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Trauma-Informed Care Best Practices in a Pediatric Setting

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Trauma-Informed Care Best Practices in a Pediatric Setting

by

Claire Carder

A Capstone Project Presented to the
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Claire Carder

Acknowledgement

I am deeply grateful for my family and most importantly, my mom, whose love and constant support have carried me through all the ups and downs of this process. This accomplishment is a reflection of your endless support and encouragement. I am so lucky to have you all in my corner.

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Abstract

Background: Pediatric occupational therapists (OTs) frequently treat children with trauma histories yet often lack formal training in trauma-informed care (TIC). Uncertainty about evidence-based interventions and OT's role on multidisciplinary trauma teams contributes to underutilization of OT services in pediatric settings.

Objective: This capstone project aimed to (1) assess practicing pediatric OTs' baseline knowledge, confidence, and perceptions regarding TIC; (2) develop and deliver a targeted educational intervention; and (3) evaluate its impact on therapists' self-reported competencies.

ACOTE Area: The primary ACOTE standard addressed within this capstone project is program development and evaluation. The capstone centered on designing, implementing, and assessing an in-service educational program. The program also reflects an educational component with the creation and delivery of the trauma-informed care training itself.

Methods: A needs assessment was conducted via a Qualtrics survey distributed to OTs at a single outpatient pediatric clinic (pre-test N=10). An in-service was then provided, synthesizing current literature on trauma types, behavioral manifestations, OT's role in TIC, and evidence-based interventions available. A post-test survey, mirroring the pre-test needs assessment items, was administered to attendees (N = 8). Likert-scale responses (1 = strongly disagree to 5 = strongly agree) were converted to numeric values. Descriptive statistics and Mann-Whitney U tests assessed changes in mean scores between pre- and post-intervention.

Results: Nine of 11 survey items showed statistically significant increases ($p < .05$) post-intervention, including confidence in identifying acute, complex, and cumulative trauma; understanding trauma's effects on brain development and behavior; and familiarity with OT-specific evidence-based TIC interventions. Two items—perceived importance of TIC and understanding lifespan impact of childhood trauma—did not reach significance.

Conclusion: A concise, evidence-based in-service significantly enhanced pediatric OTs' self-reported TIC competencies. Future research should involve larger, multi-site samples and examine long-term clinical outcomes. Advocacy for formal recognition of OTs as Qualified Mental Health Professionals is recommended to solidify their role on trauma response teams.

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Chapter 1: Introduction & Literature Review

Introduction

Research concludes that experiencing trauma as a child puts individuals at a higher risk for depression, anxiety, and low self-esteem, thus negatively affecting their occupational performance (Downey & Crummy, 2022). When providing skilled occupational therapy services to pediatric clients who have experienced trauma, it is recommended that the OT target their interventions around how the trauma is affecting daily activities, performance in school, and extracurricular participation (Piller & Achord, 2022). While trauma-informed care is within an occupational therapist's scope of practice, many OTs do not feel equipped to provide such interventions to their clients and find research to be limited (Rosa & Hartmann, 2022). Thus, a gap is created leaving childhood trauma victims without needed interventions due to lack of knowledge within an OTs scope of practice.

Purpose

The purpose of this project was to explore and provide supports to aid OTs and health professionals in providing evidence-based interventions while utilizing trauma-informed care within their scope of practice. With these resources, OTs and health professionals will have a better understanding of their role in trauma-informed care and will be able to provide specialized interventions to pediatric trauma victims, bridging this current gap in knowledge.

Specific Aims

1. During the 14-week capstone experience, I determined the extent of knowledge and comfortability OTs have in providing trauma-informed care.

2. During the 14-week capstone experience, I developed an educational resource OTs can utilize to integrate trauma informed care within their practices

3. During the 14-week capstone experience, I assessed the extent of knowledge and comfortability in using TIC after implementing and providing educational resources to practicing OTs

Outputs & Outcomes

The immediate outputs included an evidence-based educational resource on trauma-informed care practices within an OT's scope of practice. The educational resource covered various types of pediatric trauma, how pediatric trauma manifests, long & short-term effects of pediatric trauma, as well as evidence-based interventions to treat individuals who have experienced pediatric trauma. In providing this educational resource, OTs will increase competence and comfortability in providing trauma-informed care practices within their interventions.

Literature Review

Prevalence & Effects of Trauma

According to the Substance Abuse and Mental Health Services Administration, more than 2/3 of children will experience at least one traumatic event by the time they turn 16 years of age (Copeland et al., 2007). Additional research concludes that 61.8% of adolescents have already experienced a potentially traumatic event within their lifetime, including but not limited to interpersonal violence, physical assault, accidents leading to injury or illness, witnessing violence or accidents, and death or unexpected loss of a loved one (McLaughlin et al., 2013). Individuals who have trauma experiences are at a higher risk of experiencing another or multiple traumatic events thereafter (Kessler et al., 2017). Those at higher risk of encountering a trauma or traumatic event include women, adolescents and younger individuals, individuals who fall within lower socio-economic status, individuals with lower education levels, and those with a history of trauma (Kessler et al., 2017). In addition, women and children are shown to have more negative, long-term effects associated with trauma experiences and post-traumatic stress disorder related to an event or experience (Kessler et al., 2017).

Once an individual experiences a traumatic event or a trauma, they are at a higher risk for developing post-traumatic stress disorder or PTSD (McLaughlin et al., 2013). As outlined in the DSM-5, the diagnostic criteria for post-traumatic stress disorder includes the presence of intrusive thoughts or actions, avoidance of specific stimuli, negative manifestations in mood or actions, and alterations in arousal levels that cause a significant disturbance to daily life (American Psychiatric Association, 2013). Research further concludes that 50% of individuals diagnosed with post-traumatic stress disorder will have persistent, lasting manifestations that negatively affect function and participation in daily activities (McLaughlin et al., 2013).

When an individual experiences a trauma or traumatic event, the brain and nervous system oftentimes react with fight or flight responses (McGreevy & Boland, 2020). This reaction can lead to somatic symptoms, disrupt the ability to self-regulate, and disrupt the psychological, cognitive, and physical functions of the body (McGreevy & Boland, 2020). As the effects of trauma emerge and manifest, an individual may experience events or sensations that trigger the same fight or flight reaction demonstrated during the trauma (McGreevy & Boland, 2020). These lasting reactions and effects on the body have the potential to negatively affect occupational performance and participation during required daily tasks (McGreevy & Boland, 2020).

Long-term effects of experiencing trauma include a higher risk for mental health concerns, lower academic performance, and low self-esteem (Downey & Crummy, 2022; Haine et al., 2008). Children who experience trauma are also at higher risk for dysfunctional emotional regulation, thus increasing their probability of exhibiting signs and symptoms of depression (Hopfinger et al., 2016). Trauma experiences may also increase the prevalence of alcohol and drug abuse, self-injury, high-risk behaviors, and disordered eating (Roche et al., 2019). In addition, individuals who have trauma experiences are also at higher risk of exhibiting functional impairments, including inability to engage in daily activities, social isolation, and decreased quality of life (Torchalla et al., 2019).

With rising rates of trauma experiences and association with negative, long-term effects, early childhood intervention is imperative to promote improved health and wellness (Roche et al., 2019).

Adverse Childhood Experiences Study

Adverse childhood experiences (ACEs) are defined as “preventable, potentially traumatic events that occur among persons aged 17 years or younger” (Swedo et al., 2024). ACEs include

but are not limited to physical and/or emotional abuse, substance abuse within the household, parental separation or divorce, mental illness within the household, sexual abuse, violence, and incarceration within the household (Swedo et al., 2024).

Beginning in 1995, researchers from Kaiser Permanente and Centers for Disease Control (CDC) began collecting data on the prevalence and lasting effects of experiencing ACEs (Anda et al., 2010). The ACEs study was one of the largest studies conducted to investigate the prevalence and lasting effects of childhood abuse and trauma (Centers for Disease Control, 2021). The original 1995 study included a survey disseminated to over 17,000 individuals receiving physical exams in the Southern California area (Center for Disease Control, 2021). The surveys were optional and confidential to respect the privacy of participating individuals (Centers for Disease Control, 2021). Collected data included information regarding their current health status and childhood behaviors (Centers for Disease Control, 2021). Results from the original surveys found a positive relationship between adverse childhood experiences and risky behaviors and disease (Felitti et al., 1998). In other words, individuals who were exposed to adverse childhood experiences were more likely to engage in risky behaviors, be diagnosed with disease or poor health status, and exhibit mental health impairments (Felitti et al., 1998). Risky behaviors identified include alcohol use and drug abuse as well as disordered eating (Felitti et al., 1998). Diseases identified included cancer, heart disease, lung disease, liver disease, and skeletal fractures (Felitti et al., 1998). These findings created the foundation for future ACE studies (Swedo, 2023). An immense push was generated to support and place preventative measures for children at risk of experiencing traumatic events or adverse childhood experiences (Felitti et al., 1998).

In a more recent ACEs survey study, researchers found that 63.9% of United States citizens have experienced at least one ACE, with prevalence rising (Swedo, 2023). Experiencing one or more ACEs increases the risk of drug and alcohol use, mental health issues, and suicide (Webster, 2022). Experiencing one or more ACEs also puts individuals at risk for unhealthy behaviors, chronic health conditions, socioeconomic instability, and early death (CDC, 2021).

The prevalence and effects of ACEs within the United States and beyond continue to be studied (CDC, 2021). Ongoing surveys and questionnaires are being disseminated to update data and findings yearly (CDC, 2021). Those at higher risk for experiencing ACEs include women, racial and ethnic minorities, unemployed individuals, and those who fall within a lower socioeconomic level (Swedo, 2023). Adverse Childhood Experiences continue to be a leading factor in decreased quality of life (Swedo, 2023). As prevalence rises within the US, the need for preventative measures and efficient interventions increases (Swedo, 2023).



Figure 1: Lasting Impacts of Adverse Childhood Experiences

Above is a graphic posted by the Centers for Disease Control and Kaiser Permanente (CDC, 2021). The graphic identifies long-term effects of adverse childhood experiences on later life. The exposure to ACEs accompanies lasting effects that could decrease quality of life (CDC, 2021). Thus, it is important for healthcare teams to identify and provide interventions targeting daily function and enhancing well-being (Swedo, 2023).

Trauma & Brain Development

Within the early and adolescent years, the brain is experiencing changes including white and gray matter alterations, development of the pre-frontal cortex, as well as creating connections to support healthy development (Bremner, 2006). Children and adolescent brains are undergoing what is referred to as brain plasticity or the ability to be easily shaped (Laricchiuta et al., 2023). This shaping is brought about by young individuals' interactions and experiences within their environments (Laricchiuta et al., 2023). The brain is constantly creating new connections and ridding itself of connections no longer used, subsequently referred to as synaptogenesis (creation of connections) and synaptic pruning (ridding old connections) (Laricchiuta et al., 2023). This plasticity allows for extremely efficient development of the brain but also lends individuals to be vulnerable, especially once presented to trauma or traumatic experiences (Laricchiuta et al., 2023). When an individual experiences trauma, the amygdala, hippocampus, and prefrontal cortex are affected (Bremner, 2006). The amygdala is responsible for initiating the fight or flight response commonly triggered during a traumatic event (Šimić et al., 2021). The body also begins to increase the production of cortisol and norepinephrine, affecting homeostasis (Bremner, 2006). With prolonged exposure to trauma or untreated trauma, the brain can begin to change physically (Bremner, 2006). Individuals who are exposed to trauma early in life demonstrate decreased frontal cortex function and increased amygdala

function (Bremner, 2006). The hippocampus can also be negatively affected, altering declarative memory processes (Bremner, 2006). These alterations within the brain caused by trauma can affect brain development and lead to negative outcomes, including issues regarding personality development, inhibited emotional expression, decreased social participation, and decreased well-being (Laricchiuta et al., 2023).

Occupational Therapy's Role in Trauma-Informed Care

With the high prevalence of trauma experiences and adverse childhood experiences observed in pediatric clients, it is imperative that occupational therapists are well-versed in their role in trauma-informed care (TIC). While pediatric occupational therapists work with children who have experienced trauma, many OTs are unclear of their role in TIC (Piller & Achord, 2022). Many occupational therapists are unsure of how to provide meaningful, effective interventions that increase quality of life and decrease the negative effects of trauma experiences (Piller & Achord, 2022). Due to this lack of knowledge, OTs are oftentimes not included on mental health teams, leaving individuals without needed interventions (Rosa & Hartmann, 2022). If occupational therapists are unsure of their role within trauma-informed care, advocacy efforts are misinformed and oftentimes overlooked (Rosa & Hartmann, 2022). Thus, a need is created to inform OTs on their specified roles and educate them on evidence-based interventions that target daily functioning and occupations (Piller & Achord, 2022).

A study examining the effects of trauma specifically related to bereavement found that bereaving individuals oftentimes experience some sort of barrier in occupational performance (Ramano et al., 2022). Further research concludes that experiencing trauma during childhood significantly affects development and participation during occupations (Rosa & Hartmann, 2022). Thus, creating a direct need for OT services. Current findings suggest that an OT's role is

not to directly “treat trauma” but instead to provide interventions focused on how the trauma is affecting participation in daily activities and daily functioning (Piller & Achord, 2022).

Another important area of intervention for occupational therapists to target is education on the effects and manifestations of trauma and post-traumatic stress disorder (Piller & Achord, 2022). Areas of intervention that directly fall within an occupational therapist’s scope of practice include school participation, ADL participation, social participation, and health management and promotion (Piller & Achord, 2022).

As outlined within the Occupational Therapy Practice Framework, trauma and traumatic experiences fall directly under the health management sector (Occupational Therapy Practice Framework: Domain and Process- Fourth Edition, 2020). Interventions within this sector include creating and maintaining wellness routines, improving health, promoting healthy behaviors, supporting participation in daily activities, and recognizing and managing symptoms (Occupational Therapy Practice Framework: Domain and Process- Fourth Edition, 2020).

Despite the identified areas of interventions, occupational therapists are not identified as mental health professionals in some states within the US (Wan Yunus et al., 2022). This is widely due to health professionals' lack of understanding of OT's scope of practice as well as decreased advocacy efforts by working OTs on their roles within TIC (Wan Yunus et al., 2022). Evidence remains limited on OT's role within trauma-informed care, oftentimes leaving OTs without a seat at the table when discussing trauma initiatives (Rosa & Hartmann, 2022). As roles of occupational therapy within trauma-informed care are more clearly defined, practicing occupational therapists will be able to advocate for their role and beneficial intervention styles when treating individuals who have trauma experiences (Piller & Achord, 2022).

Trauma & Current Evidence-Based Practices

Trauma and the experience of trauma can have physical effects on the body; thus, OTs can target these effects through skill-based interventions (McGreevy & Boland, 2020). Utilizing a sensory-based approach through the lens of occupational therapy may be an effective approach utilized in trauma-informed care (McGreevy & Boland, 2020). Emerging evidence points toward using the senses to process trauma throughout the body (McGreevy & Boland, 2020).

Current research concludes that utilizing a sensory approach to target sensory processing difficulties can lead to positive outcomes (Fazlioğlu & Baran, 2008; Woo & Leon, 2013). A study conducted utilized a wide variety of sensory approaches, including stimulating sound, sight, taste, smell, touch, balance, vestibular, and proprioceptive systems (Fazlioğlu & Baran, 2008). Results found a statistically significant difference in sensory evaluation scores between the control and experimental groups, indicating positive outcomes for those engaging in sensory experiences (Fazlioğlu & Baran, 2008).

Another study placed an emphasis on the olfactory sense, providing kits to parents to enhance sensory stimulation practices (Woo & Leon, 2013). Results found that childhood autism rating scales improved for the experimental group (Woo & Leon, 2013).

In synthesizing these findings, a multi-sensory approach implemented by occupational therapists could serve as a strong intervention for individuals who have experienced trauma (McGreevy & Boland, 2020; Ridley & Frache, 2020).

In a literature review published in the *Irish Journal of Occupational Therapy*, the use of the Sensory Motor Arousal Regulation Treatment (SMART) was utilized across multiple studies (McGreevy & Boland, 2020). The SMART technique emphasizes the ability to explore the vestibular, proprioceptive, and tactile senses in a safe environment (Warner et al., 2013). The

idea behind SMART is that the body will be able to process the trauma, increase body awareness and self-regulation, as well as allow for self-expression (Warner et al., 2013). A therapy room was utilized during the study to allow for safe sensory activities chosen by the child (Warner et al., 2013). The room included a multitude of sensory items including but not limited to a mini-trampoline, balance beams, a tunnel, spandex body socks, crash pads, and weighted blankets (Warner et al., 2013). Though the study included a small sample size, the use of the SMART technique proved to have beneficial results, including improved self-regulation and body awareness (Warner et al., 2013). An additional benefit identified was the therapeutic relationship built when the occupational therapists allowed the individuals to lead and control the activities, giving them autonomy in exploring their sensory systems in a safe environment (Warner et al., 2013).

An alternative intervention approach used the Wilbarger Therapressure Program to explore the effects of pressure on sensory processing and post-traumatic stress disorder symptoms in individuals who exhibited sensory defensiveness (Kimball et al., 2018). All participants had trauma experiences from their childhood and exhibited signs of sensory defensiveness and high cortisol levels (Kimball et al., 2018). A single-subject design was implemented with participants utilizing the Wilbarger Therapressure technique eight to ten times per day for two weeks (Kimball et al., 2018). The technique includes using a therabrush with deep pressure over specified regions of the body followed by joint compression (Kimball et al., 2018). Of the 4 participants, 3 demonstrated significant positive reactions to the technique, including decreased cortisol levels and increased participation in daily activities (Kimball et al., 2018).

Another study utilized sensory kits, sensory rooms, and art-based activities to address the somatic symptoms that arise with post-traumatic stress disorder (Holland et al., 2017).

Occupational therapists provided sensory experiences including personalized sensory kits best suited for individual needs (Holland et al., 2017). Sensory kits could include items such as a weighted blanket or objects targeting tactile experiences (Holland et al., 2017). The purpose was to use a strengths-based approach to promote participation in activities while also targeting self-regulation and coping strategies (Holland et al., 2017).

Additional research has been conducted to identify evidence-based interventions for trauma specifically related to bereavement (Bergman et al., 2017; Ridley & Frache, 2020). Research on trauma-informed care practices related to bereavement supports grief education, creative projects, and cognitive behavioral strategies for coping (Ridley & Frache, 2020). This allowed for self-expression as well as fostering meaningful, trusting relationships (Ridley & Frache, 2020). In utilizing these evidence-based interventions, practicing occupational therapists can provide skilled services to target the short and long-term effects of trauma.

In addition to providing one-on-one skilled intervention to clients, a study completed also found positive results from interventions, including group therapy, family-focused therapy, parental guidance, and camp activities (Bergman et al., 2017). Favorable outcomes can also be identified when support is given to the whole family unit as a group rather than one individual from the family unit when discussing bereavement trauma (Ridley & Frache, 2020).

Conclusion & Summary

Research concludes that experiencing trauma as a child puts individuals at a higher risk for depression, anxiety, and low self-esteem, thus negatively affecting their occupational performance (Downey & Crummy, 2022). When providing skilled occupational therapy services

to pediatric clients who have experienced trauma, it is recommended that the OT target their interventions around how the trauma is affecting daily activities, performance in school, and extracurricular participation (Piller & Achord, 2022). While trauma-informed care is within an occupational therapist's scope of practice, many OTs do not feel equipped to provide such interventions to their clients and find research to be limited (Rosa & Hartmann, 2022). Thus, a gap is created, leaving childhood trauma victims without needed interventions due to a lack of knowledge within an OT's scope of practice.

Chapter 2: Needs Assessment

Introduction & Problem

While pediatric occupational therapists oftentimes treat individuals who have trauma experiences, research indicates that many OTs are not trained in trauma-informed care (TIC) practices within their educational curriculum (Rosa & Hartmann, 2022). Thus, OTs are left without the knowledge and skills required to establish and maintain status on mental health teams (Rosa & Hartmann, 2022). In addition, research also indicates that OTs are unsure of their role within trauma-informed care (Piller & Achord, 2022). While OTs are considered qualified mental health professionals (QMHPs) in many states across the United States, OTs are oftentimes not included on trauma care teams due to the uncertainty of roles and beneficial interventions (Wilburn et al., 2021). This uncertainty comes from both clinicians and OTs themselves within their scope of practice (Wilburn et al., 2021). Thus, a need exists to determine the current knowledge and perception practicing OTs have on trauma-informed care (TIC). OTs will continue to be overlooked in mental health settings if clear roles and benefits are not outlined, leaving individuals without crucial interventions.

Purpose

A pre-test needs assessment was conducted via a Qualtrics Survey sent to practicing In Harmony Pediatric Occupational Therapists. The purpose of the survey was to determine the extent of knowledge and comfortability current occupational therapists have in providing trauma-informed care, specifically in a pediatric setting (see Appendix 4). The pre-test needs assessment was also utilized to determine if practicing OTs are aware of their role within TIC. The survey also included questions to gauge interest in engaging in a learning experience on trauma-informed care practices within the pediatric setting.

Methodology

Prior to disseminating the pre-test needs assessment survey, approval was obtained from Georgia State's Internal Review Board (IRB) to ensure ethical compliance (see Appendix 5).

Participants

In Harmony Pediatric Therapy is an outpatient clinic located in Woodstock, Georgia with 11 occupational therapists. Given the educational and practice license requirements, all participants were above 18 years of age. Respondents were required to consent in order to move forward through the survey.

Survey Instruments and Measures

A copy of the survey can be found in Appendix 4. The Likert scale options were given numerical values: 1) strongly disagree, 2) somewhat disagree, 3) neither agree nor disagree, 4) somewhat agree, 5) strongly agree along the following dimensions: identifying and distinguishing various traumas (4 questions), effects and manifestations of trauma (4 questions), and occupational therapy's role in trauma-informed care (3 questions). The survey was optional for all practicing OTs and did not collect any personal or sensitive information.

Data Collection

The Qualtrics survey was distributed to practicing occupational therapists at In Harmony Pediatric Therapy via email. Qualtrics files and data could only be opened by the PI. All data collected remained confidential. Georgia State University offers access to the secure Qualtrics server to all its faculty and students. During data collection, all data were saved on a password-protected computer. Data will be retained until all data collection, analysis, and publication is completed. The study data will be destroyed from the PI's records after the conclusion of all study activities.

Data Analysis

Overall, the response rate was 90.1%. Quantitative data were descriptively summarized, and qualitative data were reviewed to identify common themes. Frequencies were calculated to identify responses to the Likert-scale survey items. A descriptive analysis was run to analyze responses collected. Themes were created based off the confidence levels and current knowledge the participants had on providing care through a trauma-informed lens.

Results

Knowledge of Trauma-Informed Care

In analyzing the quantitative data provided, all participants at least somewhat agreed that trauma-informed care is important to understand as a pediatric occupational therapist, with the majority of respondents strongly agreeing (90%). Despite this, the majority of participants were not familiar with current evidence-based interventions utilized for pediatric trauma-informed care (60%). Results for recognizing various forms of trauma varied, but participants were least confident in recognizing, defining, and treating complex cumulative trauma. Specifically, six participants strongly or somewhat disagreed that they would be able to identify complex cumulative trauma in practice. Participants were most confident in recognizing, defining, and treating acute trauma with seven participants somewhat agreeing that they could identify this trauma in practice. In addition, only one of nine participants strongly agreed that they understood the role of OT in pediatric trauma-informed care.

Exposure to TIC Practices and Education

Out of the 10 total responses, 8 practicing occupational therapists disclosed that they had engaged in continuing education related to trauma-informed care within the pediatric setting. Despite the high number of individuals who had engaged in continuing education, uncertainty

remained on the current role occupational therapists play in providing interventions through a trauma informed care lens. More specifically, only one participant responded that they strongly agreed to understanding OT's role in TIC.

Interest in Learning Experience

All participating occupational therapists indicated a need for additional trauma-informed care educational resources. The 10 respondents showed interest in obtaining additional education defining the roles of OTs within TIC and evidence-based interventions that can be beneficial for addressing trauma manifestations. In addition, all participants indicated interest in engaging in a trauma-informed-care learning experience. Thus, results supported the creation and dissemination of an instructional program for the doctoral capstone experience.

Identified Needs and Conclusion

A common theme identified from the survey results was the need for clearly defining OT's role within trauma-informed care. Another common theme was uncertainty of current evidence-based interventions utilized to treat manifestations and effects of trauma experiences. The results from the disseminated survey indicate a need for education on defining, identifying, and treating various forms of trauma. In conclusion, the needs assessment indicated a need for increased education and guidance on trauma-informed care practices within the pediatric occupational therapy setting.

Chapter 3: Theories and Models

The “Trauma-Informed Care Model” provides a holistic approach when identifying and providing supports for individuals who have trauma experiences (Reeves, 2015). TIC presents with guiding values to follow with emphasis placed on safety, choice, collaboration, trustworthiness, and empowerment (Koury et al., 2022). This model centers around providing individualized, accessible, and appropriate services and resources with careful consideration to not re-traumatize individuals receiving services (Koury et al., 2022).

Safety

Creating an environment where felt safety is a priority can foster connection and rapport (Isbell, 2024). Felt safety varies from person to person (Isbell, 2024). What feels or seems safe to one individual may not feel safe to others who have experienced adversity (Isbell, 2024). Promoting safety can decrease the risk of re-traumatization and validate the experiences and perceptions of the individuals who have experienced trauma (Center for Substance Abuse, 2014).

Choice

Providing clients with choices provides a sense of autonomy and control over healthcare decisions (Center for Substance Abuse, 2014). Choices should be provided during the entire continuum of care, including evaluation, planning, treatment process, and discharge (Center for Substance Abuse, 2014). Care providers should prioritize informing clients of their available choices while also summarizing all possible outcomes (Koury et al., 2022).

Collaboration

Collaborative practices ensure the needs of the individuals are met and understood (Center for Substance Abuse, 2014). Collaboration allows for the provider and client to

brainstorm interventions and create a treatment plan with mutual agreeance (Center for Substance Abuse, 2014). Collaborative practices emphasize sharing power with individual perspectives being valued (Koury et al., 2022).

Trustworthiness

Building and maintaining trust emphasizes rapport building and buy-in for provided services (Grossman et al., 2021). Creating a relationship centered around trust provides consistency and predictability for interactions (Koury et al., 2022).

Empowerment

Utilizing a strengths-based approach promotes resilience and respect (Koury et al., 2022). Empowering individuals to be active participants in their healthcare decisions fosters an environment centered around validation and mutual respect (Koury et al., 2022).

Chapter 4: Methods

Project Design

The primary objective of this capstone project included designing and disseminating an educational learning experience for OTs to utilize in pediatric trauma-informed care practices. A pre-posttest design was utilized to determine the effectiveness of the educational learning experience. The resource was created in conjunction and with the support of the capstone site mentors, Jennie Chambliss and Kate Bradley.

Site Description

In Harmony Pediatric Therapy is an outpatient clinic located in Woodstock, GA serving residents in the North Georgia area and beyond. In Harmony offers services including occupational, physical, music, speech and language, and myofunctional therapy. Their on-site clinic has sensory gyms as well as large rooms for group activities. In Harmony also provides smaller sensory and evaluation rooms for one-on-one needs. Common diagnoses seen within this setting include but are not limited to autism spectrum disorder, down syndrome, developmental disabilities, cerebral palsy, sensory processing disorders, and traumatic brain injuries. Therapists on site work in a collaborative manor on interdisciplinary teams to ensure efficiency and successfulness.

Their occupational therapists provide customized treatment plans to fit client needs and offer additional programming including Handwriting Without Tears, Sensory Integration Therapy, Therapeutic Listening, and Feeding Programs. Their services begin with an extensive background and evaluation to obtain a full picture of client and family needs. The evaluation is completed with encouraged input from family and caregivers to ensure goals and objectives of

therapy are appropriate and meaningful. Goals and treatments are created and often reviewed in tandem with clients and caregivers to ensure needs are being met.

The occupational therapy gym contains equipment to best fit client needs including swings, crash pads, adaptive equipment, fine and gross motor instruments, and sensory tools. The therapy gym offers collaboration and interaction with peers to promote social development and skills. For clients who prefer a less stimulating environment, smaller sensory rooms are available with equipment to best support their needs.

The occupational therapy team works with clients to promote learning and developmental progression through occupations and daily activities. OT works to target barriers related to emotional, social, and physical needs through engaging in meaningful and therapeutic activities, with the main goal being to promote independence and success. Common targets of OT include fine motor skills, bilateral coordination, motor planning, executive functioning, visual motor skills, interoception, and emotional regulation skills. Interventions utilized are oftentimes targeting multiple skills and goals at once. The occupational therapists at In Harmony create a tailored, customizable intervention plan while using a strengths-based approach to promote progression and success through the therapeutic process.

It was identified early in the doctoral capstone experience that many children receiving services at In Harmony Pediatric Therapy came from traumatic backgrounds or experiences. Many children receiving services had traumatic births or had experienced adversity. There became an increasing need for trauma-informed care practices within the clinic. Thus, the capstone experience purpose and aims were created.

Participants

Participants for the in-service included practicing occupational therapists working at In Harmony Pediatric Therapy located in Woodstock, Georgia. Participation was completely optional, and consent was obtained.

Program Development and Implementation

First, an extensive literature review was completed to determine occupational therapy's role in trauma-informed care, current evidence-based interventions utilized in TIC, as well as short- and long-term effects of trauma and adverse childhood experiences. Journal articles were located using databases including the Georgia State Library, American Journal of Occupational Therapy, PubMed, National Institutes of Health, and Google Scholar. Inclusion criteria included peer-reviewed articles published within the last 20 years. One exception was made for an article published in 1998 due to the fact that more recent literature was built upon the original 1998 publication.

Next, a pre-survey needs assessment was completed via a Qualtrics survey disseminated to practicing occupational therapists working at In Harmony Pediatric Therapy. This survey aimed to determine the extent of knowledge and comfortability occupational therapists have in providing trauma-informed care, specifically in a pediatric setting. IRB approval was obtained prior to disseminating the survey. After analyzing the responses, a need was found for additional resources on pediatric TIC. Thus, supporting the objective of the capstone experience. During the capstone experience, the educational resource was created and disseminated via an in-service learning experience.

In collaboration with the site mentors, the student utilized a variety of sources to create the educational presentation provided to therapists at In Harmony Pediatric Therapy. As outlined in chapter 1, the student completed an extensive literature review on the role of OTs in trauma-informed care as well as current evidence-based interventions utilized in practical settings. The student also participated in continuing educational courses to further expand their knowledge of trauma-informed care practices. The educational courses completed were Angela Isbell's "Trauma-Informed Care for Pediatrics OTs and Other Professionals", Marti Smith's "How Trauma Affects the Sensory Systems", and Rochelle Hanson's "Introduction to Child and Adolescent Trauma-Informed Care (TIC)- Why Should We Care". The student also utilized published books to further their understanding of trauma-informed care. Books utilized included *The Connected Therapist* by Marti Smith, *Sensory Healing After Developmental Trauma* by Marti Smith, and *What Happened to You* by Bruce Perry and Oprah Winfrey. In collaboration with the site mentors, the student created an educational presentation summarizing key findings from the sources mentioned.

The final program included a PowerPoint educational presentation to the occupational therapists working at In Harmony Pediatric Therapy (See Appendix 6). The content presented included prevalence, effects, manifestations of trauma, defining various types of traumas, defining OT's role in trauma-informed care, and evidence-based interventions to utilize in practice. The educational resource was presented during a 1-hour lunch and learn on March 27, 2025, at In Harmony Pediatric Therapy. The resource was provided via PowerPoint. The student delivered the intervention as well as opened the floor to questions at the end of the lunch and learn. Below are some slides included on the PowerPoint educational presentation. For the full presentation, please see Appendix 6.

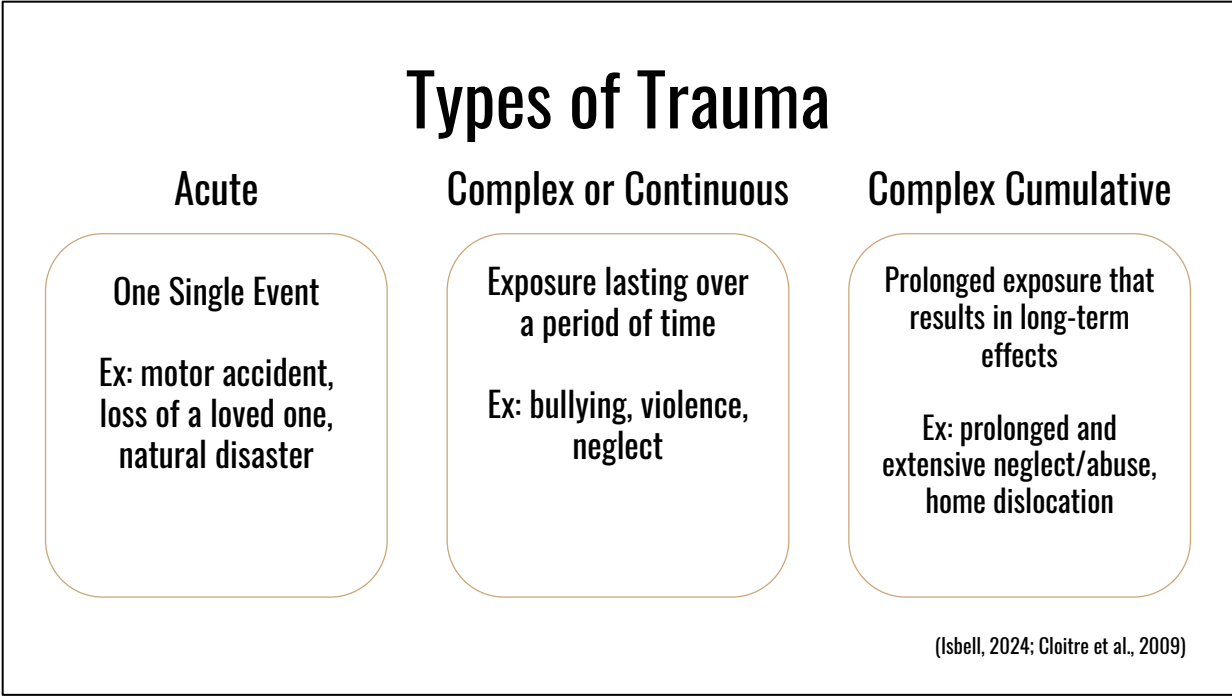


Figure 2: Types of Trauma

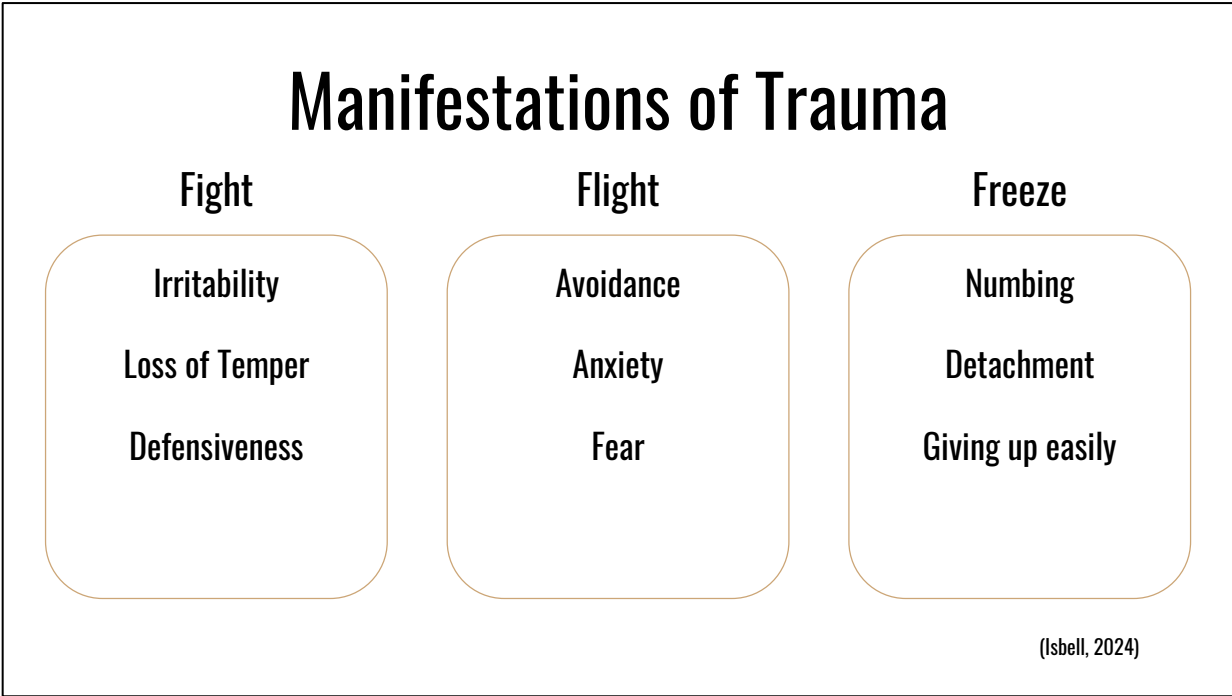


Figure 3: Manifestations of Trauma

OTs Role in Trauma-Informed Care

- Within the “Occupational Therapy Practice Framework” trauma and traumatic experiences falls directly under the health management sector
- Interventions within this sector include:
 - Creating and maintaining wellness routines
 - Improving health
 - Promoting healthy behaviors
 - Supporting participation in daily activities
 - Recognizing and managing symptoms

(OTPF, 2020)

Figure 4: OT’s Role

Outcome Measures & Instruments

A post training survey was developed to determine the extent of knowledge and comfortability occupational therapists have in providing trauma-informed care, specifically in a pediatrics setting after receiving education on OT’s role in TIC.

The post-survey contained identical, Likert scale questions from the needs assessment pre-survey to gauge content learned during the educational presentation. A copy of the post-survey can be found in Appendix 8. The Likert scale options were given numerical values: 1) strongly disagree, 2) somewhat disagree, 3) neither agree nor disagree, 4) somewhat agree, 5) strongly agree along the following dimensions: identifying and distinguishing various traumas (4 questions), effects and manifestations of trauma (4 questions), and occupational therapy’s role in trauma-informed care (3 questions).

Data Collection

Prior to disseminating the in-service educational resource and post-educational survey, approval was obtained from Georgia State's Internal Review Board (IRB) to ensure ethical compliance. The board reviewed the educational resource provided to practicing OTs at In Harmony Pediatric Therapy by the student PI. Following the in-service educational session, a Qualtrics survey was disseminated to OTs in attendance. Completion of the survey following the in-service session was optional and consent was obtained on the first page of the survey. All respondents were above the age of 18 and there was no personal identifiable information collected. The post-survey was open for responses from March 27th to March 31st.

Data Analysis

The student PI used the pre and post-test survey results to identify differences in mean scores before and after the in-service presentation. By giving numerical values to the Likert scale responses, the student was able to identify and compile mean scores from each question on the pre and post-test. The student then compared the mean scores to identify any changes before and after the in-service presentation. The student utilized SPSS to run a Mann-Whitney U test. The nonparametric test was used due to the small sample size and independent samples from the pre and post testing (Pre-Test N= 10, Post-Test N=8). The Mann Whitney U test identified any significant differences between the pre and post testing scores to determine if any changes in learning took place following the in-service presentation.

Chapter 5: Results of Program Evaluation

A total of 10 of the 11 OTs at In Harmony Pediatric Therapy (90.1%) consented and responded to the disseminated Qualtrics survey.

Identifying & Distinguishing Various Traumas

Four questions were included in this category to identify confidence levels of recognizing and distinguishing various types of traumas. Pre- and post-survey means were calculated to determine if confidence increased following the in-service presentation. As presented in the table below, all mean scores for confidence in identifying and distinguishing various traumas increased for participants. The results of the Mann-Whitney U test showed significant differences between the pre- and post-survey for all 4 questions in this section. Please see figure 2 below for exact p-values. Table 1 below outlines the frequency distribution for pre- and post-survey responses.

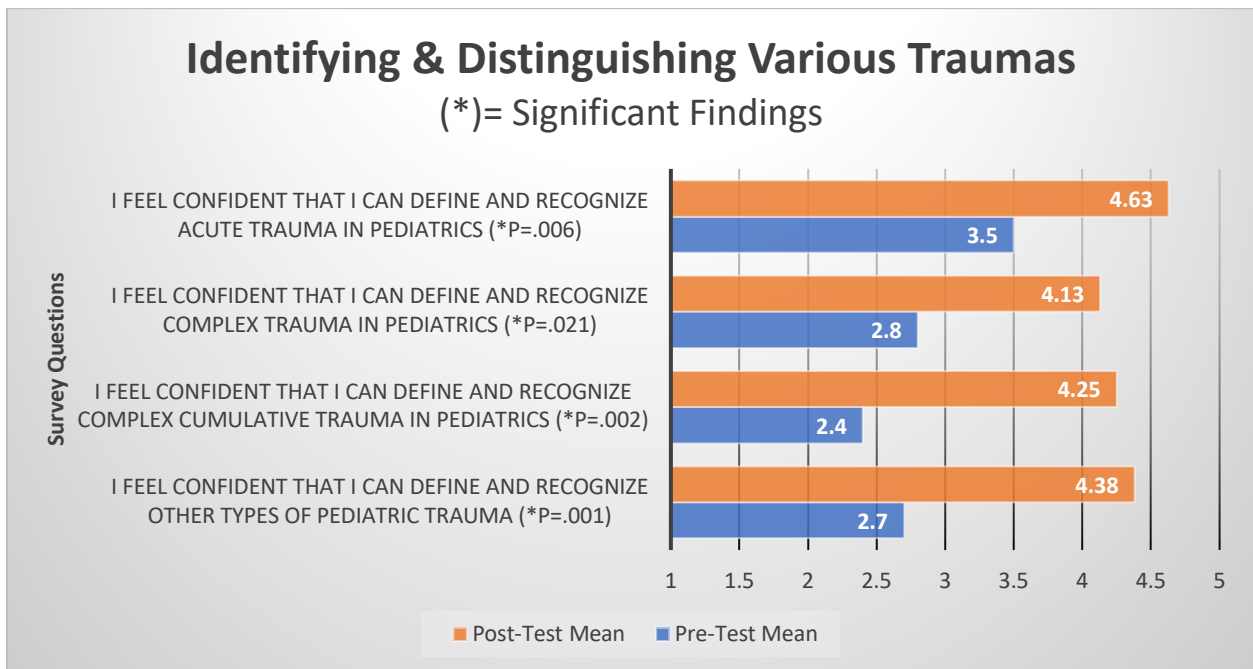


Figure 5: Identifying & Distinguishing Various Traumas

Table 1: Frequency Distribution Table - Identifying & Distinguishing Various Traumas

Survey Questions	Likert Scale	Pre-Test Frequencies (N=10)	Post-Test Frequencies (N=8)
I feel confident that I can define and recognize acute trauma in pediatrics	Strongly Disagree	0	0
	Somewhat Disagree	2	0
	Neither Agree nor Disagree	1	0
	Somewhat Agree	7	3
	Strongly Agree	0	5

I feel confident that I can define and recognize complex trauma in pediatrics	Strongly Disagree	1	0
	Somewhat Disagree	4	0
	Neither Agree nor Disagree	1	1
	Somewhat Agree	4	5
	Strongly Agree	0	2

I feel confident that I can define and recognize complex cumulative trauma in pediatrics	Strongly Disagree	2	0
	Somewhat Disagree	4	0
	Neither Agree nor Disagree	2	1
	Somewhat Agree	2	4
	Strongly Agree	0	3

I feel confident that I can define and recognize other types of pediatric trauma	Strongly Disagree	0	0
	Somewhat Disagree	5	0
	Neither Agree nor Disagree	3	1
	Somewhat Agree	2	3
	Strongly Agree	0	4

Effects & Manifestations of Trauma

The next category of questions aimed at identifying symptoms and manifestations of trauma. This category included 4 questions from the Qualtrics survey provided. As presented in figure 3, all mean scores for identifying effects and manifestations of trauma increased. Two of

the four questions were found to be statistically significant. The results of the Mann-Whitney U test showed significant differences in pre- and post-survey responses specifically related to understanding the physical brain changes that occur following a trauma, identifying the short and long-term effects of trauma, and understanding trauma manifestations. The survey question related to identifying the impact childhood trauma has across the lifespan showed no significant changes in pre- and post-survey responses. See figure 3 for exact p-values and questions. Table 2 below outlines the frequency distribution for pre- and post-survey responses.

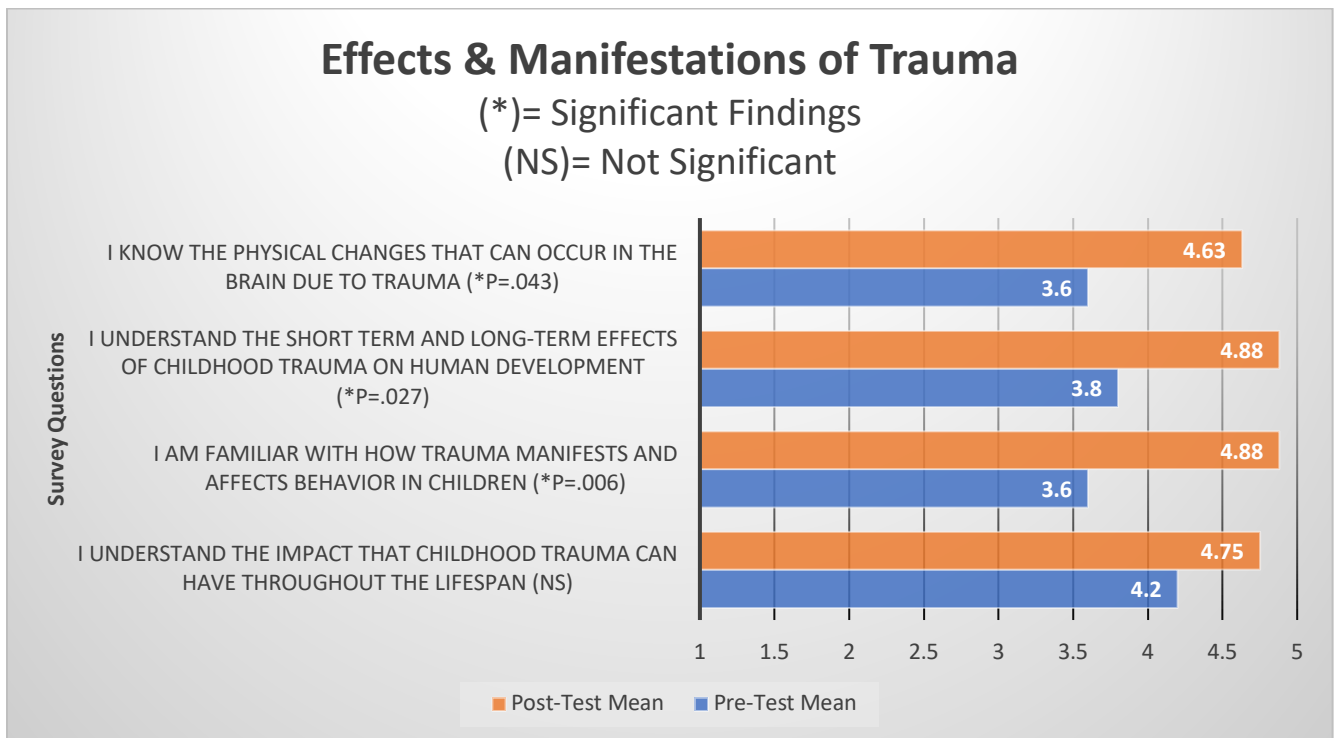


Figure 6: Effects & Manifestations of Trauma

Table 2: Frequency Distribution Table – Effects & Manifestations of Trauma

Survey Questions	Likert Scale	Pre-Test Frequencies (N=10)	Post-Test Frequencies (N=8)
	Strongly Disagree	0	0
	Somewhat Disagree	2	0

I know the physical changes that can occur in the brain due to trauma	Neither Agree nor Disagree	2	0
	Somewhat Agree	4	3
	Strongly Agree	2	5

I understand the short term and long-term effects of childhood trauma on human development	Strongly Disagree	0	0
	Somewhat Disagree	2	0
	Neither Agree nor Disagree	1	0
	Somewhat Agree	4	1
	Strongly Agree	3	7

I am familiar with how trauma manifests and affects behavior in children	Strongly Disagree	0	0
	Somewhat Disagree	1	0
	Neither Agree nor Disagree	4	0
	Somewhat Agree	3	1
	Strongly Agree	2	7

I understand the impact that childhood trauma can have throughout the lifespan	Strongly Disagree	0	0
	Somewhat Disagree	0	0
	Neither Agree nor Disagree	1	0
	Somewhat Agree	6	2
	Strongly Agree	3	6

Occupational Therapy’s Role in Trauma-Informed Care

Three questions were included in the survey related to OT’s role in TIC. The questions aimed to determine if OT’s felt more knowledgeable about evidence-based interventions and roles following the in-service presentation. As identified in figure 4, mean scores for 2 of the three questions increased. When asked about the importance of understanding TIC within the pediatric OT setting, mean scores slightly decreased. The results of the Mann-Whitney U test showed significant differences in pre- and post-survey responses specifically related to

familiarity of evidence-based interventions and understanding OT’s role in pediatric TIC. See figure 4 for exact p-values and questions. Table 3 below outlines the frequency distribution for pre- and post-survey responses.

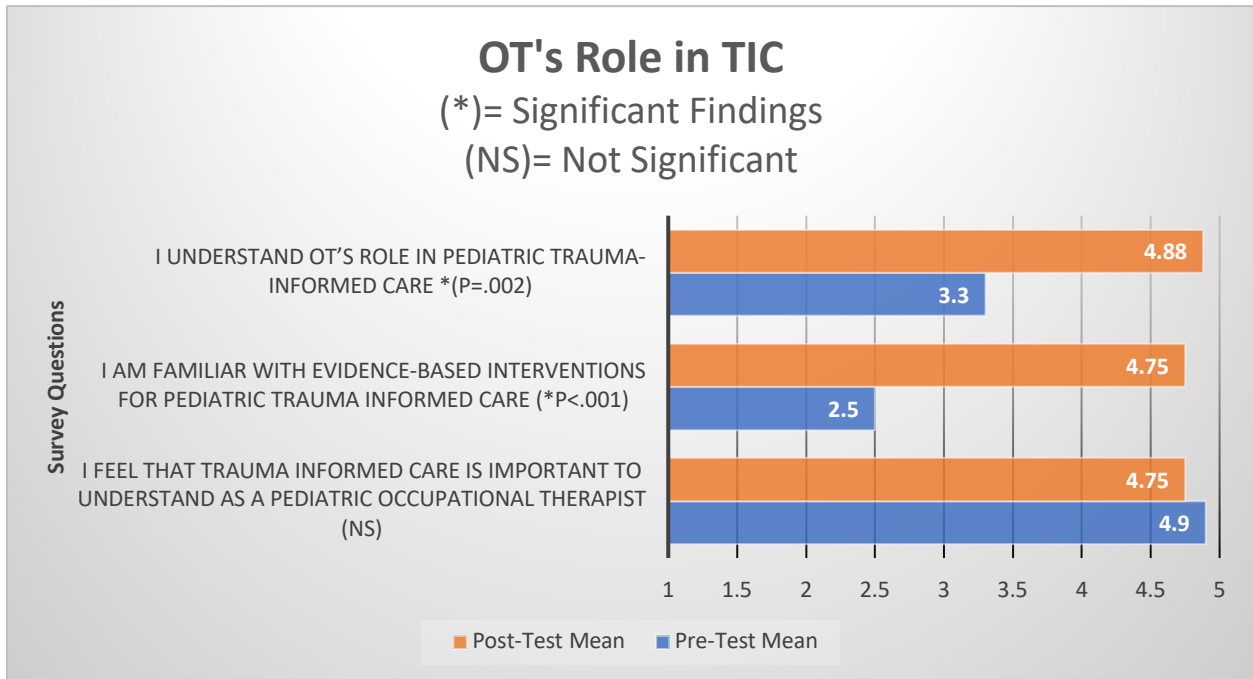


Figure 7: OT’s Role in TIC

Table 3: Frequency Distribution Table – OT’s Role in TIC

Survey Questions	Likert Scale	Pre-Test Frequencies (N=10)	Post-Test Frequencies (N=8)
I understand OT’s role in pediatric trauma-informed care	Strongly Disagree	1	0
	Somewhat Disagree	2	0
	Neither Agree nor Disagree	1	0
	Somewhat Agree	5	1
	Strongly Agree	1	7

I am familiar with evidence-based interventions for	Strongly Disagree	2	0
	Somewhat Disagree	4	0
	Neither Agree nor Disagree	1	0
	Somewhat Agree	3	2

pediatric trauma informed care	Strongly Agree	0	6
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I feel that trauma informed care is important to understand as a pediatric occupational therapist	Strongly Disagree	0	0
	Somewhat Disagree	0	0
	Neither Agree nor Disagree	0	0
	Somewhat Agree	1	2
	Strongly Agree	9	6

Summary

To conclude, 9 of the 11 survey questions were found to be statistically significant when comparing responses from the pre- and post-survey. 2 survey questions were found to have no significant changes from pre- and post-survey responses. The 2 survey items that were not found to have statistical significance were: “I understand the impact childhood trauma can have throughout the lifespan” and “I feel that trauma-informed care is important to understand as a pediatric occupational therapist”.

Chapter 6: Discussion

Findings

In analyzing the results of the Mann-Whitney U test, 9 of the 11 survey questions demonstrated statistically significant differences in scores from the pre- and post-survey responses. These findings suggest that those who attended the in-service presentation and completed the post-survey reported significantly higher confidence levels for identifying and distinguishing various types of traumas, identifying the effects and manifestations of trauma, and understanding OT's role in TIC. Among the survey items, 2 questions did demonstrate statistically significant differences in pre- and post-survey responses.

The first question that did not demonstrate a statistically significant difference in scores was a survey item that stated, "I understand the impact childhood trauma can have throughout the lifespan". Though statistical significance was not found, mean scores did increase from 4.2 in the pre-test to 4.75 in the post-test. This survey item began with a high pre-test mean, making statistically significant differences difficult to reach.

The second question that did not demonstrate a statistically significant difference in scores was a survey item that stated, "I feel that trauma-informed care is important to understand as a pediatric occupational therapist". This survey item also had a very high mean score in the pre-test survey at 4.9 out of 5. The post-test survey mean score was calculated at 4.75, indicating a slight decrease in mean scores after the in-service presentation. This slight decrease could be due to OT's not feeling as if trauma-informed care applies to their current caseload at the clinic. This could be indicative of why the mean scores for this item slightly decreased.

Contextualization & New Insights

As outlined in the literature review, OTs are unsure of their current role in trauma-informed care (Rosa & Hartmann, 2022). Furthermore, OTs are unaware of evidence-based interventions that provide effective, meaningful results (Piller & Achord, 2022). These findings were further supported by the pre-test needs assessment survey responses. Many OTs who completed the pre-test needs assessment survey responded that they were unsure of their role in trauma-informed care, with only 1 out of 10 responders indicating they strongly understood their roles. Additionally, 6 out of the 10 responses indicated that they strongly or somewhat disagreed that they were informed of evidence-based interventions related to TIC. Thus, findings from the pre-test needs assessment survey responses confirm findings in the available literature.

The findings from the pre-test needs assessment survey and available literature indicate a gap in knowledge related to occupational therapy's role in trauma-informed care. The capstone experience aimed to provide insights to working occupational therapists on their role and knowledge of trauma-informed care. As indicated by the post-test survey results, 10 out of the 11 survey items increased in score when compared to the pre-test needs assessment survey responses (see tables 1-3). Additionally, 9 of the 11 survey responses indicated statistically significant increases in mean scores when comparing pre- and post-survey results (see Figures 2-4). Thus, the knowledge gap was addressed, and participating OTs indicated a positive learning experience following the in-service presentation.

Limitations

While results indicate a positive in-service learning experience, the capstone process revealed a few limitations. First, the small size required non-parametric testing during data

analysis (Pre-Test N= 10, Post-Test N= 8). This small sample size limits the generalizability and validity of the study.

Second, the clinic had some various staffing changes, so the samples differed from pre- and post-survey responses. This explains the changes in the number of responses in the pre- and post-survey responses. This required the student to run an independent samples, non-parametric test during data analysis (Mann-Whitney U).

Lastly, participants only included practicing occupational therapists working at In-Harmony Pediatric Therapy in Woodstock, Georgia. This, along with the small sample size, limits generalizability to the wider OT population.

Clinical Relevance

As stated during the in-service presentation, 61.8% of individuals will experience a potentially traumatic event by the time they turn 16 years of age (McLaughlin et al., 2013). With prevalence rising annually, it is important that OTs understand their role in trauma-informed care. OTs are able to provide niche interventions for clients to process trauma throughout the body, thus increasing their importance on trauma care teams. OTs can utilize information learned during the in-service learning experience to provide trauma-informed care to their clients. By integrating knowledge from the in-service presentation, occupational therapists can adopt TIC principles throughout the continuum of care, including evaluation, intervention, and discharge planning.

Future Directions

This study highlights the continued need for professional education regarding OT's role in TIC and the implementation of evidence-based interventions. Future advocacy efforts should

be focused on including TIC efforts within OT educational curricula. Advocacy efforts could be focused towards creating an ACOTE standard that ensures trauma-informed practices are being covered in the classroom for OT students.

Additionally, further investigation is needed into advocacy efforts that educate healthcare professionals—including pediatricians, psychiatrists, and mental health providers—about the important contributions OTs make to trauma-informed care teams.

Furthermore, occupational therapists are currently recognized as qualified mental health professionals (QMHPs) in only a limited number of U.S. states (Wilburn et al., 2021). Expanded advocacy is essential to ensure that OTs are recognized as QMHPs nationwide, including in Georgia. Such recognition would solidify their role, ensuring their seat at the table when discussing trauma initiatives.

Chapter 7: Implications for Occupational Therapy Education

Future Research

The findings of this study highlight the need for continued education regarding the occupational therapist's role in trauma-informed care (TIC) and the application of evidence-based interventions. Future research should prioritize obtaining a larger and more diverse sample size to enhance the generalizability of findings. Additionally, further research is warranted to support advocacy efforts aimed at educating pediatricians, psychiatrists, and other mental health professionals about the critical role occupational therapists play on trauma-informed care teams.

Potential Impact

With the prevalence of trauma and traumatic experiences on the rise, it is essential that practicing occupational therapists fully understand their role in trauma-informed care. At present, OTs are frequently excluded from mental health teams addressing trauma initiatives (Rosa & Hartmann, 2022). To address this gap, both advocacy and professional education are needed to inform occupational therapists and other mental health professionals about the valuable contributions OTs can make in TIC.

As the scope and competencies of occupational therapists in trauma-informed care become more clearly defined and understood, their inclusion in trauma-related initiatives is likely to increase. This expanded role not only strengthens interdisciplinary collaboration but also enhances outcomes for individuals affected by trauma across the lifespan.

Chapter 8: Sustainability Plan

To ensure the long-term sustainability and continued impact of this capstone project, several strategies have been implemented to support ongoing education and integration of trauma-informed care (TIC) practices at In Harmony Pediatric Therapy. During the in-service presentation, the student permitted a full video recording of the session. This recording has been made accessible to all current occupational therapists employed at the clinic, including those who were unable to attend the live presentation. Additionally, a digital copy of the accompanying PowerPoint presentation has been provided to supplement the video, offering a comprehensive, self-paced learning experience for future viewers.

For future use, the recorded in-service and presentation materials could be incorporated into the onboarding process for all newly hired occupational therapists at In Harmony. This approach not only ensures continuity in staff education but also promotes consistent implementation of trauma-informed principles across the clinic. This will allow the clinic to foster a shared understanding of TIC and provide trauma sensitive approaches within their therapy sessions.

The sustainability plan is designed to be both accessible and low maintenance. No formal training is required to implement the educational program. New hires will only need access to a computer and compatible digital device to view the materials.

Chapter 9: Conclusions

This capstone project addressed a critical gap in pediatric occupational therapy by evaluating therapists' knowledge of and comfort with trauma-informed care (TIC), designing and delivering a targeted educational service, and measuring its impact. The initial needs assessment revealed that despite recognizing the importance of TIC, most practitioners lacked familiarity with evidence-based interventions and were uncertain about OT's role on trauma care teams. In response, an in-service educational experience was developed grounded in current literature and evidence-based practices. Pre- and post-survey comparisons demonstrated statistically significant gains in confidence for identifying various trauma types, understanding effects and behavioral manifestations, and applying trauma-informed OT interventions.

While the small sample size and single-site design limits generalizability, the positive survey responses suggest a need for increased education and advocacy efforts. Moreover, the sustainability plan ensures that educational efforts will be maintained for employees at In Harmony Pediatric Therapy. By clarifying OT's unique contributions to trauma-informed teams and equipping therapists with practical strategies, this project lays the groundwork for more consistent implementation of TIC principles across the continuum of pediatric care.

For future research, larger studies with diverse samples are needed to validate these findings and explore long-term outcomes associated with trauma-informed OT interventions. Advocacy efforts should also seek recognition of occupational therapists as Qualified Mental Health Professionals (QMHPs) across the United States.

In conclusion, integrating TIC efforts into both entry-level curricula and continuing professional education will strengthen the profession's capacity to support children and families affected by trauma.

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Appendix 1 - Learning Objectives

Learning Objectives (LTGs)	Short-Term Objectives (STGs)	Learning Activities	Outcome Measures	Timeline for Completion
<p>1. During the 14-week capstone experience, I will determine the extent of knowledge and comfortability OTs have in providing trauma-informed care.</p>	<p>1A. Complete a literature review to determine OTs scope of practice within trauma informed care (TIC) and current best practices for TIC.</p> <p>1B. Complete a needs assessment for OTs to complete on their current</p>	<p>1A. Gather relevant research articles for the literature review</p> <p>1B. Gather information from current, practicing OTs on their perspective of TIC</p> <p>1C. Provide questionnaire to practicing OTs to conduct</p>	<p>I. Finalize literature review and review with site mentor and faculty mentor</p> <p>II. Finalize needs assessment and review with site mentor and faculty mentor</p>	<p>Within the first 3 weeks of the capstone experience</p>

	<p>knowledge of TIC.</p> <p>1C. Analyze results of needs assessment and write-up findings.</p>	<p>needs assessment</p>		
<p>2. During the 14-week capstone experience, I will develop an educational resource OTs can utilize to integrate trauma informed care within their practices</p>	<p>2A. Utilize results from the needs assessment and tailor resources to fit the needs of practicing OTs</p> <p>2B. Disseminate educational resources to practicing OTs</p>	<p>2A. Use summary of needs assessment to determine gaps in knowledge on TIC</p> <p>2B. Create educational resources for OTs on best</p>	<p>I. Finalize educational resource and review with site mentor and faculty mentor</p>	<p>Within 8 weeks of the capstone experience</p>

		practices for TIC		
3. During the 14-week capstone experience, I will assess the comfortability in using TIC after implementing and providing educational resources	3A. Complete final survey to assess OTs comfortability in TIC after providing the educational resource 3B. Analyze results of final survey and write-up findings	3A. Gather information from participating OTs on their perspective of TIC after providing the educational resources 3B. Provide survey to participating OTs after reviewing the educational resources provided	I. Complete final survey II. Review findings with site and faculty mentor	Completed by the end of the 14-week capstone experience

Appendix 2 - Supervision Plan

The purpose of this supervision plan is to articulate the roles and responsibilities of those involved in the supervisory relationship.

Doctoral Capstone Experience Responsibilities & Supervision Plan		
Topic	Student Responsibilities	Mentors Responsibilities
Roles & Responsibilities	<p>Student will:</p> <ul style="list-style-type: none"> • Review and understand the GSU Capstone Experience policies and procedures • Identify personal and professional learning objectives • Complete the 14-week capstone experience • Adhere to the outlined project timeline • Maintain regular, consistent contact with site mentors as new developments are made throughout the capstone experience • Collaborate with site mentors and site to ensure a mutually 	<p>Site Mentors will:</p> <ul style="list-style-type: none"> • Collaborate with the student on deliverables and progress throughout capstone experience • Provide instruction and support as needed by the student • Provide feedback as appropriate on all deliverables across the capstone experience • Evaluate student at midterm and upon completion of capstone experience

	<p>beneficial deliverable is provided</p> <ul style="list-style-type: none"> • Maintain organization of materials and analyze data appropriately • Self-reflect on performance during capstone experience and after 14-week experience is complete 	
<p>Scheduled Meetings</p>	<p>Student will:</p> <ul style="list-style-type: none"> • Schedule weekly or bi-weekly meetings as appropriate with the site mentors to provide updates on capstone progress and ensure objectives are being met 	<p>Site Mentors will:</p> <ul style="list-style-type: none"> • Meet with the student weekly or bi-weekly to ensure deadlines and objectives are being met • Provide feedback on deliverables
<p>Communication Methods</p>	<p>Student will:</p> <ul style="list-style-type: none"> • Maintain consistent communication with site mentors in person, over the phone, or email as appropriate. • Utilize weekly meetings to provide open communication 	<p>Site Mentors will:</p> <ul style="list-style-type: none"> • Maintain consistent communication with student in person, over the phone, or email as appropriate.

	<p>and update site mentors on progress towards objectives</p> <ul style="list-style-type: none"> • Resolve possible disputes by encouraging open communication and immediately scheduling an in-person meeting if a dispute arises to collaborate on solutions 	<ul style="list-style-type: none"> • Attend weekly meetings and openly communicate to provide feedback • Attend meetings if disputes arise and collaborate with student on how to resolve
<p>Specific Requirements</p>	<p>Student Will:</p> <ul style="list-style-type: none"> • Complete a needs assessment and literature review • Synthesize information and data found within the needs assessment and literature review • Develop an educational resource to be delivered to the site and site mentors • Disseminate the deliverable as appropriate to the site 	<p>Site Mentors will:</p> <ul style="list-style-type: none"> • Sign the MOU to ensure agreeance amongst the student and site mentors for appropriate learning objectives and plan • Orient student to site's procedures and policies • Provide any onboarding documentation

<p>Project Timeline</p>	<p>Weeks 1-5: Orientation & Site Operations</p> <ul style="list-style-type: none"> • Student will complete any onboarding documentation and orientation required by the site or site mentor • Student will meet OT team and stakeholders • Review needs assessment results and literature review documents <p>Weeks 5-12: Resource Development</p> <ul style="list-style-type: none"> • Synthesize information received from literature review and needs assessment • Develop educational resources with collaboration from site mentors <p>Weeks 12-14: Dissemination of Project</p> <ul style="list-style-type: none"> • Disseminate educational resource 	<p>Site Mentors Will:</p> <ul style="list-style-type: none"> • Review all deliverables with student and provide feedback as needed to ensure appropriate provision of materials
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	<ul style="list-style-type: none">• Complete post-survey to collect feedback from site mentors and stakeholders	
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Appendix 3 - Summary Pages

Problem

Research concludes that experiencing trauma as a child puts individuals at a higher risk for depression, anxiety, and low self-esteem, thus negatively affecting their occupational performance (Downey & Crummy, 2022). When providing skilled occupational therapy services to pediatric clients who have experienced trauma, it is recommended that the OT target their interventions around how the trauma is affecting daily activities, performance in school, and extracurricular participation (Piller & Achord, 2022). While trauma-informed care is within an occupational therapist's scope of practice, many OTs do not feel equipped to provide such interventions to their clients and find research to be limited (Rosa & Hartmann, 2022). Thus, a gap is created leaving childhood trauma victims without needed interventions due to lack of knowledge within an OTs scope of practice.

Purpose

The purpose of this project is to explore and provide supports to aid OTs and health professionals in providing evidence-based interventions while utilizing trauma-informed care within their scope of practice. With these resources, OTs and health professionals will have a better understanding of their role in trauma-informed care and will be able to provide specialized interventions to pediatric trauma victims, bridging this current gap in knowledge.

Specific Aims

1. During the 14-week capstone experience, I will determine the extent of knowledge and comfortability OTs have in providing trauma-informed care.

2. During the 14-week capstone experience, I will develop an educational resource OTs can utilize to integrate trauma informed care within their practices
3. During the 14-week capstone experience, I will assess the extent of knowledge and comfortability in using TIC after implementing and providing educational resources to practicing OTs

Outputs & Outcomes

The immediate outputs will be an evidence-based educational resource on trauma-informed care practices within an OT's scope of practice. The educational resource will cover various types of pediatric trauma, how pediatric trauma manifests, long & short-term effects of pediatric trauma, as well as evidence-based interventions to treat individuals who have experienced pediatric trauma. In providing this educational resource, it is expected that OTs will increase competence and comfortability in providing trauma-informed care practices within their interventions.

Appendix 4 - Needs Assessment Pre-Test Survey

6/23/24, 2:50 PM

Qualtrics Survey Software



Default Question Block

Title: Occupational Therapy: Pediatric Trauma-Informed Care for Georgia State University's OTD Program: A Capstone Study

Principal Investigator: Jon Sanford, jsanford1@gsu.edu
Student Principal Investigator: Claire Carder, ccarder2@student.gsu.edu

Procedures: You are being asked to participate in a research study. If you decide to take part, you will answer survey questions regarding your level of knowledge and interest in occupational therapy's role in pediatric trauma-informed care. The survey should not take more than 10 minutes of your time. Please answer all questions honestly. All results will be anonymous.

Voluntary participation and withdrawal: you are not required to take part in this survey. You may skip questions

https://gsu.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_agxOiKBdvICTwy&ContextLibraryID=UR_cJubgtO4xRoLTUO 1/5

or stop participating at any time.

Contact information: If you have any questions or concerns, please contact Claire Carder at ccarder2@student.gsu.edu or Professor Sanford at jsanford1@gsu.edu

Consent: If you are willing to take part in this survey, please select “yes” below.

- Yes, I consent to participate in the survey
- No, I would like to stop here

Please rate your interest in learning about OT trauma-informed care practices

0 1 2 3 4 5 6 7 8 9 10

Interest Level (1 being the lowest interest and 10 being the highest interest)

0 1 2 3 4 5 6 7 8 9 10

Have you taken any continuing education courses on trauma informed care?

No

Yes

What continuing education course did you take on trauma informed care?

Click to write the question text

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I know the physical changes that can occur in the brain due to trauma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can define and recognize acute trauma in pediatrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can define and recognize complex trauma in pediatrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can define and recognize complex cumulative trauma in pediatrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I feel confident that I can define and recognize other types of pediatric trauma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the short term and long-term effects of childhood trauma on human development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with how trauma manifests and affects behavior in children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the impact that childhood trauma can have throughout the lifespan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand OTs role in pediatric trauma-informed care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with evidence-based interventions for pediatric trauma informed care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that trauma informed care is important to understand as a pediatric occupational therapist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you feel there is a need for additional educational resources for pediatric trauma informed care?

- Yes
- No

Would you take a short course on pediatric trauma informed care if it was given as a lunch and learn or asynchronous virtual experience?

- Yes
- No

Which learning experience would you prefer?

- Lunch & Learn
- Asynchronous Virtual Experience

Powered by Qualtrics

Appendix 5 – Needs Assessment IRB Approval

INSTITUTIONAL REVIEW BOARD
University Research Services and Administration

Mailing Address:
P.O. Box 3999
Atlanta, GA 30302-30303

Office 404-413-3500
Email irb@gsu.edu
Web gsu.edu/irb

In Person:
58 Edgewood Ave NE
3rd Floor
Atlanta, GA 30303



July 02, 2024

Principal Investigator: Jon A Sanford

Key Personnel: Carder, Claire A; Sanford, Jon A

Study Department: Georgia State University, Department of Occupational Therapy

Study Title: Occupational Therapy: Pediatric Trauma-Informed Care Best Practices

Submission Type: Exempt Protocol Category 2

IRB Number: H24700

Reference Number: 380635

Determination Date: 06/28/2024

Status Check Due By: 06/27/2027

The above referenced study has been determined by the Institutional Review Board (IRB) to be exempt from federal regulations as defined in 45 CFR 46 and has evaluated for the following:

1. Determination that it falls within one or more of the eight exempt categories allowed by the institution; and
2. Determination that the research meets the organization's ethical standards

If there is a change to your study, you should notify the IRB through an Amendment Form before the change is implemented. The IRB will determine whether your research continues to qualify for exemption or if a new submission of an expedited or full board application is required.

A Status Check must be submitted three years from the determination date indicated above. When the study is complete, a Study Closure Form must be submitted to the IRB.

This determination applies only to research activities engaged in by the personnel listed on this

document.

It is the Principal Investigator's responsibility to ensure that the IRB's requirements as detailed in the Institutional Review Board Policies and Procedures For Faculty, Staff, and Student Researchers (available at gsu.edu/irb) are observed, and to ensure that relevant laws and regulations of any jurisdiction where the research takes place are observed in its conduct.

Any unanticipated problems resulting from this study must be reported immediately to the University Institutional Review Board. For more information, please visit our website at irb@gsu.edu.

Sincerely,

A handwritten signature in cursive script that reads "Susan Vogtner". The signature is written in black ink on a white background.

Susan Vogtner, IRB Co-Vice Chair



Trauma-Informed Care Best Practices in a Pediatric Setting

Claire Carder (OT Student)

Defining Trauma

“Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being”

SAMHSA, 2012

Types of Trauma

Acute

One Single Event

**Ex: motor accident,
loss of a loved one,
natural disaster**

Complex or Continuous

**Exposure lasting over
a period of time**

**Ex: bullying, violence,
neglect**

Complex Cumulative

**Prolonged exposure that
results in long-term
effects**

**Ex: prolonged and
extensive neglect/abuse,
home dislocation**

(Isbell, 2024; Cloitre et al., 2009)

Other Trauma Considerations

Pre and Post-Natal Stress and/or Trauma

- Stress levels during pregnancy
- Birth history and process
- Attachment style
- Breastfeeding difficulties
- Temperament

Trauma can occur as a...

- Victim
- Witness
- Sibling
- Person listening to details (news, first responder)

(Isbell, 2024)

Prevalence of Trauma

- 61.8% of adolescents have experienced a potentially traumatic event by the time they turn 16 (McLaughlin et al., 2013)
- 558,899 children known to be victims of abuse/neglect within the US in 2022 (National Children's Alliance, 2022)
- 1 in 3 births within the US are considered to be traumatic (Ayers et al., 2024)

Brain Development and Structures

Brain Stem

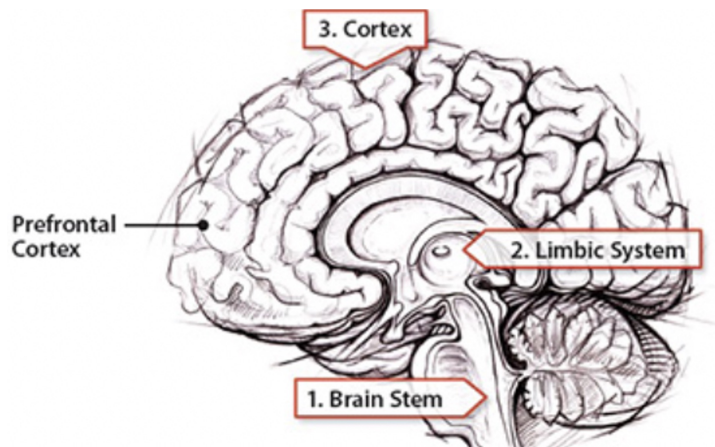
- Survival, Heart Rate, Respiration

Limbic System

- Emotion/Memory, Amygdala (fear and anger), Hippocampus (memory)

Cortex

- Thinking, learning, inhibition, language, logic, problem-solving



(Isbell, 2024)

Brain Development and Structures

Brain Stem: Regulate

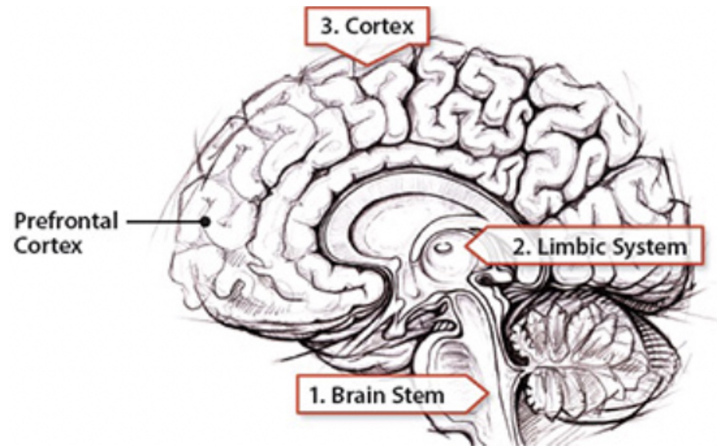
- Calm voices, calm touch, sensory items, walking, swinging, rocking, deep pressure, self-tapping

Limbic System: Relate

- Side by side, one-on-one tasks, large muscle movements, simple sorting task

Cortex: Reason

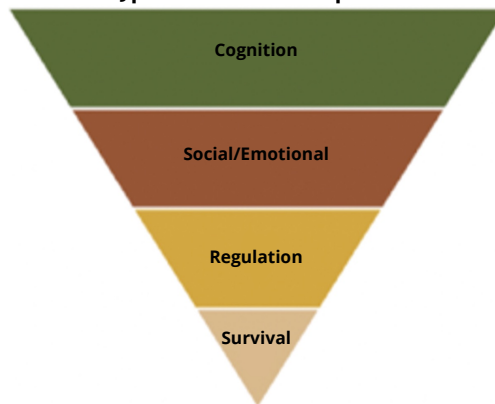
- Problem solving, decision making, complex tasks, interoception activities



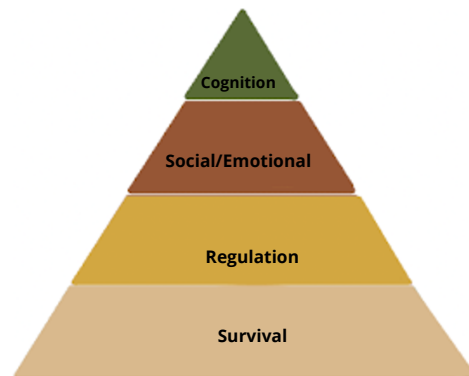
(Isbell, 2024)

Brain Development

Typical Brain Development

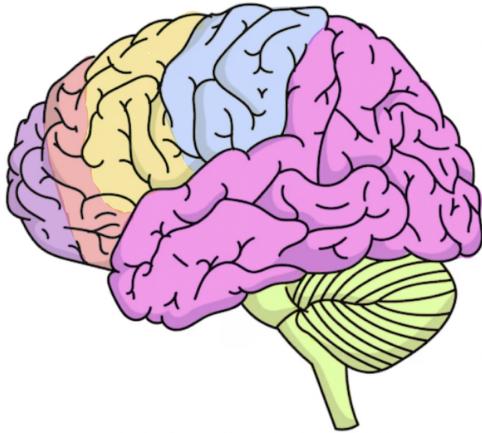


Traumatic Brain Development



(Isbell, 2024)

Brain Development



New Born (0-12 months)

- Occipital Cortex, Cerebellum

Toddler (12-36 months)

- Sensory motor, balance, coordination, language

Preschool (3-6 years)

- FM skills, body awareness, language

Child (6-10 years)

- Ideas, process outside of ourselves, sense of time

Teen 10-17

- Pre-Frontal Cortex, impulse control, emotional regulation

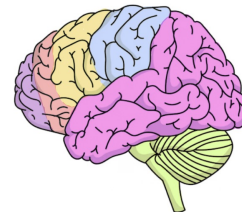
Adult 17+

- Frontal Cortex, reasoning, planning and organizing

(Smith, 2021)

Physical Brain Changes

- **Decrease in hippocampus volume**
 - Impaired memory, higher risk for mental health disorders
- **Amygdala enlargement**
 - Processing fear and threat
 - Increased activity following traumatic experiences
- **Reduced frontal cortex activity**
 - Impulse, planning, problem-solving



(Bremner, 2006)

Manifestations of Trauma

- Chronic Fatigue
- Poor immune function
- Low self-esteem
- Anxiety
- Aggressive behaviors
- Depression
- Attention difficulties
- Hypervigilance (fight, flight freeze)
- Impulsivity
- Risk taking
- Self-regulation difficulties
- Interoception difficulties
- Impaired social skills
- Disorganized
- Executive functioning deficits
- Difficulty modulating emotions

(Isbell, 2024)

Manifestations of Trauma

Fight

Irritability
Loss of Temper
Defensiveness

Flight

Avoidance
Anxiety
Fear

Freeze

Numbing
Detachment
Giving up easily

(Isbell, 2024)

Manifestations of Trauma- Dissociation

- Coping mechanism seen in some trauma instances
- Common in younger children and women
- Heart rate decreases, opioids are released, and you retreat to your “inner world”
- Dissociate to protect their nervous system and have some control over the situation
- These children will dissociate with any task bringing them outside of their window of tolerance
- Oftentimes mistaken for disobedience or refusal

(Isbell, 2024)

Manifestations of Trauma

Tolerance & Resilience

When a stress response is activated in a predictable, moderate, and controllable manner

Vulnerability & Sensitization

When a stress response is activated in an unpredictable, extreme, and prolonged manner

(Perry & Winfrey, 2021)

OTs Role in Trauma-Informed Care

- OTs are oftentimes left without a seat at the table when discussing trauma initiatives (Rosa & Hartmann, 2022)
- Experiencing trauma negatively affects participation in daily activities and occupations (Piller & Achord, 2022)
- OTs role is not to directly “treat the trauma” but instead provide interventions focusing on daily functioning and regulation (Piller & Achord, 2022)

OTs Role in Trauma-Informed Care

- Within the “Occupational Therapy Practice Framework” trauma and traumatic experiences falls directly under the health management sector
- Interventions within this sector include:
 - Creating and maintaining wellness routines
 - Improving health
 - Promoting healthy behaviors
 - Supporting participation in daily activities
 - Recognizing and managing symptoms

(OTPF, 2020)

When Selecting Interventions...

Relational

Relevant

Repetitive

Rewarding

Rhythmic

Respectful

(Smith, 2021)

Window of Tolerance

Hypoarousal Zone

Absence of sensation

Numbing of emotions

Decreased cognitive processing

Optimal Arousal Zone

Optimal state for learning

Window of tolerance is much smaller for children who have adverse experiences

Want to widen this zone through interventions

Hyperarousal Zone

Increased sensations

Emotional reactivity

Disorganized cognitive processing

Hypervigilant

(Isbell, 2024)

Targeting Trauma Through the Senses

- Utilizing a sensory-based approach is an effective tool in trauma informed care practices
- Emerging evidence points towards using the senses to “process the trauma”
- Trauma oftentimes presents with sensory-seeking or sensory-avoiding manifestations
- Target sensory processing difficulties through relating to the child via their senses
- Providing a sense of felt-safety and appropriate exploration of their environment and self
- Little, moderate doses of stress help create flexible, stress-response capabilities
 - Just right challenge

(McGreevy & Boland, 2020; Smith, 2021)

Targeting Trauma Through the Senses

- Tactile
- Vision
- Auditory
- Smell
- Taste
- Vestibular
- Proprioception



Tactile

Alerting

Light Pressure

Cold

Inconsistent Textures

Feathers

Calming

Weighted Blankets

Firm Pressure

Heavy/Tight Clothing

Warmth

(Smith, 2021)

Vision

Alerting

Yellows, Reds, Oranges

Peripheral Stimulation

Calming

Blues, Greens, Browns

Linear Lineups

Focal/Midline Concentration

(Smith, 2021)

Auditory

Alerting

90-120 BPM

Unfamiliar Melodies

Arrhythmic Sounds

Calming

50-70 BPM

Familiar Melodies

Rhythmic Drumming

(Smith, 2021)

Smell

Alerting

Musk

Floral

Strong Scents

Calming

Lavender

Vanilla

Softer Scents

(Smith, 2021)

Taste

Alerting

Spicy
Crunchy
Foods that scatter
Cold

Calming

Sweet
Chewy
Smooth
Warm

(Smith, 2021)

Vestibular

Alerting

Fast Position Changes
Spinning
Fast Movement
Obstacle Course

Calming

Slow Position Changes
Linear Movement
Slow Movement

(Smith, 2021)

Proprioception

Alerting

Hopping, Jumping, Running

Tickling (light touch)

Unexpected Touch

Calming

Pushing, Pulling, Heavy Work

Deep Pressure

Predictable Touch

Yoga

Joint Compression

(Smith, 2021)

Other Considerations: Sleep

- Co-Sleep with animal (if appropriate)
- Predictable sleep routines
 - Visual schedules
- Weighted blanket
- Allow child to sleep with CG shirt/item
- Heavy work before bed
- Night light or sensor lights
- White noise
- Sleep music
 - “Weightless” by Macaroni Union
- Lavender scent

(Smith, 2024)

Other Considerations: Feeding

- “No Thank You” Plate
- Engage child in meal prep (if appropriate)
- Allow for food art and sensory exploration
- Set aside time for food play (not during mealtime)
- Plate separator
- Play with temperatures, textures, and tastes
- Poor nutrition with good connection is better than good nutrition with poor connection

(Smith, 2024)

Co-Regulation

- During co-regulation, cortisol is blocked in the brain and helps speed up our neural processing
- Creates the predictability children crave
- Co-Regulation Strategies:
 - tossing/rolling a ball
 - Blowing bubbles
 - Coloring together
 - Reading
 - Fish Deep Breathing (Youtube)
 - Triangle breathing
 - Magic Mustache (parasympathetic pressure point)

(Smith, 2021)

Importance of Caregiver Participation

- Even just one consistent CG can be a relational buffer and positively teach resilience
- CGs facilitate our first interactions with our environment and the world around us, they teach us how to regulate
- CGs & parents pair pleasant sensory experiences following a noxious stimuli or activated stress response, teaching children resilience at a very early age
- We acquire resilience through patterned, predictable adversity followed by comfort from the people who love us

(Isbell, 2024)

Online Resources

- **Kalmar Assessment**
 - Online assessment
 - Short questionnaire for CGs
 - Creates custom, targeted list of interventions
- **“Therapy Songs by Marti Smith”**
 - Spotify playlist with various calming and alerting music
 - Relaxing: 40-60 BPM, Quiet Alerting Activities (Desk Work): 60-80 BPM, Fast-Paced, Energetic Activities: 80-110 BPM, Exercise & Cardio: 110-200 BPM
- **“Trauma Lens Sensory Activity Response Checklist”**
 - Checklist created by Marti Smith
 - Helps identify sensory-patterns

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Appendix 7 - In-Service IRB Approval

INSTITUTIONAL REVIEW BOARD
University Research Services and Administration

Mailing Address:
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March 18, 2025

Principal Investigator: Jon A Sanford

Key Personnel: Carder, Claire A; Sanford, Jon A

Study Department: Georgia State University, Department of Occupational Therapy

Study Title: Providing Trauma-Informed Care Practices in an Occupational Therapy Pediatric Setting

Review Type: Exempt Amendment

IRB Number: H25363

Reference Number: 383989

Approval Date: 01/08/2025

Status Check Due By: 01/07/2028

Amendment Effective Date: 03/17/2025

The Georgia State University Institutional Review Board reviewed and **approved** the amendment to your above-referenced Study.

This amendment is approved for the following modification(s):

- I am updating the OT TIC Educational Resource PowerPoint with more information.

The amendment does not alter the approval period which is listed above and a status update must be submitted at least 30 days before the due date if research is to continue beyond that time frame. Any unanticipated problems resulting from participation in this study must be reported to the IRB through the Unanticipated Problem form.

For more information, visit our website at www.gsu.edu/irb.

Sincerely,

A handwritten signature in black ink that reads "Jamie F. Zait".

Appendix 8 – Post-Test Survey

4/8/25, 9:53 AM

Qualtrics Survey Software



Default Question Block

Title: Pediatric Trauma-Informed Care for Georgia State University's OTD Program: A Capstone Study

Principal Investigator: Jon Sanford, jsanford1@gsu.edu
Student Principal Investigator: Claire Carder,
ccarder2@student.gsu.edu

Procedures: You are being asked to participate in a research study. If you decide to take part, you will answer survey questions regarding your level of knowledge and comfortability in occupational therapy's role in pediatric trauma-informed care. The survey should not take more than 10 minutes of your time. Please answer all questions honestly. All results will be anonymous.

Voluntary participation and withdrawal: you are not required to take part in this survey. You may skip questions or stop participating at any time.

https://gsu.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_79GnDT7sGEnjNg&ContextLibraryID=UR_eJubgtO4xRoLTUO 1/4

Contact information: If you have any questions or concerns, please contact Claire Carder at ccarder2@student.gsu.edu or Professor Sanford at jsanford1@gsu.edu

Consent: If you are willing to take part in this survey, please select "yes" below.

- Yes, I consent to participate in the survey
- No, I would like to stop here

Click to write the question text

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I know the physical changes that can occur in the brain due to trauma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can define and recognize acute trauma in pediatrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can define and recognize complex trauma in pediatrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I feel confident that I can define and recognize complex cumulative trauma in pediatrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can define and recognize other types of pediatric trauma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the short term and long-term effects of childhood trauma on human development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with how trauma manifests and affects behavior in children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the impact that childhood trauma can have throughout the lifespan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand OT's role in pediatric trauma-informed care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am familiar with evidence-based interventions for pediatric trauma informed care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I feel that trauma informed care is important to understand as a pediatric occupational therapist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Powered by Qualtrics