Development of a Pediatric Screening Tool for Trauma Exposure & Developmental Milestones: Enhancing Early Identification of Childhood Trauma to Facilitate Occupational Therapy Intervention

Development of a Pediatric Screening Tool for Trauma Exposure & Developmental Milestones: Enhancing Early Identification of Childhood Trauma to Facilitate Occupational Therapy Intervention

by

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Abstract

Background: Exposure to traumatic events during early childhood can have lasting effects on the typical development of a child, impacting their occupational performance. Despite growing research highlighting the impact of childhood trauma on various developmental domains, early recognition is often challenging in primary care settings due to a lack of appropriate resources or time limitations to routinely administer screening tools. There continues to be a need for accessible, trauma-informed resources to support pediatricians in identifying children and families who may benefit from occupational therapy services.

Objective: To develop a trauma-informed pediatric screening tool and accompanying educational resource for caregivers to enhance early recognition of developmental and behavioral concerns potentially related to trauma exposure and facilitate referrals for further occupational therapy intervention.

ACOTE Area: Primary**:** Program Development; Secondary: Advocacy and Education

Methods: This capstone project followed a program development design throughout 14 weeks. The pediatric screening tool and a caregiver educational resource were developed in collaboration with Cincinnati-based occupational therapists and co-founders of Holding Space Collaborative, Breanna Lynch and Kristen Brokamp. The screening tool was designed as a checklist-style caregiver report and includes sections on child and family history, developmental milestones and skills, and previous relevant experiences of the child and family. The educational flyer informs caregivers about the impact of trauma on child development and the role of occupational therapy in addressing these concerns. Feedback on content, format, clarity, and usability was gathered from the site mentors throughout the development process. The project

focused on tool development and refinement, so no human subjects were recruited, and no outcome measures were collected.

Results: The Childhood Development & Support Screener gathers essential information about the child from caregivers, including demographic information, developmental and behavioral checklists rooted in trauma-informed principles, and a history of potentially traumatic experiences. The structure is concise, using accessible language for application in primary care or pediatric settings. The caregiver educational flyer accompanies the screening tool to enhance understanding of occupational therapy's role in addressing trauma-related concerns in children and families. Through the iterative feedback process, preserving clinical flexibility in interpreting the results of the screening tool was an important aspect. Therefore, no scoring rubric or rigid referral threshold was incorporated. Site mentor feedback determined that the final deliverables reflected best practices of trauma-informed care, were clinically relevant and were practical for pediatric primary care settings.

Conclusions and Relevance: The capstone project deliverables contribute vital resources for advancing interdisciplinary collaboration and trauma-informed care in pediatric settings. By enhancing early identification of trauma-related developmental concerns and providing caregivers with education on occupational therapy, the tools developed from the capstone project may facilitate a pathway for referrals and increase caregiver engagement. Future directions include pilot testing the tools in primary care settings and collecting feedback from healthcare providers and caregivers to guide further refinement and validation.

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Chapter 1: Introduction and Literature Review

Introduction

Trauma exposure in early childhood can have lasting adverse effects on a child's emotional, cognitive, physical and social functioning and may manifest in developmental delays (Keeshin et al., 2020). Pediatric healthcare practitioners, including occupational therapists, can serve a critical role in facilitating healthy child development while mitigating the negative effects of trauma exposure. Despite the high prevalence of toxic stress and trauma among children in the United States, very few pediatric healthcare providers routinely screen patients for trauma exposure. Previous research indicates lack of education regarding trauma-informed care, time constraints, and limited resources as barriers of trauma screening (Hornor et al., 2019). The lack of accessible screening tools limits the potential for referring children to other services or treatments needed to support healthy development. The existing gap in knowledge emphasizes the need for a practical, concise screening tool that highlights developmental areas impacted by trauma to ensure children and families receive the appropriate OT services.

Purpose. The purpose of this capstone project is to develop a trauma-informed screening tool to assist healthcare providers with identifying children who may benefit from receiving occupational therapy services based on signs and symptoms of trauma exposure and an educational resource to inform caregivers on the impact of trauma on child development as well as the role of OT in addressing these trauma-related concerns.

Specific Aims. Specific aims of the capstone project are:

1. Conduct a literature review to understand the role of occupational therapists in delivering trauma-informed assessments and interventions within pediatric and early intervention settings

2. Develop a trauma-informed screener to use as referral tool in recognizing children and families that would benefit from receiving OT services
3. Create an educational resource for parents and caregivers to increase awareness on the impact of trauma on child development and the role of OT in addressing trauma-related developmental and behavioral concerns

Output & Outcomes. The project outcome will be a pediatric screening tool that can be used as a referral guide for healthcare providers, such as occupational therapists, to identify children who would benefit from receiving trauma-informed OT services. Increasing awareness of the developmental impact of trauma in children among healthcare providers, educators, and families can allow increased collaboration to provide effective care. A screening tool specific to OT increases access for children and families to receive occupational therapy services leading to improved developmental outcomes and overall well-being. The outcomes of this project can serve as a foundation for further research and integration of trauma-informed resources among pediatric populations. This project aims to bridge a critical gap in the identification and referral process, ensuring that children who experience trauma receive timely and effective OT interventions tailored to their unique developmental needs.

Literature Review

Childhood trauma is a prevalent issue in the United States with studies indicating over two-thirds of children report experiencing at least one traumatic event by the age of 16 (Substance Abuse and Mental Health Services Administration, 2024). Since children do not possess the same coping, cognitive, and emotional skills as adults to effectively process trauma, they are particularly vulnerable to the effects of traumatic stress ((Fairbank et al., 2014). Child

traumatic stress (CTS) refers to the physical, emotional, and behavioral responses a child develops after experiencing or witnessing a traumatic event (Perry, 2007). Research indicates children exposed to trauma are at an increased risk of experiencing developmental delays as well as cognitive, social, and emotional challenges (Friedman, Keane, & Resick, 2007). Healthcare providers, such as Pediatricians, are often the first point of contact for families with young children, which serves as an advantage in recognizing potential traumatic stress responses and connecting them with the appropriate services. This chapter reviews the existing literature on childhood trauma, its impact on development, the role of occupational therapy (OT) in addressing trauma-related concerns, and the importance of routine screening tools to facilitate early intervention for children and families.

Definition of Childhood Trauma

The Substance Abuse and Mental Health Services Administration defines trauma as an event or series of events that an individual perceives as harmful or threatening, whether that is physical, mental, or emotional, and often leads to strong negative emotions such as fear, shame, and helplessness. Children may be exposed to a wide range of traumatic events, including physical, emotional, and sexual abuse, neglect, sudden loss of a loved one, medical trauma, natural disasters, witnessing violence, and discrimination (SAMHSA, 2024). Acute trauma refers to a single, isolated event, whereas chronic trauma occurs over some time and stems from repeated exposure to stressful situations (Raynaud & Stewart, 2013). Potentially traumatic events can be very subjective, as the severity of trauma experienced by one child may differ significantly from that of another. Therefore, the responses a child develops after a traumatic event will vary depending on age, developmental level, external resources, coping skills, and previous experiences (Perry, 2007).

The Impact of Trauma Exposure on Child Development

Traumatic stress can disrupt the typical development of a child across various domains and hinder their ability to engage in tasks at school, home, and play. During early childhood, the brain is particularly sensitive to environmental influences, and in children with trauma exposure, repeated activation of the stress response system can alter the structure and function of the hippocampus, amygdala, and prefrontal cortex (Cross et al., 2017). These regions are vital in decision-making, emotional regulation, and memory skills. As a result, children may present with difficulties concentrating or learning, social functioning, regressive behaviors, and language skills (Cruz et al., 2022). Children with traumatic stress may present with sensory processing issues and display increased sensitivity to sensory stimuli or engage in sensory-seeking behaviors to cope with emotional distress. Academic performance may also be impacted by trauma exposure in childhood due to challenges with focusing, problem-solving, and delays in cognitive development (Perry, 2009). Difficulties with balance, fine motor skills, motor coordination, and meeting developmental milestones may result from childhood trauma which are key components in completing daily tasks such as feeding and dressing (Briere & Scott, 2015). Self-regulation and social-emotional skills may be impacted by trauma, with children demonstrating withdrawal or avoidance of social situations, trouble forming friendships and relationships, as well as intense emotional outbursts (Cohen & Mannarino, 2015).

These domains commonly impacted by early exposure to trauma are vital in supporting a child's participation in meaningful activities daily. However, these symptoms are often seen with other behavioral or developmental conditions, which can make it difficult for healthcare providers to identify trauma as the root. Increasing awareness and resources for early recognition

of trauma-related challenges is vital in ensuring children receive the appropriate services to promote developmental outcomes.

The Role of Occupational Therapy in Addressing Trauma Exposure

Occupational therapists (OTs) can play a significant role in addressing trauma-related concerns in children to facilitate participation in daily activities such as play, self-care, and academics. Occupational Therapy's emphasis on providing holistic, strengths-based, and client-centered care places OT practitioners in a unique position to promote skill development, engagement, and emotional regulation among children with a history of trauma (Crouch & Alers, 2014). According to the American Occupational Therapy Association (2019), OT practitioners integrate sensory-based interventions, play-based approaches, and establishment of safe and predictable environments to promote coping skills and emotional regulation in children with trauma exposure. Additional evidence-based strategies include family-based interventions to address caregiver trauma, multidisciplinary collaboration, and environmental modifications to support outcomes such as self-regulation and social interactions in the community (American Occupational Therapy Association, 2019).

The integration of trauma-informed care (TIC) in pediatric occupational therapy services has gained growing recognition in providing care to individuals with a history of trauma. Principles of trauma-informed care such as safety, trustworthiness, collaboration, empowerment, and peer support closely align with the holistic, client-centered approach of occupational therapy. A trauma-informed approach to care focuses on creating an environment that recognizes, mitigates, and addresses secondary traumatic stress while guiding assessment and intervention practices (American Occupational Therapy Association, 2019). Regularly screening for trauma and associated symptoms, implementing culturally responsive, evidence-based interventions,

connecting clients to supportive resources, and promoting the development of protective factors and resilience among vulnerable populations are all prioritized when implementing TIC into OT services. However, the role of occupational therapy in providing trauma-informed care is often underutilized, and advocating for the profession is essential to ensure children are receiving the appropriate services.

The Importance of Early Identification & Intervention

Existing research supports the benefit of early recognition and intervention among children exposed to trauma to mitigate the effects of trauma (Guerrero et al., 2022). Although awareness on the importance of trauma screening in pediatric primary care settings is growing, universal implementation of routine screening for trauma exposure is not yet standard in the United States (Keeshin et al., 2020). When trauma exposure in children is identified early, timely referrals to occupational therapy services can be facilitated to promote the child's development and participation in meaningful activities (Franke, 2014). However, effective intervention is also dependent on caregiver knowledge. Increasing educational resources to inform parents and caregivers about the impact of childhood trauma on development can help shift the negative stigma and attitudes surrounding childhood trauma, improving outcomes and fostering trauma-informed responses (Guerrero et al., 2022). Through reviewing existing literature, a need was identified for a pediatric screening tool that assesses both trauma exposure and its impact on developmental and behavioral skills relevant to occupational therapy, as well as increasing educational resources for parents or caregivers on these topics.

Chapter 2: Needs Assessment

Design and Approach:

In the initial stages of this Capstone project, a needs assessment was conducted to explore the existing gap in recognizing children with trauma exposure that could benefit from receiving Occupational Therapy (OT) services. The needs assessment included a synthesized literature review on the prevalence and impact of trauma on child development, potential traumatic events in childhood, the role of occupational therapy in addressing trauma in children, and the importance of early intervention among this population as well as findings from semi-structured interviews with pediatric healthcare professionals.

Semi-Structured Interviews:

Design: The student gathered qualitative data from interviews to identify common themes addressed during the interviews. The student received approval by Georgia State University's Institutional Review Board (IRB) prior to data collection. Informed consent was obtained from each participant prior to the interview. No identifying information was collected or reported.

Participants: A sample of four pediatric healthcare professionals was recruited for the interview process. The participants included two occupational therapists and two pediatricians with licensed pediatricians with experience working with children and families impacted by trauma. Inclusion criteria required participants to be licensed healthcare professionals, experience working in pediatric settings, and experience or familiarity with trauma-informed care or providing services for children and families impacted by trauma. Exclusion criteria included clinicians without previous pediatric experience or familiarity in trauma-related

concerns. The recruitment process utilized professional networks and direct outreach to various pediatric settings and practices providing occupational therapy services.

Measures and Instruments: Each interview lasted around 30 minutes and was guided by a list of semi-structured interview questions developed by the student prior to the interview (Appendix 4). The interview questions were focused on gathering information regarding current practices for recognizing trauma exposure in children, the challenges of routinely implementing a pediatric trauma screening tool, the role of occupational therapy in supporting children and families impacted by trauma, barriers and facilitators to developing and integrating new pediatric screening tools, and potential gaps in existing screening and referral processes.

Procedure: The interviews were conducted virtually on Webex in a private room with only the student and interviewee in attendance to ensure confidentiality. The student used a secure, personal computer for storing interview notes and answers and no identifying information was collected.

Data Analysis: The qualitative data from each interview was transcribed and reviewed by the student. Recurring themes and patterns were identified through thematic analysis of the data and refined by noting the frequency of repeated themes. Themes were considered significant if reported by more than one participant.

Results

Importance of Early Identification of Trauma: All four participants emphasized the importance and benefit of early recognition of potential trauma exposure in children. Specifically, the use of early identification to connect children to the appropriate specialized services and facilitate timely intervention was noted.

Benefit of Occupational Therapy in Trauma-Informed Care: Two participants highlighted the unique role of occupational therapy in addressing sensory, emotional, and developmental difficulties that may present in children following trauma exposure. Limited standardized tools to facilitate occupational therapy referrals in pediatric primary care settings were also reported.

Barriers of Routinely Implementing a Screening Tool: Three participants mentioned time constraints during appointments, lack of appropriate resources and training as potential barriers to implementing existing pediatric trauma screening tools.

Gaps in Effective Screening and Referral: All four participants reported lack of education or knowledge among caregivers, negative stigma, and potential hesitancy discussing sensitive topics as gaps in effectively implementing a screening tool aimed at facilitating OT referrals

Conclusion

The needs assessment identified a gap in early identification and intervention of children impacted by trauma who could benefit from occupational therapy (OT) services. Despite findings on the importance of early recognition, barriers such as appointment time constraints, lack of education and training, and absence of standardized screening tools prevent consistent screening and referrals. Participants emphasized the unique role of occupational therapists in providing trauma-informed services to children and families with trauma and addressing sensory, emotional, and developmental concerns. However, stigma and hesitancy around discussing trauma may limit caregiver engagement. The findings highlight the need for a practical, trauma-informed screening tool in pediatric settings as well as educational resources to promote timely and effective OT intervention.

Chapter 3: Theories and Models

Person-Environment-Occupation (PEO) Model

The Person-Environment-Occupation (PEO) model is utilized in this capstone project to understand better trauma's impact on a child's development and participation in daily activities. The PEO model highlights the transactional relationship between an individual, the context of their environment, the tasks they need to perform, and the impact those domains have on occupational performance. The person component of the PEO model can include the child's physical, cognitive, emotional, and sensory abilities, self-concept, and developmental stage. The environment refers to the physical spaces such as the child's home or school, social relationships, and socioeconomic, cultural, and institutional circumstances. The occupation domain alludes to the activities that are meaningful to the child, such as play, academics, or self-care tasks. The PEO model reveals that the greater the balance between these three domains, the greater an individual's occupational performance will be.

In the context of childhood trauma, the PEO model reflects the disruption of alignment between these three domains in a child caused by early adverse experiences that limit engagement in developmentally appropriate tasks. Childhood trauma can impact emotional regulation, sensory processing, neurological development, and behavior, which are all aspects of the person component. Children may experience environmental triggers within the environment, manifesting as avoidance or isolation from places and people. These trauma-related effects may hinder a child's ability to participate in important occupations, including activities of daily living, sleep, play, and academics, revealing a misalignment in the PEO dynamic.

Occupational therapists can use the PEO model to recognize areas of misalignment and develop intervention strategies to improve occupational performance. These strategies, such as

sensory-based interventions or emotional regulation techniques, can target the child's difficulties. Additionally, OTs can modify aspects of the child's environment or adapt occupations to promote their task performance and engagement. Overall, the PEO model emphasizes the need for tools such as the screener and caregiver education to ensure children with traumatic stress receive the necessary care to support development.

Trauma-Informed Care Framework

The Trauma-Informed framework was developed by the Substance Abuse and Mental Health Services Administration (SAMHSA) to guide healthcare providers on the most effective way to provide care to clients with a history of trauma. Trauma-informed care (TIC) is defined as a strengths-based, organizational approach that recognizes the widespread impact of trauma while avoiding retraumatization of the individual (SAMHSA, 2014). This approach focuses on training healthcare settings on how to be supportive and responsive to the individual needs of children with trauma to improve treatment outcomes (Ko et al., 2008). Research shows that integrating a trauma-informed approach in pediatric settings reduces the potential for medical care to trigger traumatic responses or become traumatic, provide emotional support for families, promote positive coping mechanisms, and face distress in children (Marsac et al., 2015). TIC is focused on improving the quality of care for children and families and the well-being of healthcare professionals and staff when combined with family-centered practices.

Six key principles make up trauma-informed care, including safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, and cultural sensitivity (National Center on Domestic Violence, Trauma & Mental Health, 2019). Occupational therapy's dedication to providing client-centered, holistic care aligns closely with the values of a trauma-informed approach. This capstone project utilizes the trauma-informed framework to

guide the development of the pediatric screening tool and educational brochure by using non-judgmental language, validating the concerns of children and caregivers, and increasing awareness of the impact of trauma on development while highlighting OT's role in supporting this population. By increasing resources available for parents and medical professionals, the focus is on promoting healing and resilience among children with a history of trauma.

Chapter 4: Methods

Project Design

The two primary deliverables aimed at addressing childhood trauma, developmental concerns resulting from potential trauma exposure, and advocating for the role of OT in supporting children with a history of trauma. The first deliverable included a screening tool for caregivers to complete that assists pediatricians in recognizing children and families who would benefit from additional assessment from an occupational therapist. The second deliverable consisted of an educational flyer for caregivers to raise awareness of the impact of trauma on child development, the role of OT in addressing trauma-related concerns, and the rationale behind the screening tool.

Program Development

A trauma-informed approach was employed to develop the screening tool and caregiver resource. The development process was completed in multiple steps, including a comprehensive literature review, collaboration with field experts, and an iterative process based on feedback from the site mentors. The following steps reflect each step of the development process:

1. Needs Assessment: Before starting the doctoral capstone experience (DCE), the student received approval from the Institutional Review Board (IRB) to conduct a needs assessment by virtually interviewing three pediatricians in the Atlanta area. The purpose of the interviews was to gain an understanding of current practices for identifying traumatic stress in children and potential barriers to implementing a standardized screening tool. The needs assessment results highlighted a gap in current practices and guided the formation of a screening tool and educational resource within the scope of OT.

2. Literature Review: A comprehensive literature review was conducted utilizing academic databases such as PubMed and PsycINFO to serve as the foundation of the content and format of both deliverables. The literature review focused on topics including occupational therapy's role in trauma-informed care, developmental milestones throughout childhood, current screening tools used in pediatric primary care, adverse childhood experiences (ACEs), the impact of trauma on childhood development, and evidence-based guidelines on early screening for trauma exposure. Key sources used during the program development were peer-reviewed journal articles, current screening tools such as the Adverse Childhood Experiences (ACEs) questionnaire, the Devereux Early Childhood Assessment (DECA), the Ages and Stages Questionnaire (ASQ), and guidelines from the American Occupational Therapy Association (AOTA) website.
3. Mentor Collaboration: Collaboration with the site mentors was instrumental in developing the screening and educational tool. An iterative process was designed to guide the development of the final tools. Drafts of the screening tool and educational resource were reviewed by site mentors and discussed with the student through scheduled virtual meetings, email correspondence, and shared Google documents. Following the collaborative feedback discussions, the student implemented revisions and suggestions regarding the format, tone, clinical applicability, and content to create the final tools. Microsoft Word was used to develop the final version of the screening tool, and Canva was used to create the caregiver educational flyer.

Outcome Measures

The final tool was not implemented, although its potential clinical utility and quality were evaluated through professional review and feedback from both site mentors. Feedback was collected through virtual collaborative discussions via Webex and in written format through email correspondence. Key aspects of the tools refined through feedback included content clarity, accessible language, adjusting the layout and length of tools to promote feasibility, clinical flexibility, and enhancing interdisciplinary support.

Site Description

Holding Space Collaborative (HSC) is a pediatric occupational therapy practice located in Cincinnati, Ohio, and is co-founded and owned by occupational therapists Breanna Lynch and Kristen Brokamp. Breanna Lynch and Kristen Brokamp advocate for incorporating occupational therapy services as a vital component of the holistic treatment approach to address mental wellness throughout the lifespan. Holding Space Collaborative offers holistic, trauma-informed OT services to children and families, including developmental screenings, individual and family-based therapy, classroom and home observations, and caregiver education. Additionally, the practice provides professional in-services for schools and community partners.

Holding Space Collaborative's mission is to empower children, their families, and the community by enabling participation in meaningful occupations to promote and sustain wellness. The practice is rooted in the belief that therapy should be just and accessible for all individuals and values authentic partnerships between clinicians, clients, and families. The vision of HSC is to build a collaborative, interdisciplinary practice of expert clinicians to provide client-centered, team-based intervention. They are committed to creating therapeutic practices and environments that promote intentional, empathetic interactions between individuals to cultivate a sense of

safety, security, and compassionate understanding. Breanna Lynch and Kristen Brokamp utilize their professional expertise as occupational therapists to deliver evidence-based interventions, wellness resources, and community-based support spaces to address the complex needs of children and their caregivers. Their clinical approach focuses on attachment and regulation strategies, caregiver support, and developmental education.

As occupational therapists and founders of a trauma-informed pediatric practice, Breanna Lynch and Kristen Brokamp possessed significant expertise in supporting children with a history of trauma, which was the primary focus of this capstone project. The purpose of the screening tool and educational resource for caregivers focused on promoting early recognition of trauma-related developmental concerns and advocating for occupational therapy's role in this population, which supported HSC's goals of fostering collaborative relationships between caregivers, pediatricians, and therapists as well as increasing access to appropriate services.

Procedures

Although a formal evaluation or implementation of these tools was not an objective for the 14-week capstone experience, extensive feedback was collected throughout the development process of both tools. The student received feedback from site mentors Breanna Lynch and Kristen Brokamp, Cincinnati-based occupational therapists and co-founders of Holding Space Collaborative, a pediatric OT practice specializing in mental wellness and trauma-informed care. Iterative revisions were discussed through bi-weekly virtual meetings, collaborative review sessions, shared Google documents, and regular email correspondence between the student and site mentors. The student implemented feedback and revisions to refine and finalize the deliverables continuously.

The site mentors' professional insight in supporting children with a history of trauma and their families was invaluable in ensuring the final outputs were family-centered, accessible, and clinically relevant. Their specialized expertise in providing trauma-informed OT services and their leadership roles in a trauma-responsive pediatric practice guided the student in the finalized content, format, tone, and potential clinical utility of the tools. Through conceptual and practical guidance, the site mentors collaborated with the student to ensure the final deliverables would be practical within fast-paced clinical settings and set the foundation for future clinical use.

An iterative feedback process was utilized while developing the pediatric screening tool and caregiver educational component. This information was reflected through revisions made by the student, including simplifying and clarifying language, choosing titles that avoided potential stigma, structuring the questions for ease of completion, and incorporating strategies to reassure caregivers about the screening tool's voluntary and supportive nature. The following areas outline the refinements made following collaborative discussions between the student and site mentors.

- Clarity and flexibility: The language throughout the content of the screener and educational tool was carefully chosen to be developmentally appropriate and accessible to caregivers of all backgrounds. Specific examples were also included in written and picture format to enhance caregiver understanding and completion accuracy.
- Feasibility: The structure and length of the final screening tool were developed considering the potential time constraints of pediatricians and caregivers. The screening tool employed checklist-style questions, and developmental and behavioral domains were narrowed down to ensure it was brief and easy to administer.

- Trauma-informed tone: To reduce potential stigma and promote caregiver engagement, the wording chosen for the titles and content of both tools modeled principles of trauma-informed care.
- Family-centered practice: The tools' content and domains were chosen to provide families with the information and resources they need to make informed choices regarding their child's care. The final deliverables focus on enhancing collaboration between primary care professionals, families, and occupational therapists.
- Advocating for occupational therapy: The content of the screening tool and caregiver educational component reflect OT-relevant areas to facilitate referrals and promote timely OT intervention for children with trauma exposure.

Chapter 5: Results of Program Development

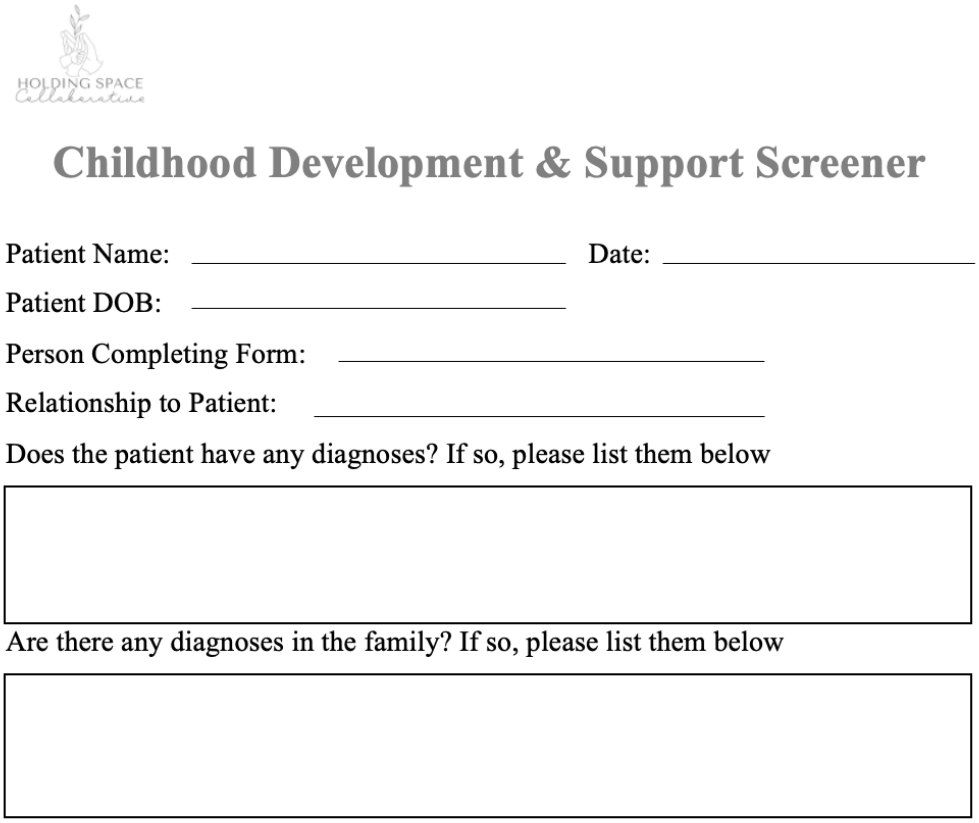
Childhood Development & Support Screener

The Childhood Development & Support Screener is a brief caregiver report checklist intended for use in pediatric primary care settings during routine or wellness visits. Its main objective is to assist pediatricians in recognizing potential trauma-related developmental or behavioral concerns in children who may benefit from further evaluation by an occupational therapist. The screening tool was developed to facilitate collaborative decision-making between healthcare providers and families to enhance early OT intervention when needed.

The screening tool is comprised of the following components:

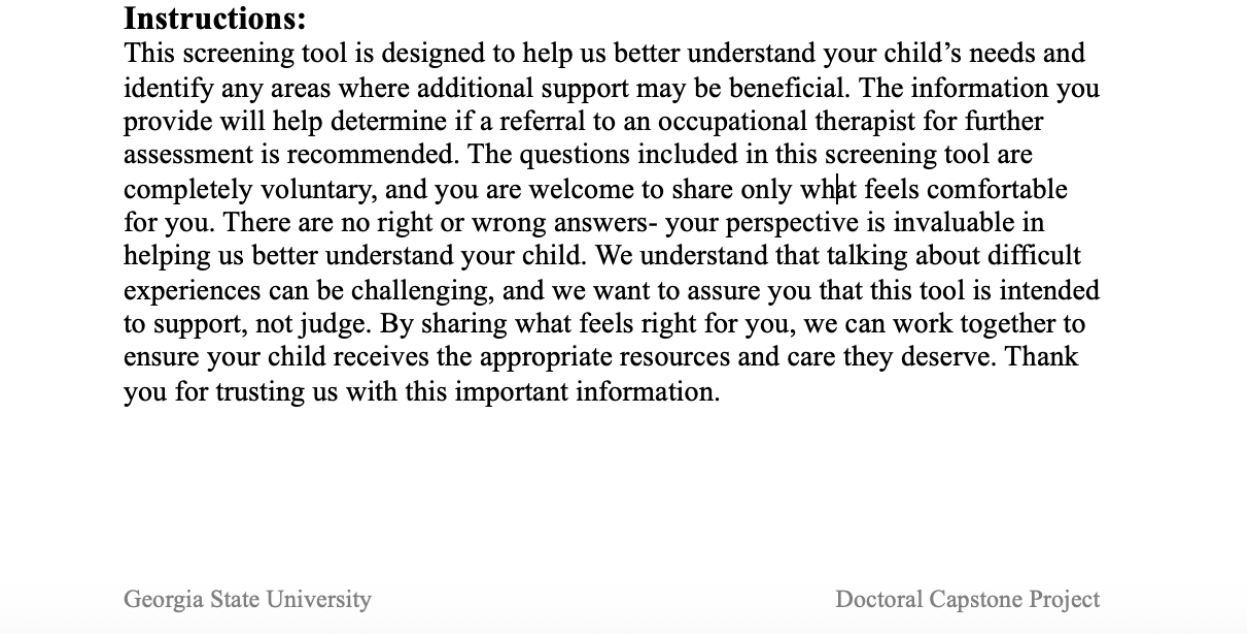
1. **Necessary identifying information:** The beginning of the Childhood Development & Support Screener focuses on gathering context on the child's medical profile, such as:
    - Patient's full name
    - Date of birth
    - The date the tool was administered
    - Name of person completing the form
    - Relationship to the patient
    - Any prior diagnoses the child has received
    - Any known family diagnoses, including neurological, mental health, or developmental conditions

Figure 1. Screener First Section



2. **Purpose and Instructions:** A brief paragraph is included before the screening sections to inform caregivers of the form's purpose, reassure them that their responses are voluntary and valued, acknowledge the challenge of discussing sensitive topics, and reinforce the tool's purpose is to support, not judge, families. The wording was carefully chosen to align with the trauma-informed framework principles of safety, transparency, collaboration, and empowerment (SAMHSA, 2014).

Figure 2. Screener Introduction



Instructions:

This screening tool is designed to help us better understand your child's needs and identify any areas where additional support may be beneficial. The information you provide will help determine if a referral to an occupational therapist for further assessment is recommended. The questions included in this screening tool are completely voluntary, and you are welcome to share only what feels comfortable for you. There are no right or wrong answers- your perspective is invaluable in helping us better understand your child. We understand that talking about difficult experiences can be challenging, and we want to assure you that this tool is intended to support, not judge. By sharing what feels right for you, we can work together to ensure your child receives the appropriate resources and care they deserve. Thank you for trusting us with this important information.

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3. **Section One: Developmental Milestones and Skills:** The first section covers a checklist of key developmental skills and behaviors throughout childhood that are often impacted by trauma exposure. Caregivers are asked to "check all boxes that apply" to their child, with brief examples accompanying each item to improve user clarity. This section is designed to identify potential delays, skill regressions, or behavioral changes within the scope of OT services. Based on collaborative feedback from site mentors, this section was placed prior to the trauma exposure section.

Figure 3. Screener Developmental Section

HOLDING SPACE Collaborative

Childhood Development & Support Screener

Section 1:

Section one focuses on developmental milestones and skills throughout childhood.

Please check all boxes that apply to your child.

My child has experienced a delay or regression in previously acquired skills such as:

- ☐ Crawling (moving one arm and opposite knee forward at the same time- refer to picture below)

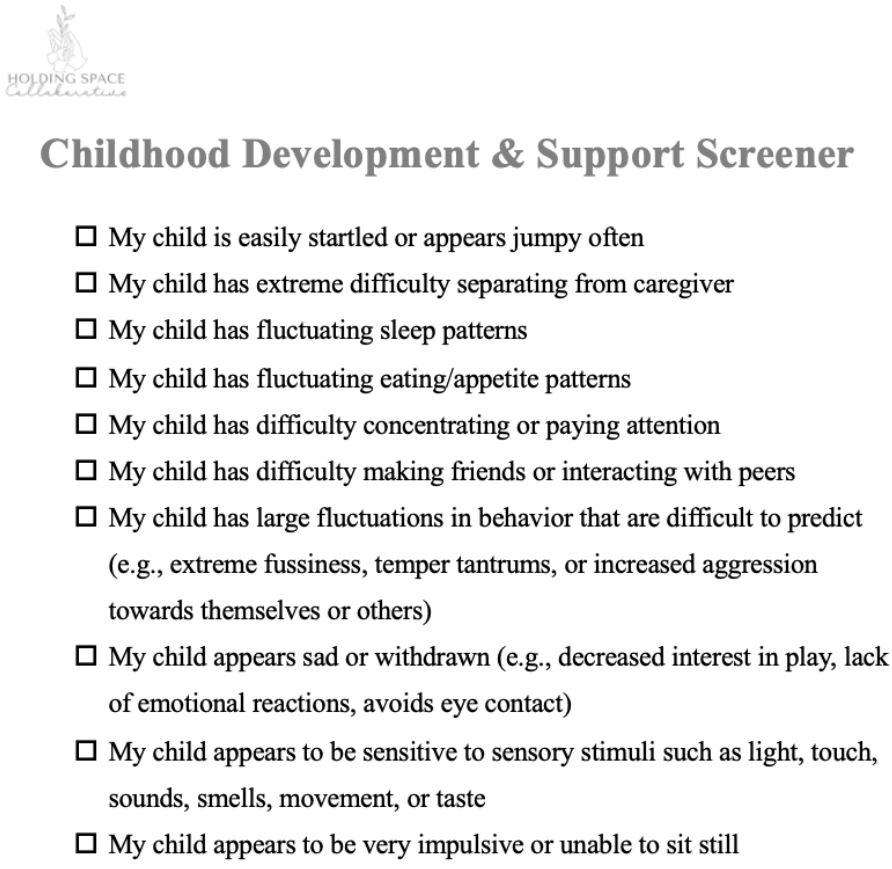
- ☐ Walking
- ☐ Toileting skills
- ☐ Communication/language skills
- ☐ Sleeping
- ☐ Eating/Appetite
- ☐ Other:

☐ My child has difficulty with balance or coordination (e.g., falls often, clumsy movements)

☐ My child has difficulty performing fine motor tasks (using crayons, utensils, or fasteners on clothing)

☐ My child has difficulty with hand-eye coordination (e.g., throwing and catching a ball)

Figure 4. Screener Developmental Section Part Two



4. **Section Two: Relevant Child and Family History:** The second section explores potential adverse or traumatic events the child may have experienced or been exposed to. The items in this section were selected using a background literature review and collaboration with site mentors on the most common traumatic events that occur during childhood. Caregivers are asked to check all experiences that may apply to their child with examples following each item to assist caregivers in reflecting on their child's experience and determining relevance. The purpose of this section is not to diagnose but to decide if additional trauma-informed OT intervention may be warranted.

Figure 5. Screener Trauma History Section

Section 2:
Section two explores relevant child/family history that may contribute to your child's development. Please check all events your child may have experienced or been exposed to.

- ☐ Abuse (Physical, Emotional, or Sexual)
- ☐ Neglect (Physical or Emotional)
- ☐ Witnessed violence (e.g., domestic violence, community violence)
- ☐ Loss of a loved one (Death of family member, friend, or pet)
- ☐ Divorce or separation of parents

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Childhood Development & Support Screener

- ☐ Natural disasters (e.g., floods, hurricanes, earthquakes)
- ☐ Car accidents or near-death experiences
- ☐ Bullying (Physical, verbal, or emotional)
- ☐ Discrimination (based on race, ethnicity, gender, etc.)
- ☐ Accidents (falls, injuries, surgeries)
- ☐ Hospitalization or severe illness
- ☐ History of mental illness in family
- ☐ Substance use in family
- ☐ Other (Please describe): _____

Caregiver Educational Flyer

The second deliverable was a one-page educational for caregivers designed to complement the screener. The flyer was designed using Canva and is visually appealing with accessible, trauma-sensitive language. It is intended to be distributed by pediatricians or supporting primary care personnel simultaneously with the screening tool or if pediatricians identify concerns. The following components reflect the purpose of the educational resource:

- Explain the impact of traumatic events on a child's development
- List common signs and behaviors to be aware of that may be related to trauma exposure
- Describe the role of occupational therapists in supporting children and families impacted by trauma
- Reduce stigma and hesitation with completing the screening tool by shifting perception from blame to support, normalizing the conversation around trauma, and building trust in the screening process

Figure 6. Caregiver Educational Flyer

HOLDING SPACE Collaborative

OCCUPATIONAL THERAPY'S ROLE IN ADDRESSING MENTAL HEALTH

WHAT TO LOOK FOR

Signs of trauma in children may vary depending on the child's age, nature of the trauma, and developmental level. These responses may manifest shortly after the event or show up later. It is important to be aware of these potential indicators to ensure the child receives the appropriate support and services. Trauma exposure in children may impact the following:

- **Behavior:** Children may appear more withdrawn, hypervigilant, or fearful of being separated from their parent/caregiver. They may also appear to be sensitive to sensory stimuli such as light, touch, sounds, smells, movement, or taste. Children may present with large fluctuations in behavior that are difficult to predict such as increased aggression, temper tantrums, or extreme fussiness. Children may appear very impulsive or more likely to engage in risky behaviors.
- **Developmental Milestones:** Children may experience a regression in previously met developmental milestones or a delay in meeting milestones. This includes crawling, walking, toileting skills, communication/language skills, or thumb-sucking.
- **Emotional Regulation:** Children may present with difficulties appropriately recognizing, understanding, and expressing their emotions. They may have difficulty self-regulating and soothing themselves in times of distress.
- **Social Skills & Forming Healthy Relationships:** Children may have difficulty interacting with peers or making friends. Children may also isolate themselves from social situations or avoid initiating play.
- **Cognition:** Children may have difficulty concentrating or learning new material in school which can lead to academic challenges.
- **Physical Health:** Children may experience physical symptoms such as unexplained stomach aches or headaches which may be signs of emotional distress.
- **Sleep & Eating:** Children may experience fluctuating sleep or eating patterns. Examples of sleep patterns include difficulty falling asleep, nightmares, or other sleep disturbances.

OT'S ROLE IN ADDRESSING TRAUMA

Occupational therapy (OT) takes a holistic approach in facilitating childhood development and overall well-being. OT practitioners focus on promoting your child's participation in essential areas including social skills, play and leisure, education, sleep, eating, dressing, hygiene, and any other meaningful activities to your child. OT's work with you and your child to assess their motor, sensory processing, and cognitive skills to develop an individualized treatment plan tailored to your child's needs and goals. Some evidence-based approaches for addressing childhood trauma include sensory based interventions, emotional regulation strategies, coaching for parents/caregivers, play-based therapy, and utilizing principles from a trauma-informed approach.

WHAT IS TRAUMA?

Childhood trauma refers to a distressing event or series of events that cause emotional, psychological, or physical harm to the child. Some examples of potential traumatic events include abuse, loss of a loved one, neglect, severe illness or hospitalization, witnessing violence, natural disasters, incarceration of a parent, or bullying. Child traumatic stress is defined as the responses a child develops following a traumatic event that impacts their daily life. Trauma exposure during a child's developmental years may have lasting effects on the child's emotional regulation, behavior, physical and mental health, and overall development.

IMPORTANCE OF SCREENER

The purpose of the following screener is to gather crucial information regarding your child's developmental progress as well as potential exposure to traumatic events. By assessing both areas, we can better understand how early experiences may be impacting your child's development involving their mental, physical, and emotional health. This screener is designed to identify children who may benefit from further assessment from an occupational therapist. Early identification of trauma-related effects allows for targeted interventions that can address specific challenges and ensure the child receives the support they need to thrive.

Georgia State University

Chapter 6: Discussion

Contextualization

The deliverables of the capstone project align with existing research recognizing the impact of early trauma exposure on childhood development and participation in daily activities. Trauma in early childhood may disrupt typical development across multiple domains including forming secure attachments, regulating emotions, sensory processing, social skills, and meeting age-appropriate milestones (Cross et al., 2017). Despite growing recognition of occupational therapy's role in supporting children and families affected by trauma, most pediatric screening tools used in primary care solely focus on trauma exposure and do not incorporate functional impairments that occupational therapists are specifically qualified to address (Franke, 2014).

The project supports current literature recommendations advocating for trauma-informed, collaborative approaches to early identification and intervention (American Occupational Therapy Association, 2019). The Childhood Development & Support Screener is intended for use in pediatric primary care settings to reflect the crucial role of pediatricians in early detection as the initial point of contact for most families with young children (Keeshin et al., 2020). By developing a tool that incorporates potential traumatic events and impacts on occupational performance as well as an educational resource to increase health literacy in caregivers, this capstone project addresses a critical gap in early intervention.

Unlike many standardized screening tools, the Childhood Development & Support Screener avoids a rigid scoring system and does not rely on a numeric threshold to support clinical discretion. Given the subjective nature of trauma experiences in children, this approach respects healthcare providers' professional judgment when deciding if an OT referral may be beneficial (Perry, 2007). While previous studies have focused on validation or intervention

outcomes of screening tools (Guerrero et al., 2022), this capstone project contributes to the program development aspect of resources to enhance early detection of changes in a child's occupational performance due to traumatic stress.

New Insights

The deliverables of this capstone project offer contributions to both the field of occupational therapy and pediatric primary care practice. The caregiver educational resource is designed to increase caregiver awareness of the effects of trauma on development and the role of OT in supporting children and families impacted by trauma. Research highlights the importance of caregiver knowledge for effective early intervention, reducing stigma, and improving engagement with screening tools that include sensitive topics (Traub & Boynton-Jarrett, 2017). The flyer incorporated simplified, trauma-sensitive language to empower caregivers in making informed decisions about their child's care and promoting trust in the screening process. This approach reflects findings that low health literacy, particularly among vulnerable populations, can be a significant barrier in recognizing trauma-related concerns and seeking the appropriate care (Guerrero et al., 2022). Additionally, this project advances the role of occupational therapy in providing trauma-informed care and advocates for the integration of OT into pediatric care pathways by highlighting the ways OT addresses emotional, sensory, social, and developmental difficulties resulting from child traumatic stress (American Association of Occupational Therapy, 2019).

Limitations

The primary limitation of this capstone project was the inability to implement or pilot test the screening tool within the 14-week timeframe, as the project's main objective focused on the development of the materials. A formal evaluation of the psychometric properties including

reliability, validity, and sensitivity as well as its use in primary care settings was not conducted so the effectiveness of the tool across diverse pediatric populations remains unclear. Although the tools were developed in collaboration with Holding Space Collaborative and reflect valuable input from occupational therapists with expertise in trauma-informed care, they were not reviewed or tested by a broader range of stakeholders. As a result, their generalizability to other settings and populations remains uncertain. The scope of the deliverables was also constrained by the project's limited timeframe. For instance, the caregiver educational flyer was created in a static format, which may limit accessibility and engagement for individuals with varying learning preferences or lower literacy levels. Furthermore, both the screening tool and the flyer are currently available only in English, presenting a significant barrier of accessibility for non-English-speaking individuals and communities.

The decision to primarily focus on the development phase over implementation during the 14-week doctoral capstone experience emerged from collaborative discussions between the student and site mentors. This approach allowed for the development of deliverables that were firmly grounded in trauma-informed principles, culturally responsive, and aligned with evidence-based practices in pediatric mental health and caregiver engagement. By prioritizing a collaborative, development-focused approach, the capstone project allowed for multiple rounds of feedback and refinement, which were essential in producing tools that are both clinically relevant and appropriate for use in community-based settings. Additionally, the methodology ensured the project addressed an existing gap in services for children impacted by trauma. Ultimately, the final project deliverables were designed to establish a foundation for future implementation, evaluation, and broader dissemination.

Future Directions

The Childhood Development & Support Screener and caregiver educational flyer is intended to be administered in pediatric primary care clinics since pediatricians are usually the first point of contact for families with young children. The screening tool is designed to be brief and requires minimal time for caregivers to complete before or during routine visits. The content is written in plain language and accessible language to encourage practical use among a variety of populations. The screener can be included in the pre-visit paperwork for caregivers to complete, delivered in printed format or electronically through patient intake systems, or integrated during other screenings already established at pediatric practices since minimal additional time is required.

The educational resource can be distributed at various points during the visit, whether prior to the screening tool to make them aware of the purpose of the screening tool, at the same time the screener is administered, or during follow-up discussions to support caregiver engagement. The flyer was designed to be flexible to account for potential time constraints and limit barriers in delivering the tool. The educational tool is not specific to primary care settings and can be used as a resource in parenting classes, community outreach programs, or any other family-centered settings. The flexibility in the design of the Childhood Development & Support Screener and educational flyer allows them to be adapted to other settings that provide services to children and families, including early intervention programs, occupational therapy practices, early childhood education settings, community mental health clinics, and many more.

Training sessions can be developed and led by occupational therapists to educate pediatricians and staff on the purpose of the screening tool, the role occupational therapy plays in supporting this population, the importance of early recognition and referral, and the use of

trauma-sensitive language when introducing the tools to caregivers to avoid stigma or judgmental language. Training sessions can be delivered through an asynchronous learning module, brief workshop, or in-service sessions. The leadership role of occupational therapists during the training process can facilitate interprofessional collaboration and educate pediatric primary care teams on trauma-informed developmental frameworks.

The project outputs can be used in physical and digital formats, expanding the tools' reach and access. The screener and educational flyer can be administered virtually through electronic health records, patient portals, or integrated into larger developmental screening platforms to expand access. Future versions of the tools can be translated into other languages and adapted for use in other cultures. Collaborating with institutions that have adopted trauma-informed care initiatives, such as children's hospitals, community-based programs, or pediatric clinics, can increase the exposure of the tools and provide opportunities for broader implementation and evaluation of the resources. As the tools begin to be delivered in practice, gathering data through feedback and case studies can guide refinement and serve as evidence for future research.

Chapter 7: Implications for Occupational Therapy Practice

Application to Clinical Practice

The Childhood Development & Support Screener and accompanying caregiver resource were developed to enhance early identification of potential developmental and behavioral challenges related to trauma exposure in pediatric primary care settings. These resources are designed to facilitate timely referral to occupational therapy when warranted to ensure children exposed to trauma receive the appropriate care and services. Although the screener is intended for use by pediatricians or supporting personnel, the tool is rooted in core principles of occupational therapy with a focus on a child's occupational performance. The tool assesses various aspects of a child's development within the scope of occupational therapy practice, such as gross motor skills, fine motor skills, socio-emotional development, sensory skills, language, and cognition.

In standard clinical practice, especially in primary care settings with limited time and resources, the Childhood Development & Support Screener offers a brief, family-centered approach to gathering valuable knowledge that may otherwise go unrecognized during a routine well-child visit. This resource supports a more holistic understanding of a child's functioning by providing insight into their lived experiences, occupational performance, and developmental history. Similarly, the educational flyer aims to inform caregivers about the potential impact of trauma on child development and the supportive role of occupational therapy in addressing trauma-related concerns, which may reduce stigma around seeking support, strengthen caregiver trust, and foster engagement in services.

Contributions to Occupational Therapy Practice

The resources developed during the capstone experience advocate incorporating occupational therapy when addressing mental wellness in children. Equipping pediatricians with a screening tool to identify concerns that may warrant OT referral increases recognition and expands the influence of occupational therapy in primary care settings. The screening instrument and educational flyer inform families and other healthcare professionals about occupational therapy practice, advocating for the role of OT as an essential member of the interdisciplinary care team. Additionally, these tools may facilitate communication and collaborative relationships between families, pediatricians, and occupational therapists.

The deliverables of this capstone project represent the value of interprofessional collaboration in program development. The collaboration between the student and Holding Space Collaborative models the leadership role OTs can play in developing resources for interdisciplinary use, expanding the impact and scope of occupational therapy in advocacy and public health.

Impact on the Target Population

The target population for these tools is children presenting with developmental or behavioral concerns who may have experienced traumatic events and their caregivers. The screening tool and educational component enhance early identification in primary care settings, facilitating timely referral to occupational therapy and improving outcomes. Additionally, the final deliverables reflect the mission of Holding Space Collaborative, the capstone site, to support trauma-informed, family-centered services and advocate for the inclusion of occupational therapy in addressing pediatric mental wellness. The Childhood Development &

Support screener was designed to adapt to different pediatric care settings, enhancing its potential reach and relevance.

Chapter 8: Sustainability Plan or Implementation Plan

The sustainability and implementation plan for the Childhood Development & Support Screener and accompanying caregiver educational flyer is aligned with the values and clinical framework of Holding Space Collaborative (HSC). Founded and led by Cincinnati-based occupational therapists Breanna Lynch and Kristen Brokamp, HSC specializes in sensory integration, early intervention, pediatric outpatient care, school-based services, and educational initiatives. With this foundation, the practice is well-equipped to integrate the deliverables seamlessly into its existing clinical offerings. The screener will be embedded into routine developmental assessments and observation-based evaluations conducted in home, classroom, and clinical settings. Consistent with HSC's trauma-informed approach, the tool will support clinicians in identifying trauma-related concerns and guide the development of individualized, evidence-based intervention plans.

Additionally, both the screener and the caregiver flyer will enhance HSC's ongoing partnerships with community providers and clinicians. These partners serve as critical referral pathways, and the screener will help facilitate timely and direct referrals to HSC when potential trauma-related concerns are identified. This promotes increased access to appropriate occupational therapy services for children and families. The deliverables will also be incorporated into HSC's current educational offerings, including parent and caregiver coaching sessions, as well as in-services and professional presentations. Integrating these tools into the educational services will increase awareness of use and application, helping caregivers and professionals better understand how to access and implement these trauma-informed resources in practice. To ensure continued relevance and accessibility, the final versions of both tools were digitally shared with Holding Space Collaborative to allow site mentors to easily revise and

adapt the materials based on feedback from caregivers and community stakeholders. The flexibility to distribute the screener and flyer in both print and digital format further expands its reach, making them accessible beyond the current client base. Through the implementation of these deliverables into the existing service model, Holding Space Collaborative advances its role as a leader in trauma-informed pediatric occupational therapy. These strategies support the practice's vision to create a collaborative practice of expert clinicians across a variety of disciplines dedicated to providing client-centered, holistic care for children and families.

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Appendix 1 - Learning Objectives

Learning Objectives

Learning Objectives (LTGs)	Short Term Objectives	Outcome Measures	Timeline for completion
Over the 14-week capstone experience, I will understand the role of occupational therapists in delivering trauma-informed assessments and interventions among the pediatric setting	- Research and summarize key literature findings on scope and role of OT in providing services to children and families with a history of ACEs - Summarize findings from need assessment to identify the gap in appropriately recognizing and delivering OT services to children with trauma exposure - Collaborate with site mentors to understand their approach to trauma-informed care within their pediatric setting	- Complete literature review towards final paper to be signed off by faculty and site mentor - Complete the final needs assessment to share with faculty and site mentor	Within 6 weeks of capstone experience
Over the 14-week capstone experience, I will gain a comprehensive understanding to identify strengths and barriers of current trauma-informed screeners and assessments used among pediatric	- Research pediatric screeners currently used in primary care settings to assess trauma exposure in children - Identify educational resources available	- Collaborate with site mentors to identify strengths and barriers of current referral screeners or assessments - Develop an outline of key information to include in the final	Within 9 weeks of capstone experience

settings.	for caregivers - Conduct research on evidence-based strategies to increase caregiver engagement during the screening process	guide, creating a template for the layout and structure - Complete research on funding opportunities for delivering OT services at Holding Space Collaborative	
Over the 14-week capstone experience, I will create a trauma-informed screening tool to assist in recognizing individuals that would benefit from receiving OT services at Holding Space Collaborative based on signs and symptoms of trauma exposure.	- Develop a screening tool that highlights indicators of trauma-related developmental delays along to facilitate early OT intervention - Identify guidelines for implementing the screening tool in clinical and educational settings - Ensure deliverables are easily understandable and usable for pediatric setting	- Gather feedback from site and faculty mentor to improve usability of screening tool - Complete final capstone paper on development of referral tool, educational resource for caregivers, research process, and key takeaways to be reviewed by site and faculty mentor - Create final presentation to communicate and disseminate information to site mentors, faculty, staff, and other students	Within 14 weeks of capstone experience

Appendix 2 - Supervision Plan

Supervision Plan

Scheduled Meetings

- ➔ Meetings between the student and site mentor will take place every 2 weeks, or as needed, via WebEx to go over progress related to the project or changes to the schedule
- ➔ Meetings between the student and faculty mentor will take place once a month, or as needed, via WebEx or in person

Communication Methods

- ➔ Primary method of communication with site mentor will be through email
- ➔ Primary method of communication with faculty advisor will be through email
- ➔ WebEx will be used as the online meeting platform with the site mentor and faculty advisor

Resolving Conflict

- ➔ Any conflicts that arise throughout the project between student, site mentor, or faculty advisor will be addressed using open and honest communication
- ➔ Issues will be addressed promptly to prevent conflict from escalating.
- ➔ A meeting, via WebEx, involving all parties will be scheduled to discuss and resolve the dispute
- ➔ Regular check-ins will be scheduled

Student Roles and Responsibilities

- ➔ Understand and follow GSU OTD program policies and requirements regarding the capstone experience

- ➔ Complete fourteen weeks (560 hours)
- ➔ Complete a literature review and needs assessment prior to the capstone experience
- ➔ Take initiative to communicate with the site mentor and faculty advisor when needed to ensure a successful capstone experience
- ➔ Maintain respectful interaction and communication with each team member during every aspect of the capstone project
- ➔ Develop and maintain a timeline to conduct and complete deliverables for the capstone experience
- ➔ Be self-directed during the entirety of the capstone process which includes the development, planning, implementation, and dissemination phase
- ➔ Provide and seek appropriate feedback from site mentor at the midterm and final evaluation to enhance the capstone experience
- ➔ Complete and disseminate the capstone project by the end of the 14 weeks
- ➔ Complete evaluation of the capstone experience

<u>Site Mentor Roles and Responsibilities</u>

- ➔ Provide supervision or mentorship to the student throughout the entire capstone experience
- ➔ Demonstrate expertise in chosen area of focus by providing the student with training, resources, and connections with additional experts in the field
- ➔ Instruct and orient the student to capstone site, expectations, policy and procedures, and any other personnel

- ➔ Collaborate with capstone team to guide the student through needs assessment and implementation phase of the capstone project
- ➔ Maintain regular communication with the student via WebEx or by email
- ➔ Provide meaningful feedback of deliverables and drafts of the capstone project, as needed
- ➔ Provide constructive, insightful feedback regarding the student's performance to enhance the capstone experience
- ➔ Collaborate with student and faculty mentor to define specific mentorship responsibilities
- ➔ Grant the student access to resources related to the capstone project, as appropriate

Faculty Mentor Roles and Responsibilities

- ➔ Collaborate with Capstone coordinator, site mentor, and student on learning objectives and supervision plan for Capstone Experience
- ➔ Provide feedback on deliverables including literature review, IRB, manuscript, poster, and final presentation
- ➔ Provide guidance and support to the student as needed regarding data collection, analysis, and deadlines for capstone
- ➔ Ensure Capstone project alignment with the curriculum and ACOTE standards

By following this supervision plan, the capstone project will be completed successfully while meeting the standards set by ACOTE.

Appendix 3 - Summary Pages

Summary Pages

Background

Trauma exposure in early childhood can have lasting adverse effects on a child's emotional, cognitive, physical and social functioning and may manifest in developmental delays (Keeshin et al., 2020). Pediatric healthcare practitioners, including occupational therapists, can serve a critical role in facilitating healthy child development while mitigating the negative effects of trauma exposure. Despite the high prevalence of toxic stress and trauma among children in the United States, very few pediatric healthcare providers routinely screen patients for trauma exposure. Previous research indicates lack of education regarding trauma-informed care, time constraints, and limited resources as barriers of trauma screening (Hornor et al., 2019). The lack of accessible screening tools limits the potential for referring children to other services or treatments needed to support healthy development. The existing gap in knowledge emphasizes the need for a practical, concise screening tool that highlights developmental areas impacted by trauma to ensure children and families receive the appropriate OT services.

Purpose

The purpose of this capstone project is to develop a trauma-informed screening tool to assist healthcare providers with identifying children who may benefit from receiving occupational therapy services based on signs and symptoms of trauma exposure.

Specific Aims

Specific aims of the capstone project are:

4. Conduct a literature review to understand the role of occupational therapists in delivering trauma-informed assessments and interventions within pediatric and early intervention settings
5. Develop a trauma-informed screener to use as referral tool in recognizing children and families that would benefit from receiving OT services
6. Create an educational resource for parents and caregivers to increase awareness on the impact of trauma on child development and the role of OT in addressing trauma-related developmental and behavioral concerns

Output & Outcomes

The project outcome will be a pediatric screening tool that can be used as a referral guide for primary care providers to identify children who would benefit from receiving trauma-informed OT services. Increasing awareness of the developmental impact of trauma in children among healthcare providers, educators, and families can allow increased collaboration in providing effective care. A screening tool specific to OT increases access for children and families to receive occupational therapy services leading to improved developmental outcomes and overall well-being. The outcomes of this project can serve as a foundation for further research and integration of trauma-informed resources among pediatric populations. This project aims to bridge a critical gap in the identification and referral process, ensuring that children who experience trauma receive timely and effective OT interventions tailored to their unique developmental needs.

Appendix 4: Needs Assessment Interview Questions

Needs Assessment Interview Questions

1. Can you describe your current role and experience working with children who have experienced trauma or adverse childhood experiences (ACEs)?
2. What strategies or tools, if any, do you currently use to identify trauma exposure in children?
3. How do you typically determine if a child's developmental or behavioral challenges may be related to trauma?
4. What challenges or barriers have you encountered in identifying trauma exposure in pediatric patients?
5. Are there any gaps you have noticed in the current screening or referral process for children with trauma-related concerns?
6. In your experience, what role can occupational therapy play in supporting children who have experienced trauma?
7. How do you currently refer children to occupational therapy, and what factors influence your decision to make a referral?
8. What are your thoughts on implementing a standardized trauma screening tool in pediatric settings?
9. What features or characteristics would make a trauma screening tool most useful or practical in your practice?
10. What potential barriers do you foresee in integrating a trauma screening tool into your workflow?
11. What supports or resources would help facilitate the adoption and use of such a tool?
12. How do you involve caregivers or families in the process of identifying and addressing trauma-related concerns?
13. What educational resources or information do you think would be helpful for caregivers regarding trauma and its impact on child development?
14. Based on your experience, what recommendations do you have for developing or implementing a trauma exposure screening tool for children?
15. Is there anything else you would like to share about trauma identification, screening, or occupational therapy's role in pediatric care?

Appendix 5 – Childhood Development & Support Screener

Childhood Development & Support Screener

Patient Name: _____ Date: _____

Patient DOB: _____

Person Completing Form: _____

Relationship to Patient: _____

Does the patient have any diagnoses? If so, please list them below

Are there any diagnoses in the family? If so, please list them below

Instructions: This screening tool is designed to help us better understand your child's needs and identify any areas where additional support may be beneficial. The information you provide will help determine if a referral to an occupational therapist for further assessment is recommended. The questions included in this screening tool are completely voluntary, and you are welcome to share only what feels comfortable for you. There are no right or wrong answers- your perspective is invaluable in helping us better understand your child. We understand that talking about difficult experiences can be challenging, and we want to assure you that this tool is intended to support, not judge. By sharing what feels right for you, we can work together to ensure your child receives the appropriate resources and care they deserve. Thank you for trusting us with this important information.

Appendix 5: Childhood Development & Support Screener

HOLDING SPACE Collaborative

Childhood Development & Support Screener

Section 1:

Section one focuses on developmental milestones and skills throughout childhood.

Please check all boxes that apply to your child.

My child has experienced a delay or regression in previously acquired skills such as:

- ☐ Crawling (moving one arm and opposite knee forward at the same time- refer to picture below)

- ☐ Walking
- ☐ Toileting skills
- ☐ Communication/language skills
- ☐ Sleeping
- ☐ Eating/Appetite
- ☐ Other:

☐ My child has difficulty with balance or coordination (e.g., falls often, clumsy movements)

☐ My child has difficulty performing fine motor tasks (using crayons, utensils, or fasteners on clothing)

☐ My child has difficulty with hand-eye coordination (e.g., throwing and catching a ball)

Appendix 5: Childhood Development & Support Screener

Childhood Development & Support Screener

- ☐ My child is easily startled or appears jumpy often
- ☐ My child has extreme difficulty separating from caregiver
- ☐ My child has fluctuating sleep patterns
- ☐ My child has fluctuating eating/appetite patterns
- ☐ My child has difficulty concentrating or paying attention
- ☐ My child has difficulty making friends or interacting with peers
- ☐ My child has large fluctuations in behavior that are difficult to predict (e.g., extreme fussiness, temper tantrums, or increased aggression towards themselves or others)
- ☐ My child appears sad or withdrawn (e.g., decreased interest in play, lack of emotional reactions, avoids eye contact)
- ☐ My child appears to be sensitive to sensory stimuli such as light, touch, sounds, smells, movement, or taste
- ☐ My child appears to be very impulsive or unable to sit still

Section 2:
Section two explores relevant child/family history that may contribute to your child's development. Please check all events your child may have experienced or been exposed to.

- ☐ Abuse (Physical, Emotional, or Sexual)
- ☐ Neglect (Physical or Emotional)
- ☐ Witnessed violence (e.g., domestic violence, community violence)
- ☐ Loss of a loved one (Death of family member, friend, or pet)
- ☐ Divorce or separation of parents

Appendix 5: Childhood Development & Support Screener

Childhood Development & Support Screener

- ☐ Natural disasters (e.g., floods, hurricanes, earthquakes)
- ☐ Car accidents or near-death experiences
- ☐ Bullying (Physical, verbal, or emotional)
- ☐ Discrimination (based on race, ethnicity, gender, etc.)
- ☐ Accidents (falls, injuries, surgeries)
- ☐ Hospitalization or severe illness
- ☐ History of mental illness in family
- ☐ Substance use in family

- ☐ Other (Please describe): _____

Appendix 6 – Caregiver Educational Flyer

HOLDING SPACE collaborative

OCCUPATIONAL THERAPY'S ROLE IN ADDRESSING MENTAL HEALTH

WHAT TO LOOK FOR

Signs of trauma in children may vary depending on the child's age, nature of the trauma, and developmental level. These responses may manifest shortly after the event or show up later. It is important to be aware of these potential indicators to ensure the child receives the appropriate support and services. Trauma exposure in children may impact the following:

- **Behavior:** Children may appear more withdrawn, hypervigilant, or fearful of being separated from their parent/caregiver. They may also appear to be sensitive to sensory stimuli such as light, touch, sounds, smells, movement, or taste. Children may present with large fluctuations in behavior that are difficult to predict such as increased aggression, temper tantrums, or extreme fussiness. Children may appear very impulsive or more likely to engage in risky behaviors.
- **Developmental Milestones:** Children may experience a regression in previously met developmental milestones or a delay in meeting milestones. This includes crawling, walking, toileting skills, communication/language skills, or thumb-sucking.
- **Emotional Regulation:** Children may present with difficulties appropriately recognizing, understanding, and expressing their emotions. They may have difficulty self-regulating and soothing themselves in times of distress.
- **Social Skills & Forming Healthy Relationships:** Children may have difficulty interacting with peers or making friends. Children may also isolate themselves from social situations or avoid initiating play.
- **Cognition:** Children may have difficulty concentrating or learning new material in school which can lead to academic challenges.
- **Physical Health:** Children may experience physical symptoms such as unexplained stomach aches or headaches which may be signs of emotional distress.
- **Sleep & Eating:** Children may experience fluctuating sleep or eating patterns. Examples of sleep patterns include difficulty falling asleep, nightmares, or other sleep disturbances.

OT'S ROLE IN ADDRESSING TRAUMA

Occupational therapy (OT) takes a holistic approach in facilitating childhood development and overall well-being. OT practitioners focus on promoting your child's participation in essential areas including social skills, play and leisure, education, sleep, eating, dressing, hygiene, and any other meaningful activities to your child. OT's work with you and your child to assess their motor, sensory processing, and cognitive skills to develop an individualized treatment plan tailored to your child's needs and goals. Some evidence-based approaches for addressing childhood trauma include sensory based interventions, emotional regulation strategies, coaching for parents/caregivers, play-based therapy, and utilizing principles from a trauma-informed approach.

WHAT IS TRAUMA?

Childhood trauma refers to a distressing event or series of events that cause emotional, psychological, or physical harm to the child. Some examples of potential traumatic events include abuse, loss of a loved one, neglect, severe illness or hospitalization, witnessing violence, natural disasters, incarceration of a parent, or bullying. Child traumatic stress is defined as the responses a child develops following a traumatic event that impacts their daily life. Trauma exposure during a child's developmental years may have lasting effects on the child's emotional regulation, behavior, physical and mental health, and overall development.

IMPORTANCE OF SCREENER

The purpose of the following screener is to gather crucial information regarding your child's developmental progress as well as potential exposure to traumatic events. By assessing both areas, we can better understand how early experiences may be impacting your child's development involving their mental, physical, and emotional health. This screener is designed to identify children who may benefit from further assessment from an occupational therapist. Early identification of trauma-related effects allows for targeted interventions that can address specific challenges and ensure the child receives the support they need to thrive.

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