptoms. This cross-sectional study was conducted to explore professional preparedness of child life specialists to include trauma-informed care into their current scope of practice. An online survey was created to assess child life specialists' education, training, and perceptions of trauma-informed care in addition to demographic info. Data was collected via multiple online forums and resulted in 81 valid survey participants. Results of the study indicate that child life specialists are well prepared to include trauma-informed care into their scope of practice based on their reported levels of education and training. While trauma-informed care is a newer framework in healthcare, younger child life specialists felt more prepared to include trauma assessment into practice and overall hold positive perceptions of trauma-informed care. Child life specialists recognized the value of trauma-informed care indicating that it can enhance the visibility of child life among the medical team, while benefiting the individual patient health outcomes. Majority of child life specialists in the study believe that all pediatric patients should be assessed for trauma. More research on

trauma-informed care within all healthcare professions is necessary to determine the best solution for trauma-informed care implementation. Child life specialists require additional training to utilize different trauma-informed care assessment tools and protocols. Additionally, a universally accepted trauma assessment protocol and training would help medical professionals to determine who is responsible to conduct trauma assessment and improve trauma-informed care implementation.

Keywords: trauma, adverse childhood experiences, children, adolescents, trauma-informed care, child life, assessment, training, education

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TABLE OF CONTENTS

TITLE PAGE.....	i
COPYRIGHT.....	ii
ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
CHAPTER 1: INTRODUCTION.....	1
CHAPTER 2: LITERATURE REVIEW.....	4
Defining Trauma.....	4
Types of Trauma.....	6
Impact of Trauma on Children and Adolescents.....	8
Trauma-Informed Care.....	12
Child Life and Trauma-Informed Care.....	19
CHAPTER 3: THEORETICAL PERSPECTIVE.....	23
Current Study.....	25
Hypotheses.....	25
CHAPTER 4: METHODS.....	27
Participants and Procedure.....	27
Recruitment.....	27
Instruments.....	28
Demographic Information.....	28
Information on Child Life Role.....	28
Trainings, Assessment, and Implementation.....	29

Perceptions of Trauma-Informed Care.....	29
Open-Ended Comments.....	29
Reliability.....	30
Data Analysis.....	30
CHAPTER 5: RESULTS.....	31
Participants.....	31
Descriptive Statistics.....	31
Demographics.....	31
Information on Child Life Role.....	34
Education and Training on Trauma-Informed Care.....	34
Perceptions of Trauma-Informed Care.....	39
Preparedness to Include Trauma-Informed Care into Scope of Practice.....	39
Perceptions of Child Life Specialists Among the Interdisciplinary Team.....	40
Open-Ended Comments.....	40
Analysis.....	42
CHAPTER 6: DISCUSSION.....	45
Education and Training in Trauma-Informed Care.....	46
Perceptions of Trauma-Informed Care.....	48
Preparedness to Implement Trauma-Informed Care into Child Life Scope of Practice...	50
Perceptions of Child Life Among the Interdisciplinary Team.....	51
Limitations.....	52
Implications.....	53
CHAPTER 7: CONCLUSION.....	55

REFERENCES.....	56
APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL.....	68
APPENDIX B: SURVEY QUESTIONS.....	69
APPENDIX C: SURVEY FLYER.....	75
APPENDIX D: PARICIPATION CONSENT.....	76

LIST OF TABLES

1. Demographic Characteristics of the Participants.....	33
2. Types of Training or Continuing Education in Trauma-Informed Care.....	36
3. Pearson’s Correlations Among Study Variables.....	44

LIST OF FIGURES

1. Knowledge of Trauma-Informed Care Approaches & Assessment Tools.....37
2. Perceptions of Child Life Among the Interdisciplinary Team.....41

CHAPTER 1: INTRODUCTION

The prevalence of trauma and other adverse childhood experiences is becoming a growing problem for children and adolescents. In the United States, approximately 45% of children and adolescents have experienced at least one adverse childhood experience (Sacks & Murphy, 2018). One in ten children have experienced three or more adverse experiences (Sacks & Murphy, 2018). Many of these traumatic experiences occur by age 16 (SAMHSA, 2021). Exposure to trauma is still common in society despite the growing body of evidence that confirms the harmful effects it has on today's youth. The Adverse Childhood Experience (ACEs) study conducted by Kaiser and colleagues (1998) was an innovative, longitudinal study that was the first to highlight the effects of common adverse experiences on youth. Research has found that experiencing trauma or other adverse experiences during childhood or adolescence can cause negative outcomes involving behavioral problems, anxiety, depression, substance abuse, post-traumatic stress disorder (PTSD), suicidal ideation, and higher risk of developing medical problems in adulthood (Leverett et al., 2020; Meeker et al., 2021; Nugent et al., 2016; Ruch et al., 2021; Vacek & Whisman, 2021). If these children and adolescents continue to go unnoticed and untreated, these negative outcomes can follow them well into adulthood. While experiencing trauma and other adverse experiences is inescapable in some cases, many of these negative outcomes of trauma can be prevented or treated through properly informed interventions.

Many professionals that work with children and adolescents are not aware of the prevalence and effects of trauma and adverse childhood experiences (Marsac et al., 2015; Martin et al., 2017). In the last twenty years, some research has been done on how to best inform healthcare professionals that work with trauma exposed children and adolescents. This analysis has led to the development of trauma-informed care which is a care practice that can be

implemented into any professional setting. Trauma-informed care has previously been defined as an approach that acknowledges “the widespread impact of trauma and understands potential paths for recovery” (SAMHSA, 2014, p. 9). Regardless of the recognized benefits and urges from research, implementation of trauma-informed care is slow-moving. Reported explanations for this delay in implementation from healthcare and human service professionals who work directly with children and families include lack of training in trauma awareness, time constraints, and knowledge or familiarity with proper assessment tools.

There has been some debate in trauma research on who should be implementing trauma-informed care assessments (Bethell, 2017; Marsac et al., 2015; Racine et al., 2019; Spates et al., 2007). While all healthcare and human service professionals (physicians, nurses, therapists, social workers, child life specialists) should be trained in basic trauma-informed care procedures, not all professionals can effectively assess for trauma and other adverse experiences in their daily roles (Crouch et al., 2019; Leverett et al., 2020; Thompson et al., 2020). A possible solution to the issues surrounding trauma-informed care would be to determine a position that would be primarily responsible for trauma assessment. Among human service professionals, child life specialists are professionals who could effectively integrate trauma-informed assessment into their scope of practice.

Child life specialists work with children and families to facilitate coping mechanisms, reduce the negative effects of hospitalization and other stressors, provide support to the child and family, and promote positive child development. Child life specialists are trained in multiple areas including child development, assessment, counseling, education, patient-centered care, and family-centered care (Thompson et al., 2020). Although they generally work in clinical settings, child life has been adapted to many alternate settings. Taking into consideration how child life

specialists work on the front lines with children and families, these professionals should be trained in trauma-informed care and assessment.

Having further knowledge and training on trauma and ACEs can help child life specialists build better relationships with children and their families, become more effective at assessments, develop successful interventions, and increase the significance of the role of child life specialists. Although some effort has been made to introduce trauma-informed care to the field of child life, there is little research that examines how well child life specialists are trained in trauma-informed care and use of trauma assessment tools such as the ACEs questionnaire. The purpose of this study was to examine child life specialists' role in trauma-informed care. This study also investigated child life specialists' level of training, understanding, and confidence in their ability to assess for trauma and gather opinions of whether or not assessment of trauma could fall within the scope of child life. This information could be used to adapt care practices to better account for the negative effects of trauma and adverse experiences which in turn could aid in the development more effective treatments and interventions for children and adolescents. The following section includes a review of literature on trauma, adverse experiences, negative outcomes, and trauma-informed care.

CHAPTER 2: LITERATURE REVIEW

Defining Trauma

Although there has been an adequate amount of research conducted on trauma and adverse experiences, the term trauma still lacks a universal definition. Multiple barriers exist that inhibit fields from creating an agreed upon definition of trauma. One reason is that the term trauma is often used interchangeably with other terms such as disaster, stressor, or adverse experiences which make it difficult to determine a definitive definition (Schild & Dalenburg, 2016; Kalmakis & Chandler, 2014). Some fields define trauma as an unexpected negative event that is uncontrollable (Schild & Dalenburg, 2016; Leverett et al., 2020). Some definitions of trauma describe it as an event that poses a threat to someone's life or safety (Black et al., 2012). Other definitions of trauma describe it as a period of prolonged stress that, over time, can have negative effects on coping and even brain structures (Martin et al., 2017; Schild & Dalenburg, 2016; Wamser-Nanney, 2016). Within the medical field, trauma refers to serious or high-risk injuries (After Trauma, n.d).

Another explanation for the difficulty surrounding the definition of trauma is that trauma is subjective. Each person experiences and is impacted by trauma in their own individualistic way. Schild & Dalenburg (2016) point out that what may seem traumatic to one person may not seem traumatic to another. Some researchers (Schild & Dalenburg, 2016; Kalmakis & Chandler, 2014) suggest that this discrepancy in trauma makes compiling a complete list of traumatic, adverse events nearly impossible due to differences between individuals, environments, and overall context. Given the subjectivity of trauma, it is important to understand how trauma or adverse experiences impact children and adolescents. For the purpose of this study, the definition of trauma comes from the National Child Traumatic Stress Network (NCTSN) which defines a

traumatic event as “a frightening, dangerous, or violent event that poses a threat to a child’s life or bodily integrity” (NCTSN, n.d.). An event depicted by this definition that is experienced by a loved one is also considered traumatic for children and adolescents.

One characteristic that is central to trauma and adverse events is experiencing stress. Though some stress is considered good if it is short-term and minor, some stress can be considered toxic. This kind of stress is caused by either a traumatic event or by long-term exposure to high levels of stress. Exposure to adverse traumatic events during childhood and adolescence has been linked to changes in brain integrity and other neurological structures (Wamser-Nanney, 2016; Bremner, 2006; Chapelle et al., 2020). When an individual experiences excessive stress the stress response system is engaged. This system releases hormones such as cortisol and adrenaline to initiate physiological responses to help the individual return to equilibrium, also referred to as homeostasis (Romano, 2018). An example of this is the ‘fight, flight, or freeze’ response. Some adverse events can produce long-term stress which equates to chronic activation of the stress response system (Martin et al., 2017). This type of stress is referred to as toxic stress (Kerker et al., 2015; Shonkoff & Garner, 2012; Romano, 2018).

Multiple important parts of the brain are negatively impacted by toxic stress levels (Bremner, 2006). Specifically, the hippocampus, which is the portion of the brain responsible for regulating cortisol, faces difficulty when an individual encounters constant stress. Other areas of the brain including the corpus callosum, cerebellum, and prefrontal cortex all experience difficulty when dealing with toxic stress. Some structures even experience decreased size and volume as a result of toxic stress (Chapelle et al., 2020; Shonkoff & Garner, 2012). This in turn affects brain functioning and can cause epigenetic changes in child and adolescent brains. Epigenetic changes can alter individuals’ genes by turning them on or off (Chapelle et al., 2020).

These changes in gene expression can even be passed down to future generations of children and is referred to as intergenerational transmission of trauma (Yehuda & Lehrner, 2018).

Types of Trauma

Research literature has classified trauma into two main categories: a single traumatic event and complex trauma. Trauma can also be described as acute, chronic, interpersonal, and non-interpersonal. Complex trauma has been defined as trauma that is repetitive and chronic, extending over a long period of time (Kliethermes et al., 2014; Martin et al., 2017; Wamser-Nanney, 2016). The term complex trauma is used synonymously with the term polytraumatization and has been used interchangeably in research literature (Gustafsson et al., 2009; Kliethermes et al., 2014). According to the American Psychological Association, it is more likely that a child or adolescent has experienced more than one traumatic event before the age of 18 (APA, 2011). In 2013, approximately 13% of adolescents had experienced complex trauma (Darnell et al., 2018). The prevalence of trauma in today's world is much greater than many realize. Children and adolescents who experience complex trauma are more likely to develop negative health outcomes than those who experience a single traumatic event (Beal et al., 2019; Lam et al., 2015; Martin et al., 2017; Wamser-Nanney, 2016). Complex trauma is often associated with interpersonal trauma, or trauma that involves or is caused by other people (Gustafsson et al., 2009; Lam et al., 2015; Wamser-Nanney, 2016; Wamser-Nanney & Vandenburg, 2013).

The presentation of the adverse childhood experiences (ACEs) study brought attention to the hardships and trauma that children and adolescents face. This breakthrough study highlighted the impact adverse trauma experienced before the age of eighteen has on health outcomes in adulthood (Felitti et al., 1998). As mentioned previously, the term 'adverse experiences' is often

used interchangeably with the term ‘trauma’. Though the terms are very similar, there is some research that argues the terms are not equivalent. One study describes the difference between the two terms by developing an overall definition for adverse childhood experiences (Kalmakis & Chandler, 2014). These researchers determined that the term trauma referred more to events experienced by the individual child while adverse childhood experiences are ones that involve the family unit that the child lives in (Kalmakis & Chandler, 2014). An example used by those researchers is a child living with a parent that uses drugs is not necessarily a traumatic event, however, it is considered an adverse experience that not all children will have. The operational definition of ACEs developed by Kalmakis and Chandler (2014) is “childhood events, varying in severity and often chronic, occurring within a child family or social environment that causes harm or distress, thereby disrupting the child's physical or psychological health and development” (Kalmakis & Chandler, 2014, p. 1495).

Moving forward, this study refers to both trauma and adverse childhood experiences as both are becoming more prevalent for children and adolescents. In 2018, it was reported that 24% of children from birth to 17 in the U.S. had experienced one ACE. It was also reported that 11% of children in the U.S. had experienced two ACEs and 10% had experienced at least three ACEs (Sack & Murphey, 2018). In the original ACEs study, the types of experiences were separated into the following categories: abuse, neglect, and family/household challenges (Meeker et al., 2021). Since the original ACE study, various versions of the ACEs questionnaire have been developed.

Researchers studying trauma have begun investigating if categories of ACEs co-occur to make assessment easier. Scott and colleagues (2013) found that multiple ACEs co-occur including physical and emotional abuse, sexual and physical abuse, emotional abuse and

domestic violence, domestic violence and living with someone who has a mental illness, living with someone who is incarcerated and substance abuse, and substance abuse and living with one parent. Another study reported that the adverse events that most often occurred together were difficulty getting by on family income and having separated or divorced parents (Thompson et al., 2020).

The National Child Traumatic Stress Network has classified the following as common sources of trauma: bullying, community violence, complex trauma, disasters, early childhood trauma, intimate partner violence, medical trauma, physical abuse, sexual abuse, refugee trauma, sex trafficking, terrorism and violence, and traumatic grief (NCTSN, n.d.). Past research has concluded that it is more common for females to experience sexual abuse and males to experience physical abuse (Lewis et al., 2010). One study that assessed adverse childhood experiences (ACEs) reported that the most common experienced ACE for adolescents was not living with both parents (Meeker et al., 2021). In 2021, it was reported that approximately 55.7% of adolescents ages 12-17 years old have experienced at least one abuse or neglect-related adverse event (Meeker et al., 2021).

Impact of Trauma on Children & Adolescents

It is confirmed that trauma can have a wide variety of effects on individuals of any age. In the last twenty years, a copious amount of research has been done to understand the negative impact traumatic events have on children and adolescents. Experiencing adverse events during childhood and adolescence has been found to cause negative health outcomes as these individuals move into adulthood. According to the original study on ACEs, the number of exposures to adverse experiences correlates to a higher risk for developing behaviors such as alcohol and drug abuse as well as increased risk for obesity, sexually transmitted infections,

depression, anxiety, and suicidal ideation during childhood and adolescence (Felitti et al., 1998). Felitti and colleagues (1998) also reported that children and adolescents who have higher ACE scores are at a greater risk for developing diabetes, chronic bronchitis, heart disease, and even some types of cancer in adulthood.

Multiple studies have confirmed that a dose-response relationship exists between traumatic, adverse experiences and negative health and behavioral outcomes (Darnell et al., 2018; Felitti, 2017; Felitti et al., 1998; Grasso et al., 2016; Kalmakis & Chandler, 2014; Kliethermes et al., 2014; Leverett et al., 2020; Romano, 2018; Scott et al., 2013). Any kind of exposure to trauma can impact a child's physical, social, and emotional development (Vibhakar et al., 2019). For adolescents, witnessing or being victim to a traumatic event can influence their sense of purpose in life (Pfund et al., 2020).

Experiencing traumatic events or ACEs during childhood and adolescence can impact every domain of human development. In terms of physical development, multiple studies have found that early exposure to traumatic events impacts structures of the brain as well as motor skills (Lam et al., 2015; Marcellus & Cross, 2016; Putnam, 2006). In a study conducted in 2016, Marcellus and Cross confirmed that exposure to toxic stress as a result of trauma during a developmental sensitive period can lead to decreased brain sizes in children. This can be harmful to other domains of development considering that the brain grows rapidly during the first five years of a child's life (Bremner, 2006; Enlow et al., 2012; Putnam, 2006).

When considering social development, exposure to trauma can negatively impact attachment behaviors and other social skills that aid children and adolescents in navigating peer relationships. When studying how ACEs scores influence social development, Kerker and colleagues (2015) found a significant correlation between ACEs and social development only

among three-to-five-year-olds. In 2006 it was reported that the longer children live in abusive or neglectful environments, the greater the social deficits (Putnam, 2006). Martin and colleagues (2017) discovered that traumatized children exhibit isolation and withdrawal from their family and peers.

The impact exposure to trauma and ACEs has on emotional development for children and adolescents is substantial. In a study focusing on complex trauma, Kliethermes and colleagues (2014) found that children and adolescents who experienced complex trauma exhibited deficits in emotional development. Specifically, complex trauma can impair emotional regulation for children and adolescents in terms of coping skills and being able to recognize emotions (Kliethermes et al., 2014). These researchers explain that lacking these skills can make navigating social situations difficult for children and adolescents which in turn puts them at a greater risk (Kliethermes et al., 2014). In another study conducted in 2021, Vacek and Whisman measured serious emotional disturbances and potentially traumatic events in adolescents. Their results indicated that 88% of the overall sample of adolescents who face serious emotional disturbances have experienced at least one traumatic event in their lives (Vacek & Whisman, 2021).

For children and adolescents, research shows that trauma exposure can negatively impact cognitive development (Enlow et al., 2012; Kliethermes et al., 2014; Lam et al., 2015; Meeker et al., 2021; Price et al., 2013). Meeker and colleagues (2021) conducted a study on the impact of ACEs on adolescents in a community sample and found that adolescents who had experienced at least one ACE were more likely to report cognitive difficulties. They also reported that females were more likely than males to report both cognitive difficulties and depressed mood (Meeker et al., 2021). Another study that was done to understand how interpersonal trauma influences

cognitive development for school age children found that trauma-induced post-traumatic stress disorder may influence certain cognitive capabilities such as engaging the environment and the ability to learn new skills (Enlow et al., 2012). Exposure to trauma can also influence cognitive development in terms of decreased school performance for some adolescents (Hildenbrand et al., 2019; Leverett et al., 2020).

Every child experiences trauma differently and exhibits individualized responses to those events. These responses can range from minor symptoms to major symptoms. Previous research has found that exposure to trauma and ACEs at a young age can increase the likelihood of children and adolescents developing negative behaviors including anxiety, depression, substance abuse, post-traumatic stress disorder (PTSD) and even attempted suicide. Although some symptoms of trauma exposure are more severe than others, all symptoms have an impact on children and adolescents and should be considered by professionals.

Taking into account the less severe symptoms of trauma, internalizing behaviors, like anxiety and withdrawal, and externalizing behaviors, such as aggression and delinquent behaviors typically emerge during childhood and adolescence and can follow individuals well into adulthood (Darnell et al., 2018). One study that was examining the effect of trauma on children and adolescents ages 4-18 found that younger children and those who struggle with emotionality have a higher risk of developing both internalizing and externalizing behaviors (Price et al., 2013). In a study conducted by De Silva and colleagues (2020), higher levels of internalizing behaviors were reported by female adolescents while male adolescents reported higher levels of externalizing behaviors. Another study found that those with higher levels of externalizing behaviors can lead to problems such as substance abuse which puts adolescents at risk for experiencing repeated trauma (Darnell et al., 2018).

Further examination of more extreme symptoms of trauma exposure and adverse experiences indicate that the prevalence of PTSD in children and adolescents is on the rise as PTSD is commonly reported in response to trauma (Chapelle et al., 2020; Darnell et al., 2018; Ponnampereuma et al., 2018; Vacek et al., 2021). One study reported that 8% of traumatized youth will be diagnosed with post-traumatic stress (Leverett et al., 2020). The traumatic events most often associated with PTSD is experiencing or witnessing violence (Vibhakar et al., 2019). This can include physical abuse, domestic violence, and community violence. Because trauma exposure is becoming more prevalent in today's world, researchers have developed sub-categories of PTSD research that includes pediatric post-traumatic stress (PPTS) and pediatric medical traumatic stress (PMTS).

In sum, trauma has a profound effect on all aspects of child development. Healthcare and human service workers are the professionals that have the ability to help those who have experienced high levels of trauma and adverse experiences. It is the responsibility of these professionals to identify those who have experienced trauma, work to help reduce the potential risk of negative outcomes and provide support for today's youth. In order to properly help these individuals, professionals need to be skilled in assessing and identifying those impacted by trauma and be able to provide proper recommendations and effective treatments/interventions for children and adolescents.

Trauma-Informed Care

Considering the negative effects trauma has on children and adolescents, healthcare organizations must find methods to help these individuals. If healthcare professionals were able to identify those who have been exposed to trauma, interventions could be implemented to reduce these negative health outcomes and possibly prevent them from continuing into

adulthood. Multiple researchers have advocated for early assessment for trauma exposure and adverse childhood experiences (Grasso et al., 2016; Kerker et al., 2015; Lam et al., 2015; Meeker et al., 2021). Researchers believe that assessment could help in developing effective interventions for trauma and adverse experiences which could help reduce the risk for negative health outcomes (Beal et al., 2016; Goldstein et al., 2018; Grasso et al., 2016; Lam et al., 2015; Leverett et al., 2020; Meeker et al., 2021). One study that examines complex trauma and the outcomes that occur advises that assessment for trauma should incorporate ideas from multiple fields and include knowledge on trauma, child development, attachment, family systems, and welfare (Kliethermes et al., 2014).

One approach that has gained popularity in research is the concept of trauma-informed care. Trauma-informed care is a framework that was developed for healthcare professionals to be better able to provide care for individuals who have experienced trauma and minimize negative trauma symptoms (Bruce et al., 2018; Hildenbrand et al., 2019; Marsac et al., 2015; Weiss et al., 2017). Trauma-informed care involves incorporating knowledge of trauma into routine care by recognizing that many individuals more than likely have a history of trauma (Marsac et al., 2015; Racine et al., 2019; Weiss et al., 2017). The most commonly referred to approach to trauma-informed care, developed by the Substance Abuse and Mental Health Services Administration (SAMHSA), includes the following four key assumptions: (1) realizing the effect trauma has on individuals, families, and other groups, (2) recognizing the common signs of trauma and associated symptoms, (3) integrating knowledge of trauma into all policies and procedures, and (4) actively working to avoid re-traumatization (SAMHSA, 2014).

Trauma-informed care attempts to understand an individual's experience, behaviors, and coping mechanisms in order to provide better treatment and interventions aimed at reducing

negative health outcomes (Menschner & Maul, 2016; Kawarm & Martinez, 2016; Weiss et al., 2017). Professionals are able to incorporate this approach into practice by following the six principles associated with trauma-informed care which include (1) safety, (2) trustworthiness and transparency, (3) peer support, (4) collaboration, (5) empowerment, voice, and choice, and (6) cultural, historical, and gender issues (SAMHSA, 2014). In a study that examines trauma-informed care from a social work perspective, the authors refer to trauma-informed care as “a shift in thinking about how to view people and their problems that can be incorporated into any therapy” (Kawarm & Martinez, 2016, p. 18).

One approach to trauma-informed care that has been mentioned in research is the “DEF” protocol that stands for distress, emotional support, and family (Health Care Toolbox, n.d.). The idea behind this approach is once a health care provider assesses for the basic ABCs of health (airway, breathing, and circulation) they can then use the ‘DEF’ approach to further care for patients by addressing potential traumatic stress (Bruce et al., 2018; Health Care Toolbox, n.d.; Hildenbrand et al., 2019; Marsac et al., 2015). This evidence-based approach is one that can be used by all professionals working with children and adolescents no matter the field (Hildenbrand et al., 2019; Marsac et al., 2015).

A study conducted by Weiss and colleagues (2017) utilized another approach to trauma-informed care called the Institute for Healthcare Improvement’s Framework for Spread (FSS). The objective of this approach is to spread information on trauma-informed care. This three-step method helps introduce trauma-informed practices throughout the entire healthcare system to aid in understanding and application. This study was done to examine the effectiveness of this three-step trauma-informed approach for all healthcare workers (nurses, physicians, social workers, child life specialists, administrators). The steps in the FSS approach include preparing for the

spread of relevant information, establishing aims for spread, and developing, executing, and refining the plan for spreading information on trauma-informed care. Results of this study indicate that 90% of the participants felt they had learned new skills and were highly satisfied with the trainings (Weiss et al., 2017).

Expanding pediatric care practices to incorporate trauma-informed care is similar to when fields expanded to include family-centered care. These care practices are comparable in the sense that both family-centered care and trauma-informed care consider outside factors that influence individuals (Bruce et al., 2018; Marsac et al., 2015). Taking this into consideration, adaptation of care practices should include both trauma-informed care and family-centered care practices. In one study on trauma-informed care in pediatric settings, Marsac and colleagues (2015) encourage the utilization of both trauma-informed care and family-centered care and report that doing so can increase the quality of care and promote positive well-being for the healthcare provider.

The support for trauma-informed care is evident among research and even in some legislation. In 2017, a senate resolution was proposed and agreed upon that “recognizes the importance and effectiveness of trauma-informed care... at the federal level.” (S. Resolution 346, 2017). This piece of legislation goes on to acknowledge the negative impacts of ACEs on children and adolescents and identifies the need for more programs and resources (S. Resolution 346, 2017). Racine and colleagues (2019) conducted a study on the implementation of trauma-informed care and reported that twenty-seven states have developed resolutions for trauma-informed care that involve acknowledgement of ACEs.

More recently, a study by Beuelieu-Jones and colleagues (2022) was done to evaluate a trauma-informed care protocol known as the PAUSE protocol that was created for the

emergency department. This stands for pain/privacy, anxiety/IV access, urinary catheter/rectal exam/genital exam, support for family or staff, and explain to patient/engage with PICU team. According to the study, this approach was designed to assess for current trauma and be conducted in less than five minutes (Beuelieu-Jones et al., 2022). While this protocol is a step in the right direction, the short amount of time in which professionals have to go through this protocol could lead to trauma symptoms being overlooked. This approach also fails to consider previous traumas that could be contributing to certain trauma symptoms. A more in-depth trauma assessment is needed in pediatric healthcare.

Despite the support for trauma-informed care, few clinics and medical offices are incorporating trauma assessment into their primary care practice (Bruce et al., 2019; Felitti, 2017; Harper, 2019). Beuelieu-Jones and colleagues (2022) reported that only 50% of trauma centers in the United States ask children or parents about trauma symptoms. Research has shown that reasons for this lack of implementation of trauma-informed care includes disputes on how to assess, lack of knowledge and skills, and time constraints. Disputes on assessment primarily involve which tools are best to use and when to put them to use. While professionals are encouraged to use the ACEs questionnaire, research has identified limitations within the ACEs questionnaire as a universal assessment tool for children and adolescents (Harper, 2019; Racine et al., 2019).

In their study on ACEs among children and adolescents who are considered at-risk, Scott and colleagues (2013) recognized that one limitation of their study was that reported ACEs among young children were based on caregiver reports. The authors explained how this could potentially lead to bias because caregivers may not disclose all adverse events children have experienced. Other limitations surrounding the use of the ACEs questionnaire involves the risk

of re-traumatization (Leitch, 2017; Racine et al., 2019). The ACEs questionnaire primarily focuses on negative experiences without considering positive experiences in an individual's life (Harper, 2019; Leitch, 2017). Hence, it was suggested that the questionnaire should include both strength-based questions and trauma-oriented questions to reduce the risk of re-traumatizing patients (Leitch, 2017).

Current literature has reported that medical professionals, specifically primary care physicians, do not feel properly trained in assessing for trauma. Leverett and colleagues (2020) found that physicians did not feel comfortable addressing all types of traumas. One explanation that was mentioned was physicians did not feel certain on how to treat individuals affected by trauma (Leverett et al., 2020). In 2019, Bruce and colleagues conducted a study to assess for healthcare workers knowledge on trauma and effective assessments including nurses, therapists, and primary care physicians. It was reported that 48% of physicians felt they had an inadequate knowledge on trauma (Bruce et al., 2019). Another study reported that opportunities for regular training in trauma-informed care is not provided in many work settings (Marsac et al., 2015).

In a report on key features for successful trauma-informed care, it is delineated that many schools for medicine, nursing, social work, and public health are not incorporating trauma-informed care education and approaches in the general curricula (Menschner & Maul, 2016). This same report advocates that in order to effectively implement trauma-informed care, all health care professionals need multiple trainings (Menschner & Maul, 2017). This idea was further supported by Goldstein et al. (2018) in their study which examined medical students' perspectives on trauma-informed care after receiving a training on ACEs and assessment. Participants reported feeling frustrated with both the assessment tool and the short amount of time with patients (Goldstein et al., 2018). Furthermore, participants reported the need for more

cultural sensitivity, institutional support, advanced trainings, and collaborative care among other professionals in order to feel comfortable incorporating trauma-informed care into practice (Goldstein et al., 2018).

The vast majority of research that examines trauma and ACEs proposes that effective assessment should be integrated into pediatric healthcare by primary care physicians (Bethell et al., 2017; Crouch et al., 2019; Harper, 2015; Kerker et al., 2015; Marsac et al., 2015; Shonkoff & Garner, 2012; Spates et al., 2007; Racine et al., 2019). Goldstein and colleagues (2018) write that discussing adverse events and other health information in a medical setting can improve the patient relationship and has the potential to reduce health impacts. However, recent research has found that physicians report not having sufficient time for proper trauma assessment (Crouch et al., 2019; Goldstein et al., 2018; Thompson et al., 2020; Wade et al., 2017), suggesting that a shorter ACE questionnaire must be developed for primary care providers in order to account for time constraints (Crouch et al., 2019). Other studies have attempted to determine if there are ACEs that often occur together in order to make assessment easier for physicians (Scott et al., 2013; Thompson et al., 2020).

While all healthcare professionals can implement elements of trauma-informed care, closer attention must be paid to the process of trauma assessment for children and adolescents. Marsac and colleagues (2015) reported that it is common for health care professionals to underestimate the prevalence of trauma symptoms, such as traumatic stress, among children and adolescents. It was also indicated that only one in ten pediatricians frequently assess for trauma symptoms like post-traumatic stress (Marsac et al., 2015). Taking into consideration the concerns from physicians related to trauma knowledge and time constraints, it is important to determine which healthcare professionals are properly trained to conduct trauma assessments. Both social

workers and child life specialists are positioned in the field of human services and are recognized as fields that are capable of effectively assessing for trauma (Health Care Toolbox, n.d.).

Certified child life specialists are trained developmental professionals that could successfully take on this job and aid in incorporating trauma-informed care in multiple settings.

Child Life & Trauma-Informed Care

Child life specialists regularly encounter children who have experienced non-interpersonal traumas including serious illnesses, serious injuries/accidents, potential for disability, or death of a loved one. Many aspects of the field of child life coincide with trauma-informed care. To start, part of the mission statement for child life states that child life specialists work to “reduce the negative impact of stressful or traumatic life events” for children and their families (Association of Child Life Professionals, 2001, p. 1). Two main elements of trauma-informed care are acknowledging the effects of trauma and working to prevent re-traumatization (SAMHSA, 2014). The field of child life is based on evidence-based practices and interventions that have been proven to minimize effects of stress, anxiety, and trauma for children and their families that transpire as a result of hospitalization for illness, medical trauma, or disability (Association of Child Life Professionals, 2018).

Child life specialists value play and strive to promote positive development of infants, children and youth through assessment, intervention, prevention, advocacy, and education (Association of Child Life Professionals, 2001). Moreover, a study conducted by Stenman and colleagues (2019) on perspectives of play and trauma-informed care found that healthcare professionals reported relying on child life specialists to perform play-based practices that help alleviate or reduce trauma. In many of the instances where play was described as a tool in trauma-informed care, the child life specialist was mentioned (Stenman et al., 2019). Thus,

training in trauma and trauma assessment among patients they serve seems to provide a natural bridge into child life services. Having a developmental background and being guided by developmental and family stress theories aids this process. Although child life specialists typically work in clinical settings as part of an interdisciplinary team of healthcare workers, their skills can be adapted to benefit a variety of settings.

A major part of a child life specialist's role is assessment of the patient to help determine the child's developmental age and stress levels. A child life specialist considers different interventions that could help in developing appropriate interventions such as coping plans, therapeutic activities, and diagnosis education. The Stress Potential Assessment is a common tool used by child life specialists to assess variables related to the child, family, and health to create a care plan (Thompson, 2018). Another commonly used assessment tool is the Psychosocial Risk Assessment in Pediatrics (PRAP) which examines a patient's ability to cope during a specific event (Thompson, 2018). Both of these tools require child life specialists to consider potential life stressors in a child and family's life. Child life specialists possess knowledge on family-centered care and aim to build rapport with patients and provide overall support to families.

Although trauma assessment is outside the current scope of practice in child life, incorporating trauma assessment could advance trauma-informed care in all settings where child life is present. Assessing for trauma is in line with the missions, vision, and values of child life practice, as this gives promotion to building therapeutic relationships that furthers positive communication with patients and advocacy for a child in order to prevent any negative outcomes of trauma. This type of deeper assessment would be beneficial for child life specialists in being better able to recognize symptoms of trauma in children and youth. It is also beneficial for

medical team members and could potentially save time for physicians in assessment of trauma, while preventing re-traumatization. With expanding the scope of practice for child life, a greater significance will be placed on the field of child life and could result in new job opportunities for child life specialists in settings such as pediatricians' offices, clinics, and public schools which are the ideal settings for trauma assessment for children and adolescents (Bruce et al., 2018; Crouch et al., 2019; Grasso et al., 2016; Leverett et al., 2020; Marsac et al., 2015; Martin et al., 2017). If certified child life specialists were to incorporate trauma assessment into their scope of practice, it would benefit the overall healthcare system and open new doors for the field of child life.

The field of child life is already making strides in implementing more trauma-informed practices with the Emotional Safety Initiative (Emotional Safety Initiative, 2021). Children's responses to medical trauma are often more related to their subjective experience of the medical event rather than its objective severity. This recent initiative is aimed at promoting resiliency, healing, and trust for pediatric patients and their families during medical experiences (Emotional Safety Initiative, 2021). It is the belief of this plan that the emotional safety of patients should be considered as equally important as physical safety (Gordon, 2021).

The Emotional Safety Initiative is comprised of four pillars that synthesizes elements of atraumatic care, trauma-informed care, patient- and family-centered care, and culturally sensitive practices (Gordon, 2021). While this approach is directed on prevention of medical trauma associated with hospitalization, which 80% of ill or injured children and their families experience (NCTSN, 2014), this approach does not take into account the impact of adverse childhood experiences in the plan of care. Taking into consideration the novelty of this young initiative, the current study investigated the preparedness of child life specialists to address trauma and

possible trauma exposure in the young patients they serve while incorporating trauma-informed care into the plan of care.

CHAPTER 3: THEORETICAL PERSPECTIVE

One theoretical perspective that can help blend trauma-informed care with the field of child life is Bronfenbrenner's Ecological Systems theory. This theory proposes that individuals are dependent on both their environment and other people to survive, and this guides how they will interact with the world around them (White et al., 2019). This led Bronfenbrenner to develop the microsystem, mesosystem, exosystem, and macrosystem (Thompson, 2018, p. 49). He describes these systems as interrelated and believed that each system is influenced by the other. Understanding aspects of child development involves examining the different systems within a child's environment.

Bronfenbrenner maintained that a person's microsystem, which includes their immediate environment (e.g. home, school, work), is the most influential system as it is interconnected to all of the outer systems (mesosystem, exosystem, and macrosystem) (Smith & Hamon, 2017). He later coined the term proximal processes which refers to the interactions that occur in a child's immediate environment which Bronfenbrenner believed were a key factor in development (Tudge et al., 2009). During that time, he also developed the Process-Person-Context-Time (PPCT) model which is a holistic perspective that considers every system with heavy focus on the proximal processes (Tudge et al., 2009).

As of now, child life specialists primarily examine the process and person segments of the Process-Person-Context-Time model developed by Bronfenbrenner. Child life specialists are trained to use assessment tools such as the Stress Potential Assessment which evaluates child/patient variables, family variables, and healthcare variables (Thompson, 2018, p. 50). Examining these variables and how they interact provides child life specialists with a better understanding of the patient's proximal processes and person. This assists in building rapport

with the patient, determining developmental age, and creating helpful interventions. Child life specialists provide information and helpful coping mechanisms that children can use in the future. The information and resources a child life specialist provides can influence the child and family.

While child life specialists are able to understand some of the patient's life in terms of context, current practices aren't fully accounting for the context or time segments of the PPCT model. Incorporating trauma-informed care practices into the child life scope of practice will allow specialists a more holistic perspective of the patients and families they work with. Utilizing the ecological theory, child life specialists could adapt their typical assessment tools using the PPCT model. For example, the Stress Potential Assessment, which is more focused on proximal processes, can be adapted to include trauma history. Including trauma history in assessment will allow child life specialists to better understand the interactions between each system and be more prepared to prevent re-traumatization for children and their families.

Another theory that supports this study is the theory of perception. This coincides with ecological systems because the environment one lives in plays a role in shaping attitudes. According to this theory, perceptions, feelings, and thoughts are influenced by our attitudes which include cognitive, effective, and behavioral factors (Dan, 2019). Part of changing perceptions is improving the cognitive processes that effect a person's attitude. One way to change child life specialists' perceptions of trauma-informed care is to provide extensive information and knowledge on trauma assessment tools/protocols. By doing so, this will increase awareness of trauma assessment tools/protocols and form the scope of child life practice.

Current Study

The purpose of this study was to explore child life specialists' role and training in trauma-informed care and trauma assessment. This study also surveyed child life specialists' perceptions, confidence, and competence of trauma-informed care practices. The current literature indicates that children and adolescents affected by ACEs and other trauma may experience negative impacts on their cognitive functioning, emotional intelligence, and behaviors. Specific training and knowledge on how to work with this population is required. The motivation behind this study was to potentially adapt the scope of practice of the field of child life to better incorporate proper assessment and care for the children and families impacted by adverse, traumatic events. While assessment of psychosocial needs of children and youth is one of the major professional standards/competencies, this research also investigated the following:

1. Does child life specialists' former education/training support trauma-informed care practices?
2. How do child life specialists perceive trauma-informed care?
3. How prepared are child life specialists to implement trauma-informed care in their scope of practice?
4. Do child life specialists feel included into the medical team to provide trauma-informed care services?

Hypotheses

1. Those specialists that have been educated and trained on trauma-informed care will report higher likelihood of implementing trauma-informed care into child life practice.

2. Those specialists that report positive perceptions of trauma-informed care will report supporting the idea of adapting the child life scope of practice to include trauma assessment.
3. Those specialists that have been educated and trained on trauma-informed care will have more positive perceptions of TIC.

CHAPTER 4: METHODS

For the purpose of this exploratory study, a quantitative survey was developed in order to collect information from certified child life specialists on their level of education, training, knowledge, perception of child life role in providing trauma-informed care services, and implementation of trauma-informed care practices. This cross-sectional study was approved by East Carolina University's Institutional Review Board (IRB).

Participants & Procedure

Eligible participants included certified child life specialists who were currently employed at the time the survey was conducted. In order to be fully certified, specialists must have successfully passed the certification exam administered by the Association of Child Life Professionals (ACLP). Child life specialists also must gain re-certification every five years. In order to participate in the study, potential participants had to meet the following eligibility criteria 1) participants must be currently certified by the Association of Child Life Professionals and 2) currently working as a child life specialist. Certified child life specialists who were working part-time, full-time, and in alternative settings were eligible for inclusion in this study.

Recruitment

Participants were recruited through multiple online forums and social media outlets including ACLP Monthly, Child Life Connection website and Facebook page, Certified Child Life Specialists' Facebook page, and the Child Life United Instagram account. An invitational flyer which included a brief summary of the study, survey instructions, and the link to the survey were posted on the appropriate websites, Facebook groups, and Instagram account stories. Once the survey link was active the invitational flyer was sent out by the primary investigator to the aforementioned contacts within the child life field. After participation consent was gathered,

participants could access the survey, which was accessible for two and a half months from the end of March to mid-May of 2022. The survey included 30 questions and took an estimated ten to fifteen minutes to complete. Reminders/invitations to participate in the study with additional link posting did not take place.

Instruments

The survey software Qualtrics was used for data collection because it is easily accessible, time effective, and low-cost. The survey was developed specifically for this study and was exploratory in nature. The survey included five sections that focused on 1) demographic information (age, gender, race, geographic region, and education level); 2) participants experience and current role in child life; 3) additional education, trainings, implementation, and knowledge of trauma-informed care; 4) perceptions on trauma-informed care and the need to include TIC into the current child life scope of practice. Participants had an option for 5) open-ended comments to gather additional qualitative data that provided more insight regarding trauma-informed care in terms of child life practice, available trainings, and other obstacles.

Demographic Information

Participants were asked to provide basic information such as age, gender, race, geographic region, and education level.

Information on Child Life Role

Participants were asked specific questions about their child life journey and current job/position. Questions that asked participants about years of experience overall as a CCLS, years of experience in their current jobs, and setting in which they work were included in the survey. Other questions referred to size of the child life department, number of patients, and amount of time spent with patients in a typical week. Participants were also asked to report on

how they felt other professionals within the interdisciplinary team perceived their role as child life specialists. A 3-point scale was used with responses ranging from feeling “perceived as a fully integrated member of the interdisciplinary team”, to feeling “included, but not fully integrated member of the interdisciplinary team”, to feeling “not perceived as a fully integrated member of the interdisciplinary team”.

Training, Assessment, and Implementation

Participants were asked to report whether they had been formally trained in screening and assessment as a part of trauma-informed care and indicated their workplace requirement and procedures surrounding trauma-informed care. Questions that inquired about knowledge and implementation level of current trauma-informed care frameworks and tools were in the survey. These included the ACEs Questionnaire, the DEF Framework, the PAUSE Protocol, and the Emotional Safety Initiative. For multiple questions, participants were asked to respond to the provided statements using a 5-point Likert scale with the possible responses ranging from ‘completely disagree’ to ‘completely agree’.

Perceptions of Trauma-Informed Care

Questions of the online survey assessed participant’s perceptions of trauma-informed care. Participants were asked to respond to the provided statements using a 5-point Likert scale with responses ranging from ‘completely disagree’ to ‘completely agree’. An example question from the survey is: Implementing trauma-informed care practices would be beneficial for the individual health outcomes of the patient population I work with.

Open-Ended Comments

Participants were given the option to provide any additional comments and/or opinions on trauma-informed care.

Reliability

Questions from sections 2, 3, and 4 were grouped into four subscales based on themes. Subscales included questions related to 1.) education/training in trauma informed care ($\alpha = .506$), 2.) perceptions of trauma informed care ($\alpha = .494$), 3.) preparedness to include TIC in child life ($\alpha = .719$), and 4.) perceptions of participant's child life role from interdisciplinary team ($\alpha = .767$). For a list of survey questions and subscales, refer to Appendix A.

Data Analysis

The data was downloaded from Qualtrics and stored in password protected files on the principal investigator's computer. SPSS 28 was used for data analysis to calculate descriptive statistics, correlations, and independent samples t-tests. Descriptive statistics were used to display all participants responses about their history of trauma-informed care training and implementation. Although the data included 81 total valid survey responses, there were some missing question responses. Means and standard deviations were reported for each variable and tables and figures were used to further display the data collected.

In order to perform statistical analyses, a maximum likelihood estimation was applied to fill in missing data and to estimate the parameters of the data distribution. To address hypotheses 1 and 2, Pearson's correlations were used to investigate the relationship between child life specialists' level of experience in the child life field, training in trauma-informed care, and their confidence and perceptions of trauma-informed care. To address hypothesis 3, an independent samples t-test was used to compare participants who had received training in trauma-informed care to those who had not received training.

CHAPTER 5: RESULTS

The purpose of this study was to explore child life specialists' role and training in trauma-informed care and assessment as well as to better understand specialists' perception, confidence, and competence to provide trauma-informed care.

Participants

A total of one hundred responses were collected with three participants indicating they did not wish to participate in the study. Additionally, 16 participants provided consent, however, they either did not provide answers to any of the survey questions or only completed the demographics section. This resulted in a total of 81 valid survey responses. The average amount of time participants used to complete the survey was 41 minutes. The range was calculated to be approximately 30 hours. Taking into consideration this survey was online, it is likely that participants had the survey open in a computer tab for an extended period of time.

Descriptive Statistics

Demographics

The current sample were predominately White ($n=75$, 92.6%) with a few participants identifying as Hispanic ($n=6$, 7.4%). Most participants identified as females ($n=79$, 97.5%) with a few participants identifying as non-binary ($n=2$, 2.5%). Over half of the participants ($n=44$, 54.3%) were between the ages of 23-32 years old with a mean of 34.4 years old ($SD=10.1$). Several participants ($n=21$, 25.9%) were between the ages of 33-42 years old with ten participants (12.3%) being between the ages of 43-52 years old. Only six participants (7.4%) were 53 years old or older.

Over half of the participants ($n=49$, 60.5%) reported to earning a master's degrees. Among those with graduate degrees ($n=49$, 60.5%), participants reported receiving degrees in

child life ($n=3$, 4%), child and family development ($n=4$, 5%), psychology ($n=4$, 5%), and human development and family services ($n=3$, 4%). Other disciplines that were mentioned included therapeutic recreation, education, social work, and health and human services. Table 1 displays the complete demographic information.

Table 1*Demographic Characteristics of the Participants*

Variable	<i>n</i>	%
Age		
23-32	44	54.3
33-42	21	25.9
43-52	10	12.3
53 and Older	6	7.4
Gender		
Male	0	0
Female	79	97.5
Non-Binary	2	2.5
Race		
Black	0	0
White	75	92.6
Hispanic/Latinx	6	7.4
Biracial	0	0
Education		
Bachelor's Degree	28	34.6
Master's Degree	49	60.5
Doctoral Degree	4	4.9
Geographic location		
North	12	14.8
South	14	17.3
East	4	4.9
West	10	12.3
Northeast	9	11.1
Northwest	5	6.2
Southeast	10	12.3
Southwest	5	6.2
Missing	12	14.8

Note. $N=81$, $N=81$, $N=81$, $N=81$, $N=69$. Participants were on average 34.4 years old ($SD = 10.1$).

Information on Child Life Role

Participants were asked to provide information on their role as a certified child life specialist. All of the participants ($N=81$) in the current sample reported on their professional experience working as a certified child life specialist indicating a range of experience with a mean of 8.7 years ($SD= 8.35$). In addition, 99% ($n=80$) of participants reported working in their current position for at least four years with a mean of 4.01 years ($SD=4.96$). A majority of participants ($n=78$, 96%) indicated working in a larger child life department that consisted of an average of more than 10 people with a mean of 14.3 ($SD=15.15$) child life specialists.

Majority of the sample ($n=63$, 77%) reported working full-time as certified child life specialists in various settings including children's hospitals ($n=58$, 71.6%), adult hospitals ($n=7$, 8.6%), as well as alternative settings ($n=11$, 13.6%) and outside clinics ($n=5$, 6.2%). The child life specialists working in alternative settings ($n=11$, 13.6%) indicated working in various environments including private practices ($n=3$), pediatric departments within adult hospitals ($n=3$), academic settings ($n=1$), child advocacy centers ($n=1$), long-term care ($n=1$), and therapeutic photography ($n=1$).

Majority of participants ($n=64$, 79%) reported providing child life services for more than twenty patients in a month while reporting spending less than 8 hours with patients in a typical work week ($n=28$, 34.6%) while another group of child life specialists ($n=28$, 34.6%) reported to be spending around 16-32 hours with their patients.

Education & Training in Trauma-Informed Care

Despite trauma assessment not being a constant practice, approximately half ($n=43$, 53%) of the participants reported feeling adequately educated on trauma-informed care information, assessment tools, and current practices. Additionally, a little less than half ($n=38$, 47%) of

participants felt confident in their ability to conduct trauma assessments on the patient population they work with. Furthermore, majority of participants ($n=54$, 67%) stated they felt confident in their ability to identify several trauma-related symptoms in their patients including attachment disorder, repetitive play, sleep disturbances, aggression, and adverse reactions to hospitalization.

Approximately half of participants ($n=40$, 49%) reported receiving some type of formal training in trauma-informed care while 29 participants (35%) reported they had no formal training. Only 10 participants (12%) reported not having received any additional education or training on trauma-informed care. One participant reported that this type of training was not required which led them to seek out their own education and training. For additional info, please refer to Table 2. Participants also reported on their knowledge of the most recently identified trauma-informed care approaches and assessment tools such as The ACEs Questionnaire, the Emotional Safety Initiative, The D.E.F Framework, and the P.A.U.S.E Protocol. Figure 1 displays these results.

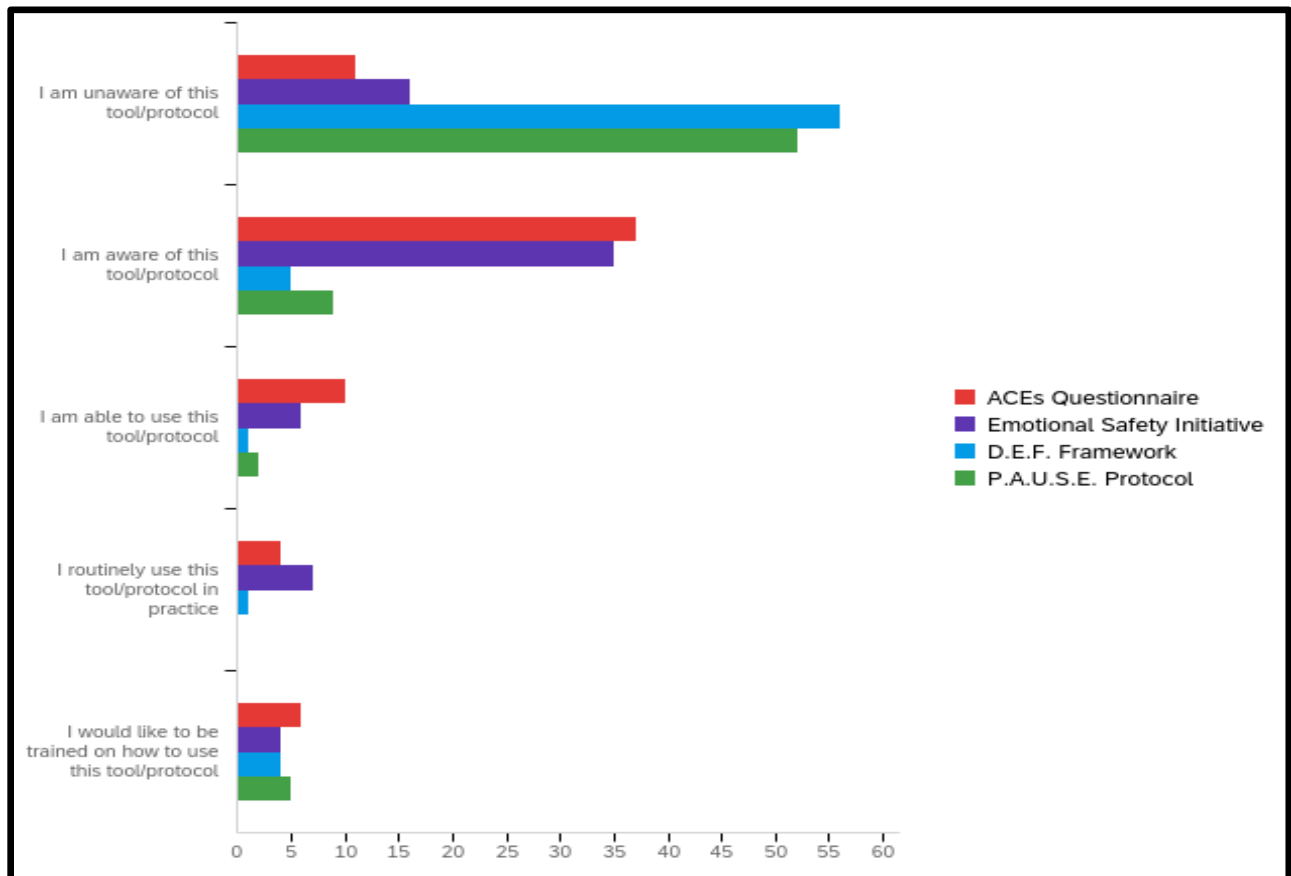
Table 2*Types of Training or Continuing Education in Trauma-Informed Care*

Variables	<i>n</i>	%
Formal workshops for continuing education credit	22	32.8
Informal workshops NOT for continuing education or credit	3	4.4
Informal trainings from other professionals	2	2.9
Updated literature	5	7.4
Internet-based resources	8	11.9
Child life conferences	11	16.4
Other	6	8.9
Did not receive any education/training	10	14.9
Missing	14	17.2

Note. N=67.

Figure 1.

Knowledge of Trauma-Informed Care Approaches & Assessment Tools



In reference to the ACEs Questionnaire, 37 participants (46%) reported they were aware of this tool with 10 participants (12%) reporting they were able to use this tool. At the same time, only four participants (5%) reported they routinely used this tool in practice. While eleven participants (14%) reported they were unaware of this tool, six participants (7%) reported they would like to be trained on how to use this tool.

In reference to the Emotional Safety Initiative, 35 participants (43%) reported they were aware of this protocol with six participants (7%) reporting they were able to use this protocol. While only seven participants (9%) reported they routinely used this protocol in practice, sixteen participants (20%) reported they were unaware of this tool with four participants (5%) reporting they would like to be trained on how to use this protocol.

In reference to the D.E.F Framework, five participants (6%) reported they were aware of this protocol with one participant (1.2%) reporting they were able to use this protocol. Only one participant (1.2%) reported they routinely use this protocol in practice. Majority of participants ($n=56$, 69%) reported they were unaware of this protocol. Four participants (5%) reported they would like to be trained on how to use this protocol.

In reference to the P.A.U.S.E Protocol, nine participants (11%) reported they were aware of this protocol with two participants (2%) reporting they were able to use this protocol. None of the participants indicated they routinely use this protocol in practice. Fifty-two participants (64%) reported they were unaware of this protocol with five participants (6%) reporting they would like to be trained on how to use this protocol.

Seventeen (21%) of the participating child life specialists reported that their facility provided some type of trauma assessment to patients, while 27(33%) child life specialists reported that their facility did not provide any type of trauma assessment. The remaining

participants ($n=24$, 30%) reported they were unsure if their patients did receive any sort of trauma assessment at the facility they work at.

Perceptions of Trauma-Informed Care

Majority of participants ($n=65$, 80%) felt that the implementation of trauma-informed care practices would benefit the individual health outcomes of their patient population they work with. Additionally, most participants ($n=61$, 75%) felt that trauma assessment for all children and adolescents would be beneficial for the medical team. Around the same number of participants ($n=65$, 80%) felt that training in trauma-informed care not only enhances child life practice and also adds to the child life competency to deliver psychosocial support to patients. Over half ($n=54$, 67%) reported that trauma-informed care training enhances the visibility of child life among the medical team. Finally, majority of participants ($n=65$, 80%) felt that, as professionals, additional training in trauma-informed care would be beneficial.

Preparedness to Include Trauma-Informed Care into Child Life Scope of Practice

Even though trauma-informed care is not yet a universal practice in healthcare, a little less than half of participants ($n=39$, 48%) felt encouraged by their supervisors and workplace to implement trauma-informed care with the patients and families they work with. Participants were then asked to report on their level of preparedness to utilize common trauma-informed practices including collection of detailed child and family history, observation of reactions to hospitalization, provision of resources/advocacy, and education for other members of the medical team. Over half of participants felt prepared to collect detailed child and family histories ($n=47$, 58%), felt prepared to observe reactions to hospitalization ($n=62$, 77%), felt prepared to provide resources and advocacy ($n=49$, 60%), and educate other members of the medical team on trauma-informed care ($n=49$, 60%).

Perception of Child Life Among Interdisciplinary Team

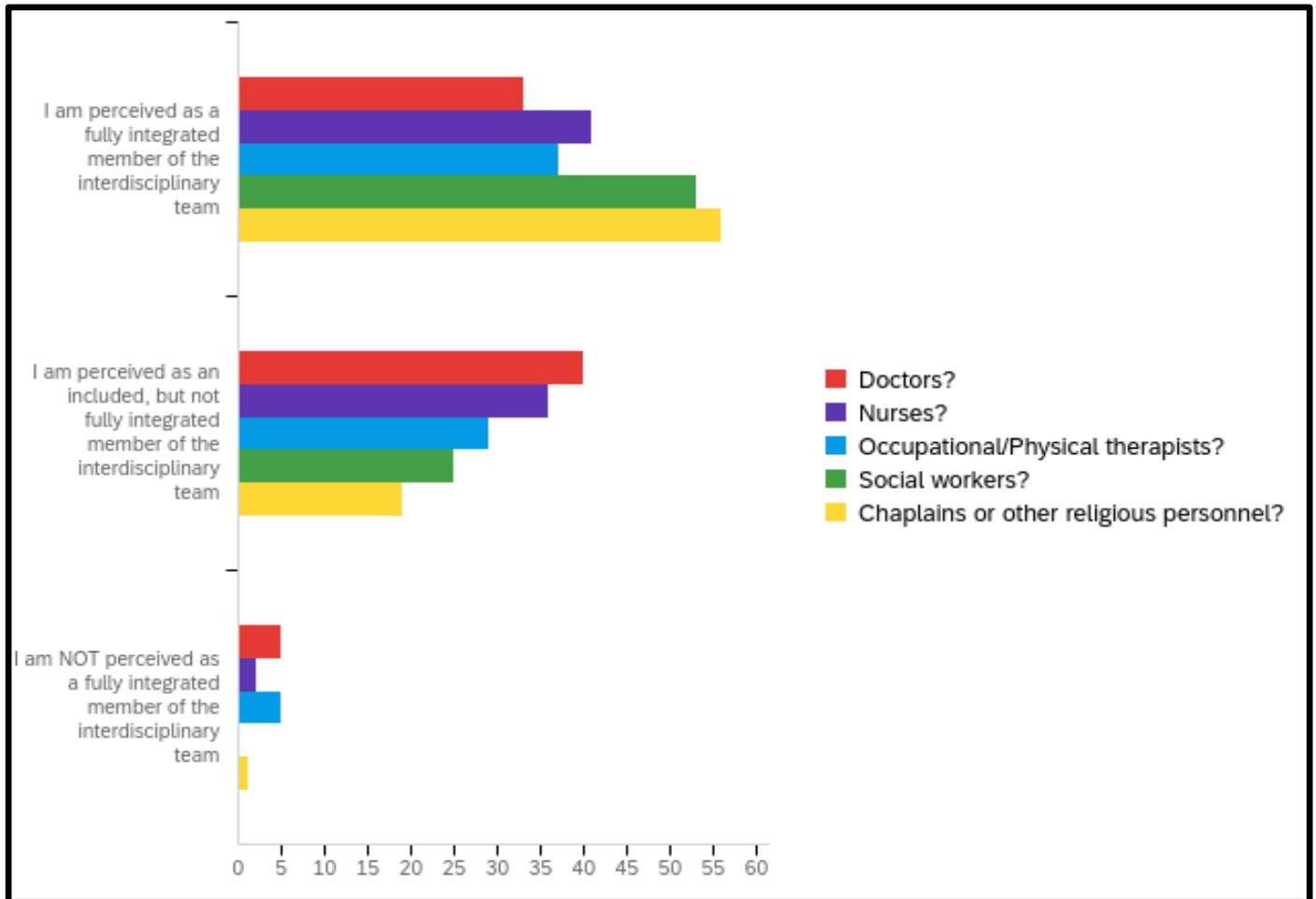
The overall results showed that all professionals within the medical team made child life specialists feel included in some way. The participants reported to feeling like fully integrated members of the interdisciplinary team by nurses ($n=41$, 50%), social workers ($n=53$, 65%), and chaplains or religious personnel ($n=56$, 69%). There were some participants ($n=13$, 16%) who shared they did not feel perceived as a fully integrated member of the interdisciplinary team by every profession besides social work. Figure 2 displays these results.

Open Ended Comments

The final section of the survey gave participants' the opportunity to provide any additional comments or opinions on trauma-informed care. While only eight participants (10%) provided comments, several comments indicated that trauma-informed care and training is "*much needed*" and "*would be beneficial*" for child life specialists. One participant shared that they teach trust-based relational intervention, which is a trauma-informed intervention (TCU, 2022), at their workplace and have received positive feedback from their workplace. While one of the participants commented saying, "*All professionals should receive trauma-informed care training and education to ensure their interactions are also coming from a trauma sensitive standpoint*", another stated that, "*trauma-informed care is important and necessary, but it is equally important for child life to employ what is within our scope*".

Figure 2.

Perceptions of Child Life Among the Interdisciplinary Team



Note. N= 78, N= 79, N= 71, N= 78, N= 76.

Analysis

An independent samples t-test was used to compare participants who had received training in trauma-informed care (Group 1) to those who had not received training in trauma-informed care (Group 2). There were significant group differences in confidence with trauma-informed care between those who had received training and those who had not ($t_{66} = 3.727, p < .001$). The effect size was large, with a Cohen's d of 0.92. There was also a significant group difference in awareness of tools and protocols between those who had received training and those who had not ($t_{66} = 2.379, p = .02$). The effect size was medium, with a Cohen's d of 0.59. There were no significant mean group differences in how each group felt perceived by other professionals in their roles as certified child life specialists, how prepared each group felt to implement trauma-informed care into child life services, or how beneficial each groups felt trauma-informed care to be.

Table 3 displays the relationships among study variables such as Age, Training, Confidence in TIC training, Preparedness, Awareness of Tools, and Perception of TIC. Age was negatively associated with level of confidence in trauma-informed care training with ($r = -.301, p < .05$), indicating that younger participants reported more confidence and receiving more education and training. Age was also associated with low levels of preparedness to implement trauma-informed care practices into the daily role as a child life specialist, with ($r = -.349, p < .01$), such that younger participants reported to be more prepared to provide trauma-informed care.

Participants who reported receiving more training also reported higher levels of confidence in their trauma-informed care training with ($r = .417, p < .01$). Receiving more training was also positively associated with awareness of current trauma-informed care tools/protocols with ($r = .281, p < .05$). Participants who reported feeling more prepared to implement trauma-

informed care practices into their daily roles also reported higher awareness of current trauma-informed care tools/protocols with ($r=.294, p<.05$). Participants who reported more awareness of current trauma-informed care tools/protocols also reported stronger perceptions of trauma-informed care as beneficial for the field of child life ($r=.292, p<.05$).

Table 3*Pearson's Correlations Among Study Variables*

Variable	1	2	3	4	5	6	7
1. Age	--						
2. Received Training	-.055	--					
3. Role Perceived by Others	-.010	-.019	--				
4. CLS Confidence in Training	-.301*	.417**	-.076	--			
5. Preparedness to Implement TIC	-.349**	.205	-.190	.624**	--		
6. Awareness of Tools/Protocols	.029	.281*	-.119	.150	.294*	--	
7. Perceptions of TIC	.039	.130	-.171	.214	.091	.292*	--

Note. * $p < .05$, ** $p < .01$, $N=81$ participants.

CHAPTER 6: DISCUSSION

Despite the growing evidence of trauma having negative impacts on children and adolescents that can lead into adulthood (Darnell et al., 2018; Felitti, 2017; Felitti et al., 1998; Grasso et al., 2016; Kalmakis & Chandler, 2014; Kliethermes et al., 2014; Leverett et al., 2020; Romano, 2018; Scott et al., 2013), implementation of trauma-informed care and trauma assessments continues to be slow moving. The main reasons for this include lack of training/knowledge of assessment tools and disputes on which professional should be conducting trauma assessments. This study proposes that child life specialists could provide the solution to this issue based on their expertise of evidence-based practices, assessment tools, and background in child development and family systems theories.

This study was guided by Bronfenbrenner's Ecological Systems theory and his Process-Person-Context-Time (PPCT) model in the sense that children's development is influenced by the proximal processes, or the interactions that occur in a child's immediate environment. Child life specialists are already completing assessments that examine the process and person segments of Bronfenbrenner's model. While child life specialists are able to understand some of the patient's life in terms of context, current practices aren't fully accounting for the context or time segments of the PPCT model. Incorporating trauma-informed care practices into the child life scope of practice will allow specialists a more holistic perspective of the patients and families they work with.

Currently, the role of child life specialists includes building therapeutic relationships with patients and families and "reducing the negative impact of stressful or traumatic life events" for children and their families (Association of Child Life Professionals, 2001, p. 1). Little research exists that examines child life specialist's level of training and awareness of trauma-informed

care assessment tools/protocols. This exploratory study is the first of its kind in that it examines child life specialists' level of education and training in trauma-informed care as well as their perceptions of trauma-informed care and whether it can be further incorporated into the child life scope of practice.

Education and Training in Trauma-Informed Care

Overall, the participants in this study reported a high level of education and experience within the child life field with over half of participants having their master's degree and approximately nine years working as certified child life specialists. These results are similar to those found in a study conducted in 2018 that examined the future direction of child life (Lookabaugh & Ballard, 2018). This demonstrates that many specialists currently working in the field are well-versed in their child life knowledge and have many years of experience in the clinical setting. In previous studies, child life was predominantly an undergraduate field. Considering the high percentage of graduate degrees reported by participants, it appears that the field of child life is changing. This observation is not surprising considering the field's changing degree requirements as well as accessible university child life programs. Incorporation of new knowledge in medicine and child life also contributes to these changes.

The results of this study also showed that participants younger in age reported receiving more training in trauma-informed care compared to those who are older, which is consistent with over half of participants ($n=44$, 54.3%) in this study being between the ages of 23-32. This finding is also rationalized by trauma-informed being a newer care practice, which was not included in the curriculum 10 to 20 years ago. In two studies conducted by Menschner & Maul (2016, 2017), they reported that many schools for medicine, nursing, social work, and public health still do not include trauma-informed care and as a result they advocate for all

professionals in health care to receive multiple trainings. Considering the results of this study and the recent research that investigates healthcare professionals and training in trauma-informed care, child life specialists appear to be well trained in trauma-informed care compared to other professionals.

In regard to training in trauma-informed care, two of the three main reasons that contribute to the absence of trauma-informed care implementation in healthcare settings are lack of training and knowledge of proper TIC assessment tools. Recent research shows that many physicians report feeling improperly trained in assessing for trauma (Bruce et al., 2019; Leverett et al., 2020). Comparatively, over half of the participants in the current study reported having received some type of formal training in trauma-informed care, mostly for continuing education. In a similar study that assessed medical staff's previous training in trauma-informed care, Hoysted and colleagues (2017) reported that over 90% of participants had no previous training in trauma-informed care.

Despite the novelty of trauma-informed care in the medical field, disputes on how, where, and when to assess for trauma contribute to the lack of trauma-informed care implementation, specifically what assessment tools/protocols are best to use. While this study did not evaluate which assessment tool/protocol is quote-unquote "the best", one of the objectives of this study was to survey child life specialists' level of awareness and confidence with current trauma-informed care (TIC) tools/protocols. The results indicated that child life specialists who received training in trauma-informed care reported more awareness of current TIC tools/protocols. Approximately half of the participants in this study reported feeling adequate in their abilities to conduct trauma assessments. When looking at the level of awareness and ability to use current TIC tools/protocols, the results indicated that over half reported more awareness of the ACEs

questionnaire and the Emotional Safety Initiative. Even with their high levels of awareness of these two tools, only a few child life specialists reported being able to routinely use these two tools in their practice.

Additionally, part of exploring the role of child life specialists in trauma-informed care included evaluating whether child life specialists were involved in assessing for trauma in the population they work with. Despite child life specialists reporting high levels of education and training, 75% of child life specialists denied or were unaware if trauma assessments took place in their workplace. Based on the 25% of child life specialists who confirmed that their patients were being assessed for trauma, responses varied as to which professional was conducting these assessments. Majority of the child life specialists reported that registered nurses and social workers were the professionals who conducted trauma assessments in their workplaces. Only two child life specialists identified themselves as the professionals who conducted trauma assessments in combination with social work and psychologists. These results indicate the absence of trauma-informed care in some workplaces and highlights the lack of consistency in who is providing trauma assessments.

Perceptions of Trauma-Informed Care

The final contributor to the lack of trauma-informed care implementation identified in research is time constraints. Several studies found that physicians reported not having sufficient time for proper trauma assessment (Crouch et al., 2019; Goldstein et al., 2018; Thompson et al., 2020; Wade et al., 2017). Allocating the role of trauma assessment to other trained professionals can help provide the solution to time constraints and ensure that more children and adolescents are assessed for trauma. Child life specialists could be the natural bridge to help implement

trauma-informed care practices through assessment and collaboration with the interdisciplinary team.

Since this would be a new role placed on child life specialists, this study examined how child life specialists perceive trauma-informed care. Overall, the results indicated that child life specialists have positive perceptions of trauma-informed care. Almost all of the child life specialists felt that all pediatric patients should be assessed for trauma as it benefits the medical team and the patient's individual health outcomes. Additionally, majority of child life specialists felt that additional training on trauma-informed care would benefit them as professionals. These results demonstrated that child life specialists who reported high awareness of trauma-informed care tools/protocols were more likely to perceive trauma-informed care as beneficial, which supports the second hypothesis of this study.

In addition to seeing the benefits of trauma-informed care for the patient population and medical team, the specialists in this study reported that trauma-informed care is valuable for the field of child life. The results showed that participants agreed that trauma-informed care enhances child life practice as well as adds to the child life competency to deliver psychosocial support for children and youth. These results also indicated that the child life specialists in this study support the idea that training in trauma-informed care can enhance the visibility of child life among the medical team. Considering the benefits that trauma-informed care can have for the field of child life only helps further justify the belief that child life could be the natural bridge to implementing trauma-informed care. The study conducted by Stenman and colleagues in 2019 provides confirmation that having child life play a main role in trauma-informed care is valuable. In this study, the researchers found that healthcare professionals reported relying on child life

specialists to perform play-based practices that help alleviate or potentially reduce trauma results.

Preparedness to Implement Trauma-Informed Care into Child Life Scope of Practice

Another objective of this study was to determine how prepared child life specialists are to include trauma-informed care into their scope of practice. The results indicated that majority of the child life specialists felt prepared to implement trauma-informed care practices into their daily child life practice. These trauma-informed care practices included, but are not limited to, observing reactions to hospitalization, collecting detailed child/family history, providing resources/advocacy, and educating other members of the medical team. The trauma-informed care practice child life specialists felt most prepared to implement is observing reactions to hospitalization. The results of this study also found that child life specialists who have received training in trauma-informed care feel more confident in their abilities to identify trauma-related symptoms. This finding supports the first hypothesis that the child life specialists that have a better understanding (education and training) of trauma-informed care are more likely to implement it into practice.

Outside of trauma-informed care, child life specialists utilize these practices within their scope on a regular basis. The current scope of practice for child life professionals does not include assessing for trauma in pediatric patients. However, the Child Life Code of Ethics does state that a goal for child life specialists is to “minimize the potential stress and trauma that children and their families may experience” (Association of Child Life Professionals, 2020). The current child life scope of practice already alludes to elements of trauma-informed care as it is. Taking this into account with the issues that currently surround trauma-informed care

implementation it would be straightforward for child life to adapt the scope of practice to include trauma assessment.

These findings prove the hypothesis that the child life specialists that have positive perceptions of trauma-informed care are more likely to support the idea of adapting the child life scope of practice to include trauma assessment. Despite child life specialists reporting mainly positive perceptions of trauma-informed care, only half felt encouraged to implement trauma-informed care at their respective workplace. This again suggests that trauma-informed care is not fully implemented in many healthcare environments that work with pediatric populations.

Perceptions of Child Life Among the Interdisciplinary Team

The final objective of this study was to explore whether or not child life specialists feel included into the medical team to provide trauma-informed care. Research has shown that in previous years, many healthcare professionals have misunderstood the child life profession and have not always perceived them as valued members of the medical team (Gaynard, 1985; Cole et al., 2001). This pattern is still present today as many child life specialists are taught that educating members of the medical team about child life's role is one of many tasks regularly done by child life specialists (Crider & Pate, 2011; Holloway & Wallinga, 1990; Munn et al., 1996).

More recently in 2021, a study by Wittenberg & Barnhart was conducted to examine how child life and other healthcare professionals perceive the CCLS role. Wittenberg & Barnhart (2021) found that other healthcare professionals have a better understanding of the CCLS role and job tasks than what previous research exhibited, and this trend is only increasing. As seen in the results of this study, child life specialists reported feeling included in some way into the medical team by most of the professionals included (doctors, nurses, physical therapists, social

work, spiritual care). However, it is important to note that participants reported that doctors made them feel only partially included into the medical team rather than fully included. This could be due to physicians not having a full understanding of what child life's role is in the clinical setting. The specialists in this study reported that being trained in trauma-informed care can enhance child life's visibility among the medical team. For child life specialists, finding ways to enhance visibility with the medical team helps solidify child life's role on the interdisciplinary team and allows specialists to feel valued.

Limitations

Despite the positive results of this study, limitations must be considered. The first limitation identified in this study pertains to the survey instrument and its development using Qualtrics. Specifically, the response requirement option in Qualtrics was not applied to each question in the online survey. This option was only utilized for the informed consent which was collected at the beginning of the survey. Ensuring participant response for all the survey questions could have also provided more insight into trauma-informed care knowledge and training. A second limitation relates to the reliability results from the survey instrument. As previously mentioned, the survey instrument was created specifically for this study. As a result, the overall internal consistency was low. This can be expected with new research instruments.

Another limitation of this study was that the data collection period was brief in time and therefore reminders were not used. While the sample size of this study was satisfactory, having a larger sample size would have provided more insight into trauma-informed care knowledge and training in child life. Lastly, a limitation of this study relates to the data collection method in the sense that it was advertised on social media platforms, which are more utilized by the younger population. This method of data collection could have excluded the older population who may

not use forums, Facebook, or other means of social media from participating in the study. However, this limitation does not diminish the value of this study as little research and information on trauma-informed care and child life exists but suggests that collecting data using other methods may provide a more complete picture of attitudes of trauma-informed care among child life specialists.

Implications

This study provided several implications for the future of trauma-informed care research, practice, and implementation. Trauma-informed care is an important element of healthcare and can impact overall health of individuals. While the majority of child life specialists are aware that assessment or screening for trauma-informed care would be beneficial for patients, the lack of universally agreed upon trauma-informed care protocol with proper assessment tools delays practical steps in trauma-informed care implementation.

A second implication gathered from this study is that more research on trauma-informed care within all healthcare professions needs to be conducted to better understand the impact trauma has on children/adolescents. More research on this topic will also help determine the best solution to trauma-informed care implementation. Considering the belief of the primary investigator that child life is the natural bridge to this problem, more research needs to be conducted in the field of child life to support this proposition.

Other implications from this study pertain to training in trauma-informed care. Even though child life specialists are trained in assessment with tools specific to their field, more training would be required for child life specialists to feel adequately prepared to utilize different trauma-informed assessment tools/protocols. Additional training for child life specialists' who have been in the field for a long time would also be beneficial as they may not have had much

exposure to trauma-informed care. Child life specialists could then take their knowledge of assessment and training on trauma-informed care to educate the rest of the interdisciplinary team which in turn would increase the visibility of the child life field among said team. Specifically, this would provide recognition of child life among medical doctors, who sometimes lack proper understanding of the role of child life.

Lastly, it would be advantageous to have a universal pediatric trauma assessment tool to be used in daily practice. Not only would this be beneficial for research purposes, but it would also help to develop trainings on trauma-informed care for all healthcare professionals. Once healthcare teams can determine which professional is to be the primary point person for trauma assessment, a universal trauma assessment tool can be properly developed.

CHAPTER 7: CONCLUSION

The current study is the first of its kind as it provides a real depiction on the current level of education and training of child life specialists in trauma-informed care. This study not only identifies the obstacles that infringe upon trauma-informed care, but it proposes to utilize child life to help implement trauma-informed care in healthcare settings by including trauma assessment into the child life scope of practice. This study demonstrates that child life specialists are knowledgeable, prepared, and passionate about trauma-informed care. Child life specialists are professionals who are positioned to conduct individual assessments, provide support, facilitate interventions that promote coping, and contribute to better health outcomes in pediatric populations. In conclusion, the field of child life could act as the natural bridge for trauma-informed care in healthcare systems and could help increase the implementation of trauma-informed care in pediatric populations.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
4N-64 Brody Medical Sciences Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 · rede.ecu.edu/umcirb/

Notification of Exempt Certification

From: Social/Behavioral IRB
To: Sarah Leary
CC: Natalia Sira
Date: 2/23/2022
Re: UMCIRB 22-000018
Child Life Practice and Trauma-Informed Care

I am pleased to inform you that your research submission has been certified as exempt on 2/23/2022. This study is eligible for Exempt Certification under category # 2ab.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
Participation Consent Form Thesis.docx(0.03)	Consent Forms
Survey Questions(0.02)	Surveys and Questionnaires
Thesis Flyer(0.02)	Recruitment Documents/Scripts
Thesis Sarah Leary (0.01)	Study Protocol or Grant Application

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHIRB be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: SURVEY QUESTIONS

Survey Questions	Subscale
Part I: Demographic Information	
<p>1. Participants Age: _____</p> <p>2. Participants Gender</p> <p> a. Male (he/him)</p> <p> b. Female (she/her)</p> <p> c. Nonbinary (they/them)</p> <p> d. Other: _____</p> <p> e. Prefer not to say</p> <p>3. Participants Race</p> <p> a. Black</p> <p> b. White</p> <p> c. Hispanic/Latinx</p> <p> d. Biracial</p> <p> e. Other: _____</p> <p> f. Prefer not to say</p> <p>4. Participants Geographic Region within the United States</p> <p> a. North</p> <p> b. South</p> <p> c. East</p> <p> d. West</p> <p> e. Northeast</p> <p> f. Northwest</p> <p> g. Southeast</p> <p> h. Southwest</p> <p>5. What is the highest level of academic training you have had? Please indicate/select type in what your degree is in</p> <p> a. Bachelor's degree _____</p> <p> b. Master's degree _____</p> <p> c. Doctoral degree _____</p>	
Part 2: Information on Child Life Role	

<p>6. How many years of experience do you have as a certified child life specialist?</p> <p>_____</p>	
<p>7. Please identify which setting you are currently working in as a CCLS?</p> <ul style="list-style-type: none"> a. Adult Hospital b. Children’s Hospital c. Outside Clinic d. Other alternative setting (Please describe): _____ <p>8. How many certified child life specialists, including yourself, work in your department?</p> <ul style="list-style-type: none"> a. 1 b. 2 c. 3 d. 4 or more e. Not applicable <p>9. How many certified child life specialists, including yourself, work in your job setting as a whole? _____</p> <p>10. How often do you work as a certified child life specialist?</p> <ul style="list-style-type: none"> a. Full time b. Part Time c. On-call or As Needed <p>11. How long have you worked in your current position?</p> <ul style="list-style-type: none"> a. Less than 1 year b. 1 to 5 years c. 6 to 10 years d. 11 to 15 years e. 16 to 20 years f. More than 20 years <p>12. How many patients have you cared for in the last month?</p> <ul style="list-style-type: none"> a. Zero b. 1-10 c. 11-20 d. More than 20 <p>13. In an average week, how much time do you spend with your patients?</p> <ul style="list-style-type: none"> a. Less than 8 hours 	

- b. 9 to 16 hours
- c. 17 to 24 hours
- d. 25 to 32 hours
- e. 33 to 40 hours
- f. More than 40 hours

14. In your opinion, how do you think your role as a child life specialist is perceived by...

Subscale 4

	I am perceived as a fully integrated member of the interdisciplinary team	I am perceived as an included, but not fully integrated member of the interdisciplinary team	I am NOT perceived as a fully integrated member of the interdisciplinary team
doctors?			
nurses?			
occupational/physical therapists?			
social workers?			
chaplains or other religious personnel?			

Part III: Training, Assessment, and Implementation

15. Have you ever received formal training in trauma-informed care?

Subscale 1

- a. Yes
- b. No

16. At the facility in which you currently work, what type of continuing education or trainings do you receive related to trauma-informed care?

Subscale 1

- a. Formal workshops for continuing education credit
- b. Informal workshops NOT for continuing education credit
- c. Informal training from doctors, nurses, or other professionals
- d. Updated literature
- e. Internet-based resources
- f. I do not receive continuing education or special training
- g. Child life local/state conferences
- h. Other (Please specify): _____

17. To your knowledge, do your patients undergo any type of trauma assessment when entering/staying/receiving treatment your facility?

- a. Yes
- b. No
- c. Not sure

18. If you answered yes to the previous question, who is responsible for conducting trauma assessments at your facility?

Each work environment has specific procedures and practices. Please record your response to the following statements regarding trauma-informed care.

19. I am adequately educated on trauma-informed care information, current practices, and trauma assessment tools.

Subscale 1

Strongly Disagree Disagree Neutral Agree Strongly Agree

20. I feel confident in my ability to identify trauma related symptoms (attachment disorder, repetitive play, sleep disturbances, aggression, adverse reactions to hospitalization/etc) in the children and adolescents I work with.

Subscale 1

Strongly Disagree Disagree Neutral Agree Strongly Agree

21. I feel confident in my ability to conduct trauma assessments on population I work with (asking patient/family questions on sensitive topics and reporting on potentially traumatic events, including loss)

Subscale 1

Strongly Disagree Disagree Neutral Agree Strongly Agree

22. I feel adequately prepared to implement trauma-informed care practices into daily child life practice including

Subscale 3

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Collecting detail child/family history					
Observing reactions to the hospitalization					
Providing resources/advocacy					
Educating other members of the medical team					

23. I am encouraged to implement trauma-informed care while working with children, youth, and their families by my supervisor/workplace.

Subscale 3

Strongly Disagree Disagree Neutral Agree Strongly Agree

24. Receiving additional training on trauma-informed care would benefit me as a professional.

Subscale 2

Strongly Disagree Disagree Neutral Agree Strongly Agree

25. Please indicate your knowledge of the following trauma-informed care approaches and assessment tools.

Subscale 1

	I am unaware of this tool/protocol	I am aware of this tool/protocol	I am able to use this tool/protocol	I routinely use this tool/protocol in practice	I would like to be trained on how to use this tool/protocol
ACEs Questionnaire					
Emotional Safety Initiative					
DEF Framework					
PAUSE Protocol					

Part IV: Perceptions of Trauma-Informed Care

There are many different ways that child life specialists conduct care with patients.
Please rate how much you agree or disagree with each of the following statements.

26. Being trained in trauma-informed care enhances child life practice provided for patients.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Subscale 2

27. Being trained in trauma-informed enhances visibility of child life among the medical team.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Subscale 2

28. Providing trauma-informed care adds to the child life competency to deliver psychosocial support for children and youth.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Subscale 2

29. It would be beneficial for the medical team if all children and adolescents in a healthcare setting are assessed for trauma.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Subscale 2

30. Implementing trauma-informed care practices would be beneficial for the individual health outcomes of the patient population I work with.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Subscale 2

Part V: Open Ended Comments

Please provide any additional comments or opinions on trauma-informed care in the box below.

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APPENDIX C: SURVEY FLYER

RECRUITING PARTICIPANTS FOR A
**STUDY
EXPLORING
THE ROLE OF
CHILD LIFE IN
TRAUMA-
INFORMED CARE**

A short online survey for certified child life specialists to share their practices and opinions of trauma-informed care.

To participate in this research study,
please visit:

https://ecu.az1.qualtrics.com/jfe/form/SV_a8H0CqfW7ztrCSy

I am a graduate student at East Carolina University working to become a certified child life specialist. I, alongside an experienced research team, are conducting a research study to learn more about trauma-informed care practices among child life specialists.

APPENDIX D: PARTICIPATION CONSENT

Dear Participant,

You are invited to participate in my research study entitled, Child Life Practice & Trauma-Informed Care. The purpose of this research is to investigate child life practice with the focus on trauma-informed care with hope of learning more about specialists' level of understanding of trauma-informed care and how it can be further incorporated into the scope of practice.

I am a master's student at East Carolina University in the Human Development and Family Science department studying to be a child life specialist. This research is overseen by an experienced team of professionals and has received approval from the ECU Institutional Review Board. If you agree to participate in this study, you will be asked to fill out a short questionnaire that asks about your child life journey as well as your perceptions, knowledge, and trainings on trauma-informed care. This survey should take less than 10-15 minutes to complete. All information will be protected to maintain confidentiality.

Please call Sarah Leary at 252-722-2628 or email learys15@students.ecu.edu for any research related questions. If you have questions about your rights when taking part in this research, call the ECU University & Medical Center Institutional Review Board (UMCIRB) at phone number 252-744-2914 (days, 8:00 am-5:00 pm).

Your participation is completely voluntary. You may stop at any time you choose without penalty.

Thank you for your time!

Sincerely,

Sarah Leary Principal Investigator

YES

NO

