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The Sensory Treatment Approach in Dealing with Trauma in Children:

Does it Work?

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Abstract

This study focused on the sensory treatment approach for children with histories of trauma. It was an exploratory, qualitative study where four licensed social workers were interviewed at a small agency in Rhode Island that uses the sensory treatment approach. Each participant had attended a day long training on this approach for use in their agency setting. The findings revealed that each participant highly rated this method of treatment and found it to be effective. All participants used the sensory treatment approach differently and in combination with different treatment modalities and models. Implications for social work practice, policy, and research and limitations of the study are discussed.

The Sensory Treatment Approach in Dealing with Trauma in Children:

Does it Work?

The number of childhood victims of trauma due to abuse and neglect in the United States may be as high as 2,688,000 (Moroz, 2005). Specifically, in Rhode Island, 3, 271 children were victims of abuse and neglect in 2007 (*Child Abuse and Neglect*, n.d.). Not all children that have witnessed or experienced some sort of traumatic event suffer from traumatic stress. Some victims of child abuse and neglect are able to function successfully, develop positive relationships, and overcome problematic situations while others are not as capable. However, there are many children in the United States that have experienced at least one traumatic event in their lives and are greatly affected by the incident. “The explanation for variable responses to severe, cumulative risk factors lies in an understanding of “resilience”: a dynamic process that entails positive adaptation and successful developmental outcomes in spite of the presence of adverse conditions” (“Research in Brief,” n.d.). With proper supports, all children have the capacity to overcome difficult past trauma, but there are several factors that must be taken into consideration. Those who are able to demonstrate resilience are still affected by traumatic situations, but are more able to recuperate from trauma than children who do not show resilience in various circumstances. The development of resilience depends on certain factors such as, feelings of hope and meaningfulness of life, strong relationships with a caring, pro-social parent or parent figure, and opportunities to learn and experience skills (“Research in Brief,” n. d.). As a result, trauma has a unique and substantial impact on children.

There are many factors as to why a child may experience trauma. Trauma is referred to as “a physical or psychological threat or assault to a child’s physical integrity, sense of self, safety

or survival or to the physical safety of another person significant to the child” (Moroz, 2005, p. 2). Some experiences include sexual, physical, and emotional abuse, abandonment, witness to violence, bullying, and serious illness. When a child has experienced one or more of these circumstances, they are likely to display a wide range of emotional and physiological reactions. Some effects of trauma may consist of feeling guilt, repetitious traumatic play, disturbing feelings, sleep disturbances, safety concerns, aggressive behavior, angry outbursts, sexually acting out, changes in mood and personality, complaints about bodily pains, isolation, anxiety, lower school performance, and depression. These traumatic affects are a major concern as if they are not treated early or properly, it may result in life lasting mental and physical effects as the child progresses into adulthood.

There are currently many different methods of treatment for children suffering from trauma. Professional facilities utilize a range of helpful tools and techniques, in order to treat children dealing with trauma. Examples of methods used include individual cognitive-behavioral therapy, group cognitive-behavioral therapy, play therapy, art therapy, psychodynamic therapy, and psychological debriefing. Although there are various effective methods of treatment that have already been implemented for traumatized children, sensory approaches to treatment are less utilized as most treatments focus on direct exploration rather than sensory integration. In treating trauma, the sensory approach promotes self-regulation and teaches clients positive ways to deal with stress, anxiety, and mental health symptoms. This approach also includes sensory sensitive environments, such as a sensory room. In regards to sensory rooms, every room can look and feel very different. Also, sensory rooms are also referred as sensory modulation rooms, sensory integration rooms, or snoezelen rooms. Professional facilities such as mental health settings, skilled nursing facilities, day treatment centers, schools, long-term care facilities, respite

care homes, hospitals, emergency rooms and hospice care settings are all known to utilize sensory rooms as part of their restraint reduction initiatives, and it is the place where sensory strategies are taught and practiced (Moore, 2010). Overall, the sensory approach is person centered focusing on emotional-regulation and coping skills and requires staff training and good assessment. Not only it is fun and cost effective, it integrates into client goals and treatment planning (Moore, 2010). For instance, an agency in Rhode Island which focuses on working with children with histories of abuse and neglect has recently begun to use this technique for treatment at its facility. Although the agency has been in operation for a little over one hundred years, the sensory approach to treatment is a fairly new tool to the agency. Both social workers in the residential and outpatient facilities are using sensory techniques, such as a sensory room and/or sensory traveling kits with their clients. As of 2009, the agency staff has had some professional training for the use of sensory approaches to treatment and the method is shown to be effective.

Since trauma affects so many children and families, it is important for social workers to develop and use certain tools and techniques in order to treat it effectively. This particular problem is important to social work practice as social workers are likely to interact, assess and treat individuals with traumatic histories. Since there are several current treatment models that are based on various cognitive techniques, which are shown to be extremely effective but not always the solution to the problem, it is crucial for social workers in professional treatment based facilities to have knowledge regarding alternative approaches. Although alternative approaches are necessary, such as the sensory model, it is important to evaluate its usefulness and effectiveness. Sensory approaches have been incredibly valuable in mental health settings. However, since the sensory approach has recently been brought into a setting with children with

histories of abuse and neglect, it is important to evaluate if this approach is able to help this population as effectively. It would be valuable for this approach to be tested and explored in order to see its effectiveness for this particular population.

Ballion (2002) explains that this sensory treatment approach is expected to assist children with relaxation, stresses reduction, emotional regulations, cognition, therapeutic relationships, symptoms of mental illness, sensory defensiveness, and restraint reduction (as cited in Moore, 2010). This kind of approach exclusively uses the human body to calm the mind. Thus, “sensory can be used to help calm the nervous system, even when cognitive techniques fail” (Moore, 2010). By evaluating if the sensory approach is truly effective or not, this agency in Rhode Island can distinguish whether or not they are utilizing an effective technique. Given that social workers should use evidence-based practices evaluating sensory room effectiveness for this population could be valuable to inform research and practice.

As traumatic experiences in childhood can have a severe and long-lasting effect, it is important for social workers to be well educated on the subject matter. A professional social worker must be capable of recognizing symptoms and indicators of trauma, and provide useful early intervention. Early recognition, intervention and support for children who have experienced trauma are needed to reduce the impact of trauma, building resiliency and increase their functioning in the short and long term (“Child Trauma,” 2010). It is necessary to keep in mind that children are very vulnerable human beings as they have not yet fully developed emotionally and socially. Consequently, they are more vulnerable to the traumatic effects causing their personal and human development to be greatly impacted. It is common for victims of abuse and neglect to view the world as a frightening and an unsafe place. If childhood trauma is unresolved, a sense of fear and helplessness will continue throughout adulthood. For this reason, methods of

treatment, such as the sensory treatment approach, should be evaluated in order to validate its usefulness and effectiveness when working with children with histories of abuse and neglect.

Literature

Child Abuse and Neglect

The Department of Children, Youth, and Families (DCYF) in Rhode Island receives an average number of 37 abuse and neglect calls daily. An approximate total of 20 child abuse/neglect complaints are also investigated daily (*Child Abuse and Neglect*, n. d.). Between the years of 1998-2007, 26 children died as a result of injuries due to abuse and neglect. The yearly average of indicated cases of child abuse and neglect was 2,354 in this time period. Six particular communities accounted for most of the indicated cases of child abuse and neglect, which are Cranston, Pawtucket, Providence, Warwick, West Warwick, and Woonsocket (*Child Abuse and Neglect*, n.d.). In regards to the 3,271 children who were victims of abuse and neglect in Rhode Island in 2007, 31% were ages one to five, 30% were ages six to eleven, and 19% were ages twelve and fifteen. Neglect was responsible for 79% of the cases, while physical abuse represented 9% and 6% involved sexual abuse (*Child Abuse and Neglect*, n. d.). When considering these cases, the most disconcerting percentages reside in the relationships between the child and the abuser. Unfortunately, 90% of abuse and neglect were caused by the child's parents and 4% were caused by relatives (*Child Abuse and Neglect*, n. d.).

According to the Child Abuse and Neglect Reporting Guide (n. d.), there tends to be some complications and difficulties in recognizing abuse and neglect amongst children. When thinking about abuse and neglect, the signs are often ambiguous and difficult to recognize, especially if one is unaware or uneducated on the subject matter. For example, one day, an

individual could identify a good size bruise on a child but the cause of the bruise could be unclear. The child could have gotten the bruise from being hit by a caregiver or by falling down while playing outside. As previously mentioned, not all children, who have experienced trauma, show signs of being affected emotionally. Children who have experienced trauma may react psychologically in different ways. Children vary in many ways, including how they respond to experiences of maltreatment. Regardless of the situation, it is important to be familiar with the child and his/her life when assessing and interpreting the signs.

By definition, a child is a person that is under the age of eighteen and often times are vulnerable. In particular, “children with disabilities or other conditions that require a care giver to exert effort to meet their special needs are especially vulnerable” to becoming victims of abuse and neglect (*Child Abuse and Neglect*, n. d., p. 3). Often times, it takes a substantial amount of effort to care for children, leaving some parents or caregivers emotionally and physically exhausted; therefore rejecting their child, which leads to problems such as neglect, emotional abuse, physical abuse, and sexual abuse. Therefore, it is important to address the categories of abuse and neglect, effects and indicators, and treatment techniques, specifically the sensory treatment approach.

Categories of Abuse and Neglect

There are different categories of child abuse and neglect. Child abuse consists of physical abuse, sexual abuse, emotional abuse, and medical abuse. Physical abuse is defined as “any non-accidental injury, which is inconsistent with explanations given for it, suffered by a child as the result of an act or omission by the person responsible for the care of the child.” Examples of physical abuse may include beating, burning, biting, and strangling (*Child Abuse and Neglect*, n.

d., p. 5). When speaking about physical abuse, it often occurs as a method of discipline or a kind of punishment. As for sexual abuse, “it is a commission of a sexual offense with or to a child through the acts of omission of the person responsible for the care of the child” (*Child Abuse and Neglect*, n.d., p. 5). Instances of sexual abuse may include fondling, oral sex, or penetration of the vagina or anus. Emotional abuse may include verbal and emotional attack, inadequate affection, and ridicule. Lastly, medical abuse involves Munchausen’s by proxy, which is when a care giver exaggerates or makes up certain illnesses or symptoms in relation to the child. There are also four areas of neglect, which include physical, emotional, medical, and educational neglect. A caregiver is guilty of committing physical neglect by failing to provide adequate necessities, such as food, shelter, clothing, or overall supervision. Emotional neglect is a failure of the caregiver to provide medical attention, which also applies to medical neglect. Finally, education neglect involves truancy and not enrolling a child in school (*Child Abuse and Neglect*, n. d.).

Familiarity with these definitions is helpful for distinguishing physical and behaviors indicators of abuse and neglect. Several indicators of physical abuse are unexplained bruises, unexplained burns, welts, lacerations or scratches, broken bones, scars, or internal injuries. Physical neglect indicators include underweight or poor-growth patterns, poor hygiene, inappropriate dress, unattended physical problems or medical needs, and consistent hunger. Sexual abuse indicators consist of pain when urinating or difficulty walking, swollen, painful vulva or area, bruising or bleeding of the vagina, venereal disease or pregnancy, frequent yeast infections (*Child Abuse and Neglect*, n. d.). Lastly, indicators for emotional abuse are physical and intellectual developmental delays, speech disorders, alcohol and substance abuse, ulcers, anxiety disorders, and empty facial expressions.

Effects and Indicators of Abuse and Neglect

Physical trauma tends to almost always have a physiological impact on a child. Black and Trickey (2000) state, “even minor physical injuries can result in severe psychological problems” (p. 261). Children may also experience psychological trauma even when they have not been physically injured. For example, this can occur if children are neglected and feel helpless or trapped (Black & Trickey, 2000). Regardless if a child has experienced abuse or neglect, trauma in general can cause an individual to experience posttraumatic stress. Moroz (2005) defines post-traumatic stress as:

a disorder that is caused by the individual’s past traumatic experience, which carries on after the traumatic event has ended. Posttraumatic stress also continues to affect a child’s ability to function both emotionally and physically. If posttraumatic stress continues and the child’s neurophysiological responses remain chronically aroused, even though the threat has ended and the child has survived, then the term post-traumatic stress disorder (PTSD) is used to describe the child’s enduring symptoms. (p. 2)

PTSD is a well-recognized psychiatric disorder with symptoms of re-experiencing, avoidance, and arousal (Black & Trickey, 2000). More specifically, children with PTSD, experience certain post-traumatic symptoms, such as difficulty sleeping, eating, focusing, hyper alertness, over-arousal or under arousal, avoidance of eye contact or physical contact, preoccupation with re-enactment of the traumatic experience, and negative reactions to sensory input (Moroz, 2005). These terrified responses to sensory input are also known as triggers. A trigger is considered to be anything that reminds a child of the traumatic experience, such a certain smell, touch, sound, or something one sees. For example, smelling the cologne that the offender wore, seeing a bed similar to the one where the abuse took place, or hearing a song that was playing during the abuse are all things that could be triggers. Since being abused and neglected are such horrible experiences to endure, it is normal for a child to be triggered at some point. When a child is

triggered, panic attacks, intrusive memories, and flashbacks are all common things that may occur in their life (Lee, 1995). PTSD and other effects such as these tend to develop shortly after the trauma, although delayed-onset PTSD is also possible, which is considered to develop six months after the trauma has taken place (Black & Trickey, 2000).

Psychological trauma may occur due to a single traumatic event or as a result of continuous exposure to great stress. Event Trauma refers to the sudden unexpected occurrence of a stressor and Process Trauma is characterized by continuing exposure to an enduring stressor, such as emotional, physical, or sexual abuse (Shaw, 2000). Although psychological trauma may occur during both instances, children who experience repeated exposure are more likely to have and experience far worse outcomes than children exposed to one traumatic event (Moroz, 2005). In a process trauma, a child may not only display symptoms of PTSD, but may also express developmental, emotional, and behavioral problems that is associated with chronic stress and the interweaving of the traumatic experiences into the emerging personality (Shaw, 2000). In particular, a child may begin displaying personality trait disturbances, dissociative phenomena, trauma specific mental disorders and internalizing and externalizing patterns of emotional and behavioral problems. Black and Tricky (2000) state that “depending on the precise nature of the trauma, the age of the child, and the manner in which it has been handled in relation to the child, this disturbance exerts its influence on the development of the person” (p. 264). Consequently, psychological trauma causes damage of the neuroendocrine systems in the human body. Moroz (2005) mentions that “extreme stress triggers the fight or flight survival response, which activates the sympathetic and suppresses the parasympathetic nervous system” (p. 4). When the fight or flight response is triggered, cortisol levels in the central nervous system in an individual’s body intensifies. This reaction results in an individual taking action to survive, either

by dissociation or hyper arousal. However, extreme levels of cortisol cause alterations in one's brain development and destruction of brain cells (Moroz, 2005). Moroz (2005) states "in children high levels of cortisol disrupt differentiation, cell migration and critical aspects of central nervous system integration and functioning" (p. 4). Therefore, trauma affects basic regulatory processes in the brain stem, the limbic brain, neocortex, and integrative functioning across various systems in the nervous system. This information means that trauma has a great impact on a child's emotion, memory, regulation of arousal, perception of self, and the world as a whole. As time goes by, devastating traumatic experiences are stored and remain in a child's mind. As a result, a sense of fear, arousal, and detachment that is associated with the initial traumatic event may continue well after the threat of danger has decreased. According to Shaw (2000), there is little known about the recovery rate post-traumatic stress. However, there have been studies on adults showing that one third of victims will still have and show significant symptoms even after 5 years have passed. Furthermore, it is said that males will generally recover significant faster than females (Shaw, 2000). Thus, a child's past never truly stays in the past. Consequently, past traumatic experiences will continue to exist in the minds' of survivors and unsettling thoughts will likely continue to resurface in the future.

Some individuals are able to regulate past traumatic memories more so than others. Since trauma disrupts one's developmental capacity to regulate affect, children may show symptoms of mood swings, impulsiveness, emotional irritability, anger and aggression, anxiety, depression, and dissociation (Moroz, 2005). Early trauma, especially trauma that is associated with a child's caregiver, particularly has a great effect on a child. Trauma caused by a personal caregiver can greatly transform one's perception of self, trust in others, and view of the world. Children are also likely to give up on a sense of hope for the future. Unfortunately enough, "young trauma

victims often come to believe there is something inherently wrong with them, that they are at fault, unlovable, hateful, helpless and unworthy of protections and love” (Moroz, 2005, p. 4). In the long run, feelings such as these may leave a child vulnerable to later trauma, re-victimization, and long term affects.

It is clear that unresolved trauma affects every aspect of development and contributes to behavioral, social, emotional, cognitive, and health difficulties. Although there is extensive research on the long-term and short-term effects of trauma, there is less information on the effects of trauma on the processing of sensory information (Cermak & Groza, 1998). Children who have experienced trauma are vulnerable to living in a dysregulated state of arousal, which are considered to having a sensory modulation dysfunction (Koomar, 2009). Trauma due to abuse and neglect can result in a child’s inability to regulate oneself to proper sensory stimuli. Since dysregulation of trauma can alter neurochemistry of the central nervous system and integration of the brain, children who have difficulties processing sensory information often show either under reactions or over reactions, which is considered hypersensitivity, to the sensations of touch, movement, sight, sound, and smell.

Sensory Integration

Caregivers play a crucial role in controlling children’s physiological arousal by providing a balance between soothing and stimulation; in turn, this balance regulates normal play and exploratory activity (Moroz, 2005). Thus, trained caregivers are able to maintain a balanced level of physiological arousal. On the other hand, caregivers who are neglectful and abusive often help cause hyperarousal in children. Healthy, appropriate touch and movement experiences are critical for emotional and physical growth and development. The amount of stimulation that

children receive from their caregivers is crucial in sensory integration; therefore, if a caregiver is the cause of a child's trauma, the child is more greatly affected. Not only does trauma contribute to a child's deficiencies in the development of sensory integration, as previously stated, it affects one's behavior as well.

Cermak and Groza (1998) state that "sensory integration is the process by which individuals organize and interpret information received through their senses in order to successfully meet environmental challenges" (p. 8). The brain's function is to sort and organize all the sensations that enter the human body. So, when the sensations flow into the brain in a well ordered manner, these sensations are used to form appropriate perceptions, behaviors, and learning (Cermak & Groza, 1998). Thus, when sensory information is processed accurately in the brain, the foundation for emotional development, social relationships, physical integrations, and cognitive performance is developed. Often times many people are fixated about senses, such as sight and hearing for learning purposes. However, in regards to sensory integration, there is great emphasis on the importance of integration of information through the senses of touch, proprioception, which is muscle and joint, and position and movement (Cermak & Groza, 1998).

It is important to note that children with difficulties in sensory integration do not have physical problems with their actual sense organ, such as their actual eyes or ears. Instead, the issue relies in how particular sensory information is being processed by the actual brain. "Just as food nourishes the body, sensations are food for the brain, providing energy and knowledge to direct the body and mind" (Cermak & Groza, 1998, p. 9). When a child uses sensations, such as touch and movement, they are ultimately nourishing their brains and simultaneously meeting the needs of their developing nervous system. When this does not happen accordingly, sensory integration dysfunction occurs. Various signs of sensory integration dysfunction are overly

sensitive to touch, movement, sights, or sounds, under-reactive to sensory stimulation, delays in pre-academic or academic achievement or activities of daily living, and poor organization of behavior (Cermak & Groza, 1998). Moreover, it is important realize that problems dealing with sensory integration are not simply unique or specific to children with histories of abuse and neglect. Children with learning disabilities, autism, and extensive developmental disorders are all capable having problems with sensory integration.

Common Methods of Treatment

There are currently different treatments available for the psychological conditions of trauma. In general, the essential components in a treatment plan for traumatized children include the use of direct exploration. Most treatment plans include direct exploration of the traumatic experience, explication and clarification of inaccurate attributes regarding trauma, and the use of stress management techniques (Shaw, 2000). Helpful initial interventions consist of cognitive-behavior therapy (CBT), behavior therapy, family therapy, and psychodynamic psychotherapy. CBT helps the client change their outlook of the world by consequently changing what they feel and do. Black and Tricky (2000) mention that “children who are avoiding a reminder of the trauma are assisted in gradually remembering and re-experiencing the event in safe circumstances that enable the distress to be mastered not magnified” (p. 267). To help children re-experience certain events, activities such as play, drawing, storytelling, and talking are encouraged. As for behavior therapy, it is used in order to change the child’s behavior rather than focusing on the true underlying issues. In regards to family therapy, this treatment approach looks at the entire family as a unit and focuses on the pattern of interactions that occur between each family member rather than on the individuals (Black & Trickey, 2000). During family therapy, members in the family are helped to come to terms with the changes that follow a

traumatic experience and adjust to the changes appropriately. Lastly, psychodynamic treatment helps children to try and understand and make sense of the traumatic experience that has occurred by providing a friendly environment in which the child feels safe and comfortable enough to express their fears and anxieties (Black & Trickey, 2000). During this treatment, the professional working with the individual will allow the child to use different modes of expression, such a play or words. Ultimately, the professional accepts both verbal and non-verbal means of communication.

Sensory Treatment Approach

Although these previous treatments have been shown to be useful and successful, this study is interested in focusing on a sensory treatment approach. Instead of an intervention that encourages and gives a child the opportunity to tell his or her story and construct a personal narrative of the traumatic experience, this study will specifically look at the use of sensory integration and the overall effectiveness of a sensory treatment approach for children with trauma due to abuse or neglect. Treatment concepts that are related to sensory integration come from a body of work that has been developed by a occupational therapist by the name of A. Jean Ayres, in the 1950s and 1960s (“Sensory Integration Therapy,” 2005). At the time, Dr. Ayres was fascinated with the subject matter and wanted to know in which sensory processing and motor planning disorders interfered with everyday life function and learning. Although sensory integration was first introduced by Dr. Ayres in the 1950s, this theory continues to be developed by other professionals from the fields of neuropsychology, neurology, physiology, child development, and psychology. Thus, “the current effort to describe and explain sensory modulation disorders is rooted in decades of hypothesis development based on clinical observations, description, and data analysis related to Ayres’ hypothesis on sensory integration

and, more specifically, sensory defensiveness” (Atchison, 2007, p. 111). In particular, Royeen and Lane (1991) expanded Ayres’ initial work, and their hypothesis suggested that the limbic system, the hypothalamus, and their associated functions have significant effects for sensory modulation (as cited in Atchison, 2007, p. 111). Atchison (2007) states that “the limbic system, which is known to facilitate motivation and expression of emotion, has direct connecting fibers to and from all the cerebral lobes as well as within its own structure” (p. 111). Therefore, the main purpose of the limbic system is to function for learning and memory, aggression, sexual behavior, eating and drinking behavior.

In general, a child’s psychological response to a traumatic stressor is influenced by preexisting temperament, personality traits and psychopathology. Hence, when treating a child, it is important to realize that all children are different, have different individual needs, and respond differently to trauma specific stressors, especially due to different developmental stages. For instance, a preschool child has less specific cognitive awareness than school age children, who is considered to have a more cognitively mature understanding of the nature of the traumatic situation (Shaw, 2000). As for adolescents, they typically respond similarly to adults with the exception of some psychological responses which may be affected by the adolescent’s awareness of a life unlived (Shaw, 2000). Thus, treatment services are created to address personal individual needs. Ultimately, the purpose of a sensory treatment approach is to “encourage the nervous system to process and integrate sensory input in organized and meaningful ways, which will ultimately enhance the ability of the nervous system to function more adequately” (“Sensory Integration Therapy,” 2005). Each suitable response that enters the human body into the nervous system provides specific feedback and urges child maturation and organization of the nervous

system. In due course, the child will hopefully be able to interact with the environment in a more positive and fitting way.

In particular, a sensory connection program has been recently developed by Karen Moore (2010). Thus far, this treatment has been developed for mental health settings, substance abuse treatment, geriatric care, trauma informed care, and restraint and seclusion reduction initiatives. Although this study will primarily focus on the aspect of trauma informed care, it is helpful to recognize that the treatment is effective and useful in other professional facilities as well. For example, sensory processing problems have been observed within a variety of diagnostic conditions, including autistic deficit spectrum, learning disabilities, attention deficit disorders, and mental retardation and sensory treatments have been used and effective for these conditions (Atchison, 2007). Overall, this program uses specific sensory approaches to treatment for psychosocial care. This treatment starts by developing a child's self-awareness and then slowly moves on to certain strategies for self-regulation, self-care, and self-healing.

Sensory treatment strategies are based on direct individual treatment, group treatment and the development of sensory sensitive environments. When using the sensory treatment approach, sensory quality of tasks and the settings in which sensory processing challenges occur are greatly considered. Sensory sensitive environments include sensory rooms and comfort spaces. The environment where the sensory treatment is taking place should be organized, demand for skill, demand for sustained attention, have a level of engagement, fun, motivational, and be purposefulness (Atchison, 2007). In using this method, typically several different sensory systems are considered. Although sensory modalities include tactile, vestibular, proprioception, audition, vision, taste, olfaction, oral input, and respiration, not all are necessarily used in each individual case. In regards to each task, the qualities of sensation are important. Qualities of

sensation should consist of duration, frequency, complexity, and rhythmicity (Atchison, 2007). When working with this treatment approach, there should be structure, routine, level of control by both the child and professional, self-monitoring, and interaction taking place (Atchison, 2007). Most importantly, the tasks that are being used in this treatment provide children with coping skills and strategies, which can be extremely useful during stressful situations. Some examples of activities that are used in sensory settings consist of listening to soothing music, rocking in a chair, and watching an aquarium display. Completing word searches, cuddling up in bean bag chairs, playing with stress balls, and smelling scent boxes are also helpful activities (Moore, 2010). Exercise equipment such as exercise bands, mats for Yoga, balancing balls, and other weighted modalities are all used as well. Furthermore, such treatment techniques can be transferred over to the home environment allowing caregiving to take part in the recovery process as well. In times of crises and distress, it is crucial for children to have support by loving caregivers.

Not only do sensory treatment approaches use tools and strategies that support trauma informed care, they also use techniques for restraint and restraint initiatives. The use of sensory treatments are crucial for children because “atypical sensory experiences resulting from trauma cause abnormal sensory responses that cannot be addressed through traditional psychosocial models of treatment alone” (Moore, 2010). According to Moore (2010), there are researchers and leaders in treatment for trauma that are greatly supporting the idea and necessity of body oriented treatment. It is crucial for children with histories of abuse and neglect to have some sort of sensory treatment integrated into their discharge plans.

In general, the use of sensory input is a critical component for everyday life. Sensory input helps an individual have health responses to daily life stressors. However, traumatized

children, especially those in a residential facility, often lack the opportunity to take advantage of common sensory activities and need support (Moore, 2010). In regards to sensory treatment approach, one of the most important benefits and outcomes is for a child to feel empowered to have safe emotional control regardless of past trauma, stressful circumstances or symptoms of PTSD and sensory modulation dysfunction (Moore, 2010). Thus, this study will explore the current use and effectiveness of sensory integration for children with histories of abuse and neglect in a small agency in Rhode Island. Do these sensory rooms work with children who have trauma histories?

Methodology

This was an exploratory, qualitative study that addressed the effectiveness of sensory treatment approach for children with histories of trauma. The study involved narratives of social workers from a small agency in Rhode Island who worked directly with children who have histories of abuse and neglect. These workers specifically engaged and utilized the sensory treatment approach with this population of children.

Subjects

Participants in the study were male and female social workers directly working with children who have histories of abuse and neglect. This study used a convenience method to identify social workers in an agency who utilized the sensory treatment approach. This study also used the snowball sampling technique to gather participants. Since only a few of the social workers in the agency utilize sensory integration, the researcher found it necessary to approach one social worker known for using this approach and recruit future subjects among his colleagues. Ultimately, the author used recommendations to find social workers in the agency with the specific range of skills regarding the sensory approach that would be determined to be

useful for this study.

Data Gathering

A qualitative approach was used in this study to interview social workers who use the sensory treatment approach and assess its effectiveness. Before the interviews, all participants in this study expressed their consent by signing an informed consent form which stated that they were able to withdraw from the study at any point (See Appendix A). The form specified that all participants would remain unidentified and all information would remain confidential.

Furthermore, the participant's reflections were mostly based on a semi-structured interview process conducted by the author (See Appendix B). Some of the questions asked in the interview include age, years of experienced practice, and if they were a licensed social worker. Questions about their training in the use of sensory approach, number of years using this method, and their thinking about the validity of its use in this population were also asked.

Data Analysis

The data gathered from the interviews conducted by the author were individually analyzed and studied. While interviewing, the researcher used a tape recorder and also took notes on a laptop in order to capture each participant's experience and opinion. After each completed interview, the notes and tapings were reviewed and themes were gathered. Throughout this process, all notes and tape recordings were kept in a locked drawer and were then destroyed by the author after the collected information was transcribed. These techniques were used during the interviews in order for information to be as accurate as possible. The results from the interviews were then used to draw conclusions and determine whether the sensory treatment approach is effective for children with histories of trauma in this agency.

Findings

This study was intended to examine the newly implemented sensory treatment approach at a small agency in Rhode Island which works with children with traumatic past histories. The study was achieved by interviewing four licensed social workers from the agency that use the sensory approach when working with clients. The interviews in this study consisted of open-ended questions regarding their use of the sensory treatment and their perception of its effectiveness for this particular population of children.

All four participants were licensed social workers who worked at this small agency in Rhode Island; three of the recipients were outpatient clinicians and one was a residential clinician. The three outpatient clinical social workers were female and the residential clinical social worker was male. Participant 1 is a 43-year-old female and holds her license in clinical social work (LCSW). She has been working as a clinician at the agency for a total of three years. She was trained to use the sensory treatment approach and has been using this method of treatment for two years. Participant 2 is a 44-year-old female and is a Licensed Independent Clinical Social Worker (LICSW). She has eighteen years of experience as a licensed social worker and has been using sensory treatment for a total of three years. Participant 3 is a 33-year-old female and also has her LICSW. She has been a licensed social worker for six and a half years and has been using the sensory approach for a total of six years. Participant 4 is a 48 year old male and has his LICSW. He has been a licensed social worker for ten years and has two years of experience in using the sensory treatment approach. All in all, the mean number of years using the sensory approach for this sample of social workers was 3.25 years.

All four of the participants in this study were trained in using the sensory treatment approach and were trained by an occupational therapist (OT), Karen Moore. Karen Moore has

used sensory approaches in many psychiatric hospitals in Massachusetts since the 1990's. According to Participant 1, "Karen Moore is one of the experts in sensory interventions and does group trainings." Ms. Moore provided these participants with a day of training which totaled eight hours. She provided a day of training at this agency and adapted what they do there and explained to the workers the most effective techniques for this population of children. These four participants attended this particular training at the agency and each of them noted that they continued to attend trainings that are focused on sensory interventions. For example, Participant 3 stated:

I attended trainings over the years focused on sensory work. I go to different conferences and some of the workshops may be an hour and a half. I'm always getting updated because it changes so much that you have to.

The sensory approach is without a doubt evolving. Many helping professionals are starting to use this treatment approach for many different populations such as children with autism, learning disabilities, and extensive developmental disorders.

Sensory Treatment for Children with Trauma

All participants interviewed were in an agreement and believed that the sensory treatment approach works for children with histories of abuse and neglect. Sensory treatment particularly works for children with trauma because it's a calming mechanism and keeps them safe.

Participant 1 explains how:

The theory is that it helps balance [one's] system. So, for a child that is so over stimulated by his environment, one would use some of the sensory approaches that would help calm him down or balance so he can focus and stay on task. It is all specific, need to figure out what do they need to balance out that hyper active behavior. For kids that are depressed, they need something to stimulate the brain. So, sensory is going to counteract the chemicals in the brain that are causing the depression and help stimulate them and keep them more alert.

The sensory approach is able to increase and decrease a child's mood and behavior. It can be used when a child is in crises or as a sensory diet, where a client uses it on a daily basis. In participant 2's opinion:

The theory is that your body needs touch and smell and odor and a lot of these kids don't get that. They have been deprived of so many different things in their life. Think about neglect, kids who are neglected do not get a lot of food, they don't get a lot of touch, hugs and things like that. So, the theory is that you sort of give it to them as part of a daily diet. For example, as would have three meals a day, you'll have 3 sensory diets a day. It would be different for each kid. Maybe one kid didn't get food as a child so maybe part of his sensory diet could be gum flavored candy and you would give that to him throughout the day. So, if one client didn't get hugs back then, you personally wouldn't give them hugs but you could give them a weighted blanket or stretchy cloth that they could wrap around their self, and it almost gives their self a hug.

For participant 2, there are two theories; one theory is to use the sensory approach as a calming technique and the other theory is to use it as a diet approach. The calming technique is used more in the moment and as needed. "So, you could have a sensory nap sack or a sensory suitcase of different items for when a kid is stressed they could go to it and take something from it that might calm them, whether it is a stress ball or scented candles" (Participant 2). On the other hand, the diet approach is more of a scheduled routine. The sensory diet is not used for when a child is in crises only; they should get this treatment whether they are in crises or not in crises. "It is just like when you eat three meals day, you give them the sensory diet and that sort of keeps them at a homeostasis sort of level" (Participant2). When it is used as a diet, often times, individuals go into a sensory room rather than using a to-go sensory bag. Typically, sensory rooms are visually calming and have tactile and auditory devices. Not every sensory room is exactly the same but they all consist of calm music, pictures that are calming, and calming smells and lights.

Treatment Plan

Although the sensory treatment approach works for children with trauma, it is important to note that each child is different. Every child is affected differently from their traumatic experience; therefore, all treatment plans look different for each child. Participant 1 and 2 strongly suggest that the first thing a clinician should do is perform an evaluation on a child to see what sensory approaches may work and satisfy his or her own needs. Participant 1 says:

Initially when you are working with a client you need to tailor their sensory diet specifically to what is calming to them because everybody is different. You want to go through the various senses that you are going to use and establish a sensory diet for them to use.

Techniques that are known to work well are sensual oils, soothing music, and certain colors, food, and pressure. For example, all four participants mentioned how sensual oils or smell, in general, is the most effective. Participant 1 mentioned that “research says that smell is the most effective ground technique because it goes directly to the limbic system, which controls emotional regulation.” According Participant 1, certain smells interrupt a person’s electrical signal in the brain and helps with the production of serotonin, which is used for calming in the body. Different kinds of oils will cause different chemical reactions in the brain. For instance, the smell of peppermint is famous for stimulating and restoring the senses. Lavender is helpful for relaxing and calming. Not only is lavender an essential oil energizing or relaxing, it is good for balancing. The scent is known to rejuvenate a tired person and soothe and slow down an individual who is perhaps stressed or tense. The smell of lemon is known to be very uplifting but also relaxing as well. Citrus oils are helpful in eliminating emotional confusion and even increase ones sense of humor and well-being as a whole. These are just some examples of smells

that are known to have a great impact but there are many other smells that are used and helpful as well.

According to Participant 1, “research shows that certain smells work in certain ways and it is important to let clients smell them first because for some of them a certain smell may trigger an association or memory in the olfactory sense that has the opposite effect.” For example:

I have a lot of trauma survivors that are triggered and can vividly remember the smell during that particular moment like cigarette smell or alcohol or there could have been lavender present when the sexual abuse was going on so it is always very important to establish the sensory diet before they start using.

A specific example was also mentioned by Participant 4:

For my kid with PTSD, she cannot tolerate the smell of Vicks vapor rub because she was molested by her father who wore that all the time. If she smells that it sends her into panic and flash backs. Same thing with flowers because he raped her in a funeral home so she hates the smell of flowers. So, I ask her to avoid those triggers at all costs. I advise the parent and child to not have flowers around if they can.

Aside from oils, the use of crunchy foods is also effective. Participant 1 described how the jaw has the most pressure for proprioceptive sense than any other part of the body. She mentioned how chewing gum is really great for concentrating and crunching is very good for organizing. “So, if you have a child with PTSD or ADHD, you can use the crunching for when they have to concentrate on a certain task”. As mentioned before, music and certain lighting are helpful as well.

Measure of Success

The four participants revealed that there is no standardized measure or specific tool that they use exclusively to see whether sensory measures have improved symptoms. However, there are always different forms of paper work that are being used when working with a child

throughout treatment. During the training by Karen Moore, she gave those who attended the training sheets to document the things that are most helpful to the child in terms of sensory intervention. The purpose is to go through the whole list of senses, such as sound and smell, and document what works. These forms give clinicians the opportunity to see whether or not something in particular is working. If a child or clinician feels as though something is not working or is not helpful, it will be taken out of their treatment plan. In a sense, social workers determine whether the sensory treatment is working by tracking the before and after, similar to a pre and post-test but it is not really a test. For instance, participant 3 explained:

The only way that we know that clients are making progress is that we look at our treatment plan and what our goals are and every three months we review that treatment plan and see if they made progress in therapy. It is not really a test but it is more of an ongoing assessment of their treatment progress.

According to Participant 4, it is important to “have the child try [different techniques] between sessions and check in on how they are doing and then in three months when you review the treatment plan you can review whether these interventions are working.” Participant 3 mentions that:

In three months, I do a trauma symptom check list to see if their symptoms have subsided. I see whether depression, PTSD, and anxiety have decreased. Most of the time, within the first three months of therapy, the symptoms will spike on the trauma symptom check list because you are digging and feelings are coming up. So, you are trying to get them to use sensory interventions at the same time. You will see, at the six month mark when you do the trauma symptom check list again, the symptoms will go down but that is with both trauma focused CBT and sensory interventions. It is usually with something and sensory.

There is also an overall discharge evaluation that every child gets at the end of their treatment. Upon completion of treatment with a child, parents or caregivers are given an overall evaluation sheet. The blue forms are called Child Behavior Check Lists (CBCL), which focus on

a range of different symptoms. The forms also ask questions, such as have symptoms increased or decreased, what was helpful, and what will you continue to use. Ultimately, these sheets provide clinicians an idea of what parents or caregivers are observing; therefore results are based on what the clinicians observe throughout sessions and what parents report back as well.

Continued use of this Method

There was a consensus among the participants that they will continue to use this method of treatment with this population. Since using this method of treatment, all four participants believe the sensory approach is effective and have seen great improvements in their clients.

Participant 3 stated:

I definitely see a lot of progress with most of my kids. And just helping them identify what can calm them down that is not just sitting and talking because kids can't do that. It is important to be able to have something that, when they leave the office, their parents can work on with them and have something readily available. It's definitely something they need every day.

The art of therapy is to get people relaxed enough in order for them to talk about their trauma and that is what sensory interventions accomplish. Sensory intervention gives one the ability to process. It is very difficult to process trauma when an individual is hyperventilating, therefore one has to try and help get individuals to get some mastery over what they are talking and show them how that can be accomplished.

Other Treatments Used with the Sensory Approach

Along with the sensory approach, methods of treatment, such as Cognitive Behavior Treatment (CBT), trauma focused CBT, play therapy, therapeutic crises intervention (TSI), relationship model, art therapy, Dialectical Behavior Therapy (DBT), and Eye Movement

Desensitization and Reprocessing (EMDR) are all helpful interventions when working with individuals with trauma.

The sensory treatment approach is only part of a child's treatment plan; it is one piece of the puzzle. In Participant 4's opinion:

[Sensory treatment] is effective not as a stand-alone but as an element. It is more like an intervention that you would use in addition to another treatment method. I think that you probably could use it as a stand-alone, but I think you need to use it in conjunction with another kind of therapy because I think the sensory interventions are helpful in the office. For example, I have a kid with PTSD. So, one of the sensory interventions for her in the office is strong scented lotions and sour patch kids to keep her grounded so she doesn't dissociate during the session. So, in order for her not to dissociate, I use sour patch kids so I can do CBT with her so she can be present or DBT with her. So, it's like in order for her to get where she needs to be.

Not only did Participant 4 feel this way, the three other participants were all in agreement as well. Participant 1 stated that she always integrated another method. She expressed that she uses "whatever medium that the child can use in order to express things that have gone on in a child-like way." Often times, children have the inability to talk about the trauma that has occurred, but they can and feel better acting it out instead by using dolls, puppets, or sand trays. Acting the trauma out rather than specifically talking about it gives the child the opportunity to distance themselves from what has gone on in their lives. For instance, Participant 1 explained:

One little boy that I was working with, he was five, had language delays and some cognitive delays. So, it was really hard to communicate with him around what was going on with his body and what he has experienced. But when I took him into the play therapy room, he was a lot more expressive. There was physical abuse going on with his father and he really didn't have a way to describe it but was able to act it out with dolls that represented his own father, which was interesting.

As Participant 3 would say, “busy hands make busy mouths.” Since trauma is so complex and affects people differently, the sensory approach should not be used alone. It is best to use multiple methods of treatment when working with children with traumatic histories.

Family Role

Although there were no questions regarding family in the interviews, each participant mentioned the role the family plays in the child’s life. Not only is it crucial to teach children that they are in control and they can do things to their body to help alleviate symptoms, it is important to get family members or caregivers involved as well. Participant 1 mentioned:

A lot of times with trauma survivors with sexual abuse or something else, the parents feel pretty power less over the child’s symptoms, which is difficult. So, they are going through their own issues dealing with this so it also helps the parents feel a little bit more in control.

Participant 1 goes on to explain:

There are things that parents can do in every day experiences. They could create a sensory experience with the child that helps them relax. For example, a night time routine that consists of having a warm bath and putting lavender oil in. So if the child is experiencing a lot of flash backs and are very symptomatic, they could use blankets to help the proprioceptive sense too. The restriction and causing pressure is helpful.

On the other hand, parents can be of great help by creating their own personal sensory kit at the home. Participant 3 makes an effort to give family members copies of how to create their own sensory kit. By having a sensory kit, parents can ultimately transform a corner of the house or a child’s room into a sensory area, having sensory techniques readily available.

Participant 3 explains that:

In our sensory room we have kids test out different things and we have a sheet (in binder) that marks what stimulates them, what helped them to relax and I share that with parents and encourage them to get those things, which you can find at the dollar store for

them to have at home. For example, encouraging them to buy things, such as different lotions, different colored sun glasses, and different colors light bulbs.

The good thing about sensory treatment is that parents can also use it at home for sleep problems and attention problems, like white noise machines, peppermint, and things that are of similar nature. Therefore, parents can regulate this at home, initially allowing them to play a crucial role in their child's treatment plan as well.

Summary and Implications

This study was conducted to assess the effectiveness of the sensory treatment approach for children with past traumatic histories. This study examined the use of sensory integration at a small agency in Rhode Island. The study interviewed four licensed professional social workers who have experience working with the sensory treatment approach with this population of children.

The literature shows that there are a high number of children who fall victim of abuse and neglect in the United States (Moroz, 2005). The literature also indicates that children with traumatic histories are greatly impacted and can lead them to experiencing behavioral, emotional, cognitive and health difficulties (Shaw, 2000). Due to the impact of trauma on children, various treatments have been developed in order to help children who have unresolved trauma and are experiencing mental and physical health complications. In particular, the sensory treatment approach is based on direct individual and group treatment that goes on helping children develop self-awareness and incorporates strategies for self-regulation, self-care, and self-healing.

In the sample of four professional clinical social workers, it was interesting to see that all workers were trained by the same occupational therapist to use the sensory treatment approach. A strength in the study was that all four social workers were trained together, providing consistency in the treatment process. Although the residential clinician and outpatient clinicians

attended the same eight hour long training, they utilized different treatment modalities.

Residential clinicians in this agency tended to use the sensory treatment approach as a sensory diet and crises intervention, whereas, outpatient clinicians solely used sensory integration as a diet. A sensory diet involves having a personalized activity plan that provides the sensory input that a child needs to stay focused and controlled throughout the day. Just as a child needs food throughout the span of a day, sensory input must be met as well. Crises intervention involves using sensory techniques right before a child is about to have an outburst or to deescalate a child when her or she is already at the point.

Based on these interviews, it is clear to say that the sensory treatment approach works for the population of children with trauma in this agency. Although there is not a standardized tool to measure the success of this treatment, there are various work sheets that are filled out and self-observations were made throughout helping process, which allowed the social workers to distinguish whether or not the treatment helped and a client's symptoms improved. The professional social workers interviewed were confident that simply tracking the before and after behaviors of a client during treatment is a sufficient method to determine the effectiveness of the treatment for these children.

Although only four social workers were interviewed in this study, it was significant that not one participant had anything negative to say about the use of the sensory treatment approach. Out of the four social workers, no one mentioned any drawbacks in using this treatment. In fact, all four social workers expressed that they highly suggest using sensory integration when working with traumatized children and will continue to use this method of treatment. However, it was interesting to see that they were all in agreement and stressed the importance of using other methods of treatment along with the sensory treatment as well. Although the sensory treatment

approach proves to be successful and social workers have noticed improvements in their clients, this kind of treatment should not be used as a stand-alone. When working with children with histories of trauma, it is important for social workers to use methods such as CBT, play therapy, art therapy, TSI, DBT, and EMDR combined with the sensory treatment approach.

Having the opportunity to interview these social workers who work directly with children with traumatic histories and specifically engage and utilize the sensory treatment approach supports that the sensory approach is effective and can be successful for children who have endured trauma. Children who have experienced trauma in their lives are greatly affected psychologically and the sensory treatment approach is an effective method that helps children alleviate trauma induced symptoms.

There are limitations that should be noted in this study. The first limitation is in regard to the sample size. The sample size in this study included four participants, who are all members of the same agency in Rhode Island. Among the four participants, there were three outpatient clinicians and only one residential clinician. Therefore, it would be inaccurate to make generalizations regarding the findings in relation to helping agencies who work with abused and neglected children. Ideally, it would have been more beneficial if there was a greater sample size and the participants worked at different agency settings. This can potentially reveal different responses and various ways the sensory approach is used. The workers interviewed could have also been biased using this technique. In spite of these limitations, focusing on this agency in Rhode Island and the social workers that use the sensory treatment approach supports the effectiveness of this method for children with trauma.

Overall, regardless of the limitations, the strengths of the study are evident. This study is clearly a descriptive study (on a very small scale) but it supported the value and utility of the

sensory treatment approach. Since the sensory treatment approach has been recently implemented in treatment plans at this small agency in Rhode Island, it is important to see if it is having positive effects on the children who are being treated with this method. The interviews revealed that the children are showing great improvements throughout the process of treatment; therefore it is reassuring for the agency to know that their clinical social workers are being trained properly and their clientele are being treated appropriately. With the use of sensory treatment techniques, children at the agency are being taught new coping skills, which result in fewer outbursts and fewer physical restraints. If numbers of outburst and physical restraints are decreased, social workers have more of an opportunity to work directly with clients and focus on reducing their psychological issues. Also, outburst and physical restraints not only affect the child; it affects all the surrounding children who are witnessing the situation taking place as well. It is difficult for children to focus on their own treatment when other children are acting out around them. Therefore, implementing a sensory diet in a child's treatment plan not only impacts that individual child, it benefits the other children on the same unit as well.

The results from this study provide helpful implications for social work practice, research and policy. The population of children with trauma is substantial and it is a population that many social workers work with; therefore it is crucial for social workers to be educated and informed on this issue and particular method of treatment. It is important for social workers to be well-informed about trauma and the sensory treatment approach because their knowledge can help clients overcome symptoms caused by traumatic events. Although there are various methods of treatment that are proven useful when working with children with trauma, it is valuable that there is another method, sensory integration, that can be an additional tool. The existing interventions of treatment for children with traumatic histories can always be improved upon and strengthened

and there is always room for new and improved methods to be invented. Research in this area could focus on agencies devising methods to measure the success of children's treatment.

Research is always encouraged, especially since the field of social work is always evolving. This study provided social workers valuable information about effects of trauma and the use of sensory integration. Since there is not a lot of literature that focuses on the sensory treatment approach and this population of children, this study contributed to research and practice regarding this issue. Also, this study gives future researchers a template to gather further information about the sensory treatment approach when working with children with trauma.

References

- Atchison, B. J. (2007). Sensory modulation disorders among children with a history of trauma: A frame of reference for speech-language pathologists. *Language, Speech, and Hearing Services in Schools, 38*, 109-116. doi:0161-1461/073802-0109
- Black, D. & Trickey, D. (2000). Long-term psychiatric effects of trauma on children. *Trauma, 2*, 261-268.
- Cermak, S. & Groza, V. (1998). Sensory processing problems in post-institutionalized children: Implications for social work. *Child and Adolescent Social Work Journal, 15*(1), 5-37.
- Child trauma (2010). Retrieved from <http://mentalhealth.vermont.gov/topics/trauma>
- Feather, J. S & Ronan, K. R. (2009). Trauma-focused CBT with maltreated children: A clinic-based evaluation of a new treatment manual. *Australian Psychologist, 44*(3), 174-194. doi:10.1080/00050060903147083
- Koomar, J. A. (2009). Trauma-and attachment-informed sensory integration assessment and intervention. *The American Occupational Therapy Association, 32*(4), 1-4.
- Lee, S. A. (1995). *The survivor's guide for teenage girls surviving sexual abuse*. Thousand Oaks, CA: Sage Publications.
- Moore, K M. (2010). The sensory connection. Retrieved from <http://www.sensoryconnectionprogram.com/index.php>
- Moroz, K. J. (2005). Vermont Agency of Human Services. *The effects of psychological trauma on children and adolescents*. VM.
- Prevent Child Abuse. (n. d.). *Child abuse and neglect reporting guide*. Pawtucket, RI.

Probst, B. (2006). Re-framing and de-pathologizing behavior in therapy for children diagnosed with psychosocial disorders. *Child and Adolescent Social Work Journal*, 23(4), 487-500.

doi:10.1007/s10560-006-0066-5

Research in brief: Resilience in childhood (n. d.). Retrieved from

http://strengtheningfamilies.net/images/uploads/pdf_uploads/%281.3_.4%29_RB_-_Resilience_in_Childhood_.pdf

Sensory integration therapy (2005). Retrieved from <http://www.memorialhospital.org/index.html>

Shaw, J. A. (2000). Children, adolescents and trauma. *Psychiatric Quarterly*, 71(3), 227-243.

doi:0033-2720/00/0900-0227

Appendix A

Informed Consent

Dear Potential Participant,

I am a senior Social Work major at Providence College, inviting you to participate in a study that explores a sensory treatment approach. The data gathered in this study will be reported in a research paper for a social work course at the college. There are no anticipated significant risks associated with involvement in this research. There is always the possibility that uncomfortable or stressful emotions may come to surface with regard to personal experiences with working with this population of children. Participants are free to cease participation in this study at any time.

You are being recruited for this research to answer questions to the best of your ability regarding the use of a sensory treatment approach. The total participation time should not exceed more than 45 minutes.

Benefits of participating in this study include the possible reward of knowing that the participant has contributed to the generation of knowledge that may aid in work with others in the future.

Confidentiality of participants will be protected. Although notes will be taken and a tape recorder will be used, once the data is obtained all identifying information linking the participant to his or her response will be destroyed. The responses will be shredded and tapes will be destroyed. Therefore, the responses can no longer be identified with individuals. Data will be reported mostly in written terms of the participant's narrative to the research questions. The information gained from the interview will only be transcribed and quoted without any identifying information. Responses will be kept secure in a locked drawer.

Participation in this study is voluntary. Once again, you can withdraw from the study at any time.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTOOD THE ABOVE INFORMATION AND THAT YOU HAVE HAD THE OPPORTUNITY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE STUDY.

Thank you for participating in this study.

(Name) _____ (Date) _____

PLEASE KEEP A COPY OF THIS FORM FOR YOUR RECORD

Appendix B
Interview Questions

Are you a licensed Social Worker: Yes or No?

Degree:

Do you have a LCSW or a LICSW?

Gender:

How many years of experience do you have?

Age:

1. Were you trained to use the sensory approach treatment: Yes or No?
 - a. What kind of training did you have?
 - b. Where did you go?
 - c. How many hours?
2. How many years have you been using this treatment?
3. Do you think this treatment approach works for children with histories of abuse and neglect: Yes or No?
 - a. Explain why:
4. How do you think the sensory approach works for this population?
5. How do social workers know that this treatment works?
 - a. What do you use to determine its effectiveness?
 - b. What are the measures of success?
6. Will you continue to use this method of treatment: Yes or No?
 - a. Explain why:
7. Do you use other methods of treatment along with the sensory treatment as well?
 - a. Others used: