

# Addressing the unique and trauma-related needs of young children



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## *Acknowledgements*

*Authors for this paper include FSU Faculty: Patricia Zindler, MPA., Anne Hogan, Ph.D., Mimi Graham, Ed.D.; with special thanks to Cecilia Casanueva, Ph.D., and Jenifer Goldman Fraser, Ph.D., Research Triangle Institute, Raleigh, NC, and Jane Streit, Ph.D., Chair, Florida Trauma Informed Workgroup*

# Introduction and Background

This policy brief is prepared by the Florida State University's Center for Prevention and Early Intervention Policy (the FSU Center) for the State of Florida's Agency for Health Care Administration (AHCA) under contract #MED110, Year 1 of 3. The FSU Center provides "professional development services and system development demonstrations statewide to support child development, positive mental and physical health status, and family relationships for Medicaid recipients with a primary focus on children from birth to age five and their families."<sup>1</sup>

In the area for promotion, prevention and intervention approaches, the FSU Center works to achieve two targeted goals "to enhance child development, mental and physical health status, family relationships in vulnerable families, and to prevent or ameliorate disabilities."<sup>2</sup> Goal 1 is to build capacity through the FSU Center's professional development and training, and Goal 2 is to build capacity through developing a System of Care for early childhood in Florida. This policy brief supports Goal 2, and to that end, the FSU Center works "with state agency systems and regional or local community systems to support the use of developmentally appropriate and trauma-informed practices; the provision and coordination of relationship-based services in home and program settings; the enhancement of referral, linkages and follow-up within and between systems partners; and, the integration of early childhood mental health consultation models into current systems."<sup>3</sup>

Young children's trauma response and recovery are particularly dependent on the context of the trauma experience.<sup>4</sup> In some cases, children may experience trauma as a result of a single event, such as unintentional injuries due to accidents or illness. If the child's development has been typical and immediate family members were not also traumatized in the experience, then the family may be very capable of understanding the child's experience and response, and providing sensitive support in the trauma aftermath. In other cases, the child and family members may experience the trauma together, such as in car accidents or natural disasters, and thus each person's capacity to support others

may be compromised by their own trauma response. Adults' emotional availability to children's distress in the face of possible trauma reminders may be limited if the same reminders are powerful triggers for themselves. In the most complicated circumstances, an immediate family member holds responsibility for the child's trauma, as in cases of child maltreatment including abuse and neglect. In such cases, the child's recovery process and resumption of developmental progress requires addressing both the needs of the individual child as well as repairing and rebuilding their relationships with significant others.

The need for a sense of trust and security with their parents is essential for infants and toddlers, and forms the basis for their optimal development in all domains. As will be described later in this paper, children who experience maltreatment in the early years are at high risk for short and long-term health and developmental problems. Because children in this group are so vulnerable to their trauma experiences, this paper will focus primarily on addressing their unique needs. The purpose of this paper, then, is to create a stronger system of care by offering the evidence base for increasing the provision of trauma-informed care in state and community services for young children in the Medicaid system. The combination of access to early intervention and treatment that optimizes recovery from trauma and the establishment of effective policies that prevent re-traumatization promote the long-term health and development of young children.

In 2008, nearly 750,000 children in the United States were maltreated, and the victimization rate was highest among children younger than 3 years of age at the rate of 47 per 1,000 victims.<sup>5</sup> Approximately 247,200 children suffering maltreatment were younger than 3 years of age. Among maltreatment investigations isolated to infant and toddlers, the Children's Bureau reports that approximately 12.3% of substantiated child abuse or neglect cases are for infants aged birth to 1 year, 7.2% are children aged 1 to 2 years, and 6.8% are children aged 2 to 3 years, equaling a total of 26.3% of the maltreated child population younger than 3 years. Almost half of the infant and toddlers are white (45%), 22% are black, and 21% are Hispanic.

The most frequent type of maltreatment suffered by infants and toddlers is neglect with 33% lacking supervision and another 28% having parents who fail to provide basic needs.

*Some parents leave small children alone for extended periods of time or fail to monitor the child's whereabouts so that the child is found wandering the neighborhood. Others leave their infants or toddlers with a succession of neighbors or friends as they engage in substance abuse, making it difficult for the child to establish attachment relationships. Parents who fail to appropriately monitor their small children, either because of substance abuse or their own previous trauma, may fail to recognize individuals and situations which pose a risk to their child (Osofsky, et al. 2004, p. 262).<sup>6</sup>*

After neglect, the most frequent type of maltreatment is physical abuse (21%) of children. Caseworkers report the substantiated harm to the child as moderate (35.3%) and severe (28.9%). The population most at-risk are infants since children under the age of 1 represent 44% of all child fatalities occurring from abuse and neglect.<sup>7</sup> Infants are susceptible to retina hemorrhages, blindness and traumatic brain injury from violent shaking. Young children with skull or multiple bone fractures at various stages of healing (especially spiral fractures of long bones) are all indicative of inflicted trauma.<sup>8</sup> In 2000, nearly 88,000 children in the United States experienced sexual abuse, and approximately 10% of the substantiated sexual abuse cases were perpetrated against infant and toddler victims.<sup>9</sup>

Increasingly, young children are witnesses to violence. In 1992, a survey of parents in a pediatric primary care clinic at Boston City Hospital determined that 10% of their children ages 1 to 5 years had witnessed a knifing or shooting; and half of all those surveyed reported violence occurring in the home.<sup>10</sup> Today, 40% of American households with children living in the home have guns.<sup>11</sup> In preliminary data for 2007, the National Center for Health Statistics listed homicide as the third leading cause of death for children ages 1-4.<sup>12</sup> Every year, 3 to 10 million children witness domestic violence.<sup>13</sup> The results for some children are shattering to their sense of relationship security, and young boys who witness their fathers' violence are significantly more prone to violence in their lifetime than boys from non-violent homes.<sup>14</sup> Alcohol and drug abuse among women and their partners increases risk for intimate partner abuse.<sup>15</sup> Women who are abused during pregnancy are more likely to use alcohol and drugs than non-abused women.<sup>16</sup> Intimate partner violence during pregnancy has been associated with poor health outcomes for mother, fetus, and the newborn baby.

More than 50% of maltreated children are identified as having special health

care needs.<sup>17</sup> About a third of children (aged birth to 3 years) have developmental delays,<sup>18</sup> and 50% of preschoolers have considerable developmental or behavioral needs.<sup>19</sup> Among mothers of infants in the child welfare system, about 25% are teenagers and 40% have less than a high school education. About three-quarters (76%) are unmarried, 37% report being current victims of physical intimate partner violence, and about a quarter are clinically depressed.<sup>20</sup>

An extensive body of research consistently finds that early exposure to maltreatment is associated with serious health disparities in the form of wide-ranging developmental and mental health problems that continue into adolescence and adulthood.<sup>21 22 23</sup> These include severe emotional and behavioral problems, substance abuse, high-risk sexual behaviors, aggression and violent crime, intimate partner violence, and dysfunctional parenting.<sup>24 25 26</sup>

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## Section 1

# Psychological Trauma for the Infant or Toddler



*Trauma can be “a single event, connected series of traumatic events, or chronic, lasting stress. . . .Trauma is the direct experiencing or witnessing of an event(s) that involves actual or threatened death, serious injury, or threat to the psychological or physical integrity of the child or others.”*

Diagnostic Classification: 0-3R

## 1 What is trauma for infants and toddlers?

***Trauma for the infant or toddler is an unanticipated exceptional event that is powerful and dangerous in which a feeling of helplessness overwhelms the child’s capacity to cope.***<sup>28</sup> For many years, the assumption was that young children could not remember trauma; therefore, it did not affect them. Research following Hurricanes Andrew, Charley and Katrina has now established that psychologists frequently see considerable reactions and lengthy recovery from trauma among children.<sup>29</sup> Very young children may experience trauma differently, but they do, indeed, experience as much or more psychological trauma as older children and adults, primarily because their capacity for cognitive and emotional processing of the event is different.<sup>30</sup> When left to process psychological trauma on their own without intervention, babies as young as 4- to 6-months have been identified with symptoms of depression and traumatic stress responses. Additionally, it is significant to note that a child who witnesses violent or abusive acts can be just as traumatized as one who experiences a traumatic event directly.

Young children are particularly vulnerable to the affects of trauma because they are unable to anticipate or prepare for ensuing danger, have no means of preventing its occurrence,<sup>31</sup> and have developed fewer coping strategies than adults.<sup>32</sup> Unlike an older child or adolescent, the young child’s potential emotional shock and response to trauma is not necessarily determined simply

by the horrific nature of the event and the child's response to it. Young children depend on adults for protection from injury and traumatic experiences; so, the very young child's perspective of trauma must be understood in the context of the primary attachment relationship with the parent or caregiver.<sup>33</sup> This means the parent or primary caregiver's reaction to trauma is extremely significant to the young child's ability to accept and process the event.

***Acute trauma is a single traumatic event that is unpredictable and overwhelms a child's ability to cope.***<sup>34</sup> Not every young child is traumatized from the experience of a single acute event, but some common examples of acute events that may be traumatic for the young child are:

- Natural disasters such as hurricanes, fire, floods, earthquakes, etc.
- Serious accidents such as automobile or other high-impact events
- Bodily injury
- Illness, especially when accompanied by a very high fever
- Hospitalization, surgery, or painful medical procedures
- Forced separation from the parent or primary caregiver, including life-threatening illness or sudden death
- Birth trauma
- Abandonment

***Complex trauma (also referred to as chronic trauma) in the infant or toddler is repeated exposure to trauma over time with very negative impacts on the child.***<sup>35</sup> A young child who experiences complex trauma will be exposed to multiple instances of the same or varied traumatic events. A young child who lives in an environment of ongoing trauma exposure is at enormous risk for chronic traumatization<sup>36</sup> including the development of persistent and pervasive symptoms that lead to negative health and behavioral outcomes later in life. Usually, this form of trauma is caused by adults entrusted with the child's care, so it affects nearly every aspect of the young child's development.

Vulnerable populations who experience trauma are at increased risk of "mental health and substance abuse problems, as well as obesity, cardiac problems and

even premature death.<sup>37</sup> Some all-too-frequent situations or events that involve the young child and may qualify as chronic or complex trauma when experienced repeatedly or simultaneously include:

- Physical or sexual abuse
- Neglectful care that ignores the child’s emotional or physical needs
- Domestic violence
- Community violence (e.g., fighting, shootings, stabbings, robbery, horrific injury, carnage or fatalities)
- Chronically chaotic environments in which housing and financial resources are not consistently available
- Poor or inadequate relationships with the parent or primary caregiver, who may also suffer from trauma, chronic depression, mental illness, grief, or suicidal thoughts

## **2** Why is trauma particularly detrimental in pregnancy and infancy?

Compelling new research shows that environmental factors and experiences leave chemical imprints on the genetic make-up of the developing young child. Exposure to positive experiences such as healthy nurturing relationships and exposure to negative influences such as prolonged stress, environmental toxins or nutritional deficits act as external influences that chemically change genes in the fetus or young child to temporarily or more permanently shape the individual’s development. The field of epigenetics provides evidence that environmentally-provoked alterations in egg or sperm cells during pregnancy can modify DNA in the fetus and be inherited by future generations.<sup>38</sup> Changes in the epigenome give instructions to the body that turn gene action on or off. When this happens at critical times of development, the resulting impacts on specialized cells for organs such as the brain, heart, or kidney can result in development that has substantial and lifetime implications on physical and mental health.<sup>39</sup>

The potential harmful effect of adverse environments and exposure to trauma adds urgency to provide the best possible environments for infants and

toddlers. Prolonged stress during pregnancy or early childhood can be particularly toxic, and in the absence of protective relationships, may also result in permanent epigenetic changes in developing brain cells. This evidence shows that toxins and stress from the mother cross the placenta into the umbilical cord,<sup>40</sup> so babies of stressed or anxious mothers are more likely to be premature and low birth weight.<sup>41 42</sup> As a result, the young children of stressed mothers will themselves have elevated stress hormones that may make them more fearful and fretful in their responses to adversity throughout the lifespan.<sup>43 44</sup>

### **3 What complications in brain development can result from infant and toddler trauma exposure?**

When considering any form of trauma or overwhelming stress, every individual requires an ability to cope if they are to survive. The brain circuits needed for individuals to acquire the capacity to cope are not fully developed in young children. The development of those specific brain circuits is strongly influenced by the child's multiple experiences and the availability of a supportive adult to help regulate the child's reaction to traumatic events. This is supported by Shuder and Lyons-Ruth (2004) who note that an infant feels secure with less fearful arousal when maintaining close proximity or contact with the caregiver when a meaningful relationship exists.<sup>45</sup> Conversely, if the primary attachment relationship is poor, nonexistent or suffers early disturbances, then the child may develop emotional insecurity that impedes the formation of meaningful relationships in the future.<sup>46</sup>

When young children experience challenging situations, such as an unfamiliar environment or getting an immunization, the brain is meant to handle the event as a positive stressor that promotes adaptation. Normal, everyday stress of this nature may cause the child to experience elevated heart rates or mild changes in stress hormone levels. But, in the context of a supportive relationship, the caring and available adult can temper the young child's reaction to stress and, ultimately, help the child develop a sense of mastery over moderate stress responses. This buffering is instrumental to the long-term development of the young child's entire stress management system, which is essential to the survival of more threatening situations or physical danger.<sup>47</sup>

During early childhood growth and development, the young child's neural circuits responsible for dealing with stress are still malleable. Accompanied by a warm and safe relationship, the child can experience positive or tolerable stress

for short periods of time. These opportunities effectively test newly developing thresholds for stress and allow the child to experience safe recovery after reaching those limits. In the absence of a supportive relationship, stress that might have been tolerable can quickly become toxic stress. The adverse impacts of toxic stress on the young child include lower thresholds for tolerable stress and the potential for smaller brains, both of which increase future risks for stress-related physical or mental illness.<sup>48</sup>

## **4** How does poverty exacerbate the impact of trauma exposure in infants and toddlers?

The dire consequences of poverty are often most detrimental when experienced during early childhood,<sup>49</sup> compared with poverty experienced later in life.<sup>50</sup> Children in poverty are more likely to be exposed to substance abuse, smoking and alcohol than other children. These variables are known risks for abuse<sup>51</sup> as children whose parents abuse drugs and alcohol are almost three times more likely to be abused and four times more likely to be neglected than are children whose parents are not substance abusers.<sup>52</sup>

Child maltreatment and poverty are more prevalent in the first five years of life than during any other period.<sup>53 54</sup> In Florida, as in the rest of the U.S., babies under one year of age constitute the largest age group entering foster care and more than half of the entire foster care population is under age five.<sup>55 56</sup> About half of all families involved with child protective services are living at or below the federal poverty level. The negative effects of poverty and child abuse begin before birth, and continue to derail optimal development throughout childhood and into adulthood.

By almost every measure of health and development, children born in poverty are at greater risk for poorer outcomes than their higher income peers.<sup>57</sup> Poor health is often an outcome of poverty but it is also a pathway to other adverse outcomes.<sup>58</sup> Children in poverty are more likely to be low birth weight, exposed to substance abuse, smoking and alcohol than other children.<sup>59</sup> The co-occurrence of these problems is especially prevalent in low-income families compared to the general population.<sup>60</sup> Substance abuse, maternal depression,<sup>61</sup> and family violence negatively influence early brain development and often result in poor developmental and emotional outcomes.<sup>62</sup> Poverty influences brain development by affecting nutrition in both mother and child, decreasing access to medical care, altering safety and predictability of the physical

environment, increasing maternal stress and the risk for depression,<sup>63</sup> and decreasing the children's stimulation.<sup>64</sup>

Decades of research inform us about interventions that can minimize the disparities associated with poverty and recent neuroscience inspires hope that malleability of the brain responds to nurturing and positive environmental influences. This means that by ensuring a good start in life, we have more opportunity to promote learning and prevent damage than ever imagined.

## **5** What are the signs and symptoms of trauma exposure in young children?

Unresolved trauma can cause serious health and emotional problems in infancy or at any age. Even single exposure to traumatic events can impair learning and may cause jumpiness, interrupted sleep and nightmares, moodiness or anger, and withdrawal; but, chronic trauma causes devastating effects.<sup>65</sup> Young children dealing with repeated trauma may resort to dissociation, or an emotional numbing, to deaden or block the pain and trauma that may be exhibited by the young child's lack of emotional responsiveness. The child may appear depressed, withdrawn, and detached.<sup>66</sup>

Understanding the trauma-related dynamics of the young child's symptoms, feelings and responses associated with trauma and traumatizing relationships requires knowing and addressing the developmental needs of young children at different ages and milestones. The capacity for a young child to cope with trauma comes from the primary caregiver's emotional state and how those emotions are communicated to the child.<sup>67</sup>

Children gain emotional competence by observing and imitating the adults in their family. "Social referencing" is when a child looks to an adult for the emotional cues of how to respond. For example, when a child is about to touch something he knows is forbidden, he looks to the adult to see how to react. Or, a child falls and looks to the adult to decide whether to cry or not. In another case, a stranger comes into the room and the child looks to the adult to see if this person can be trusted. If the adult is welcoming, then the child tends to be less fearful. When the appropriate role models are present, the child can go through the developmental stages at appropriate times and build emotional resources.

Through social referencing, the child learns to express a range of emotions including joy, fear, surprise, anger and sadness. The child learns the appropriate

reaction to each situation from the adult. When the appropriate adult response is not observable, the child is forced to guess what is normal or appropriate. The classic “still face experiment” shows how distressed even young children become when adults shut down with no emotional cues to, instead, adopt flat affects. The experiment plays out in reality when parents are depressed, have mental illness, alcoholism or addictions, or are otherwise emotionally unavailable. Young children experiencing trauma without a role model do not learn how to emotionally respond to life situations. Children have dysfunctional role models when they live in volatile households and learn that anger, violence and hitting each other are normal responses to everyday situations. Or, if the trusted caregivers in life do not protect them from harm, children have no reference for what is normal.

When appropriate role models are absent, children respond to trauma in various ways. Some children become withdrawn; others become aggressive, imitating and repeating the dysfunctional adult behaviors. “Children suffering from traumatic stress symptoms generally have difficulty regulating their behaviors and emotions.”<sup>68</sup> This is to be expected as they have not had an adult to be the “secure base” from which to explore their emotional world. Some children may develop “disorganized attachment,” which shows up in infancy around 12 months of age<sup>69</sup> and has an appearance of confusion in the young child or a mixture of erratic behavior ranging from avoidance to resistance. The young child may appear to be dazed or apprehensive – not wanting to be held or touched. By the age of 6, a child with disorganized attachment may even take on a parental role and act as a caregiver toward the parent.<sup>70</sup>

“Children who have experienced traumatic events may have behavioral problems, or their suffering may not be apparent at all.”<sup>71</sup> In all likelihood, parents and caregivers underestimate and are unaware of some of the traumatic events witnessed by their children.<sup>72</sup> Nevertheless, younger children exposed to trauma while their brains are rapidly developing are more inclined to develop posttraumatic stress disorder (PTSD) with symptoms that last longer and are more severe than adults.<sup>73</sup> Therefore, recognizing signs and symptoms of trauma exposure in infant and toddler behaviors is an important first step in treatment. Possible changes in behavior<sup>74</sup> that may occur in young children having psychological trauma are:

- Disrupted attachment showing an inability to trust, inability to connect, unstable moods, and emotional numbness
- Separation anxiety, clinginess, and an increase in dependent behaviors

- Diminished awareness or dissociative states, aimless motion, disconnected and disorganized behaviors, or freezing
- Heightened vigilance, startle responses or increased awareness of the environment
- More withdrawn behaviors that show little emotion and decreased attention
- More immature behaviors signaling regression in previously mastered stages of development such as thumb sucking, problems with toileting, bedwetting, or soiling
- Lack of developmental progress, specifically, not progressing at the same level as peers
- Disturbance of sleeping routines such as difficulty falling or staying asleep, night waking, or nightmares
- Loss of language skills or formerly acquired language
- Loss of appetite, unexplained weight loss or failure to thrive
- Increased distress or rapid changes in mood such as less of an ability to tolerate frustration, unusual moodiness, irritability with more crying, whimpering, screaming, or tantrums
- New fears such as fear of the dark, animals, or monsters
- More aggressive behaviors
- Unable to comfort self

It should be noted that these symptoms may be indicators of problems *other than* trauma exposure, and that some of the symptoms are, in fact, frequent in children at some ages or common in response to typical life events such as the birth of a sibling. Nevertheless, infants and toddlers who have experienced trauma may show many of these symptoms. When young children show a significant number of symptoms for at least a month, they may meet the diagnostic criteria outlined in DC:0-3R for Posttraumatic Stress Disorder.

Children are severely affected when the source of trauma is the child-caregiver relationship because it breaks down resilience and the child's natural protective system.<sup>75</sup> Once maltreated children are removed from an offending environment

and transitioned into a loving home with a relative or foster parent, it is easy for the primary caregivers to forget about the root cause of any problem behavior or developmental delay that may surface in the child.<sup>76 77</sup> Understanding that young children who have been chronically maltreated will have impairments in their relationships, behaviors, and developmental progress is an important perspective.<sup>78</sup> Yet, a caregiver may become sensitive or frustrated after repeated attempts to bond with the child are rejected. Perhaps the child's biological parent may have been so inconsistent that the baby failed to develop secure attachments. By anticipating and attributing the annoying or symptomatic behavior to the child's past traumatic experiences, caregivers will have more realistic expectations of the child. Furthermore, caregivers will be better able to apply emotional support and intervention strategies that help the child recover.

The overwhelming insecurity caused by trauma can do substantial harm to the child's development. The caring adult is in a good position to activate the positive relationship as a buffer and, thereby, avoid escalating any tumultuous reactions in the child. Caregivers, who give extra consideration to the traumatized baby and understand that unusual or difficult behavior may be possible attempts to cope, will experience less frustration themselves. Those efforts, no matter how disconcerting, should be respected by the adult; yet, not reacting or rushing to negative judgment is difficult for some caregivers when the baby's persistent crying is disrupting everyone's sleep in the home. The symptoms of trauma can be very alarming and discomposing, but adults must be careful not to add shame or guilt to what the young child is already experiencing. If the primary caregiver understands the symptoms and can attribute difficult or unusual behavior in the young child to a traumatic event, then the caregiver can help the child become grounded again in the relationship through reassurance and a return to consistent daily routines and normal living.

## Section 2

# Supportive Interventions for Trauma-Exposed Infants and Toddlers



## 6 What interventions are effective for infants and toddlers?

An extensive body of research consistently finds that early exposure to maltreatment and trauma is associated with serious health disparities in the form of wide-ranging developmental and mental health problems that continue into adolescence and adulthood.<sup>79 80 81</sup> Once trauma occurs, early intervention is essential to help reestablish a sense of safety for the young child. If at all possible, the earliest (and, perhaps, the most effective) form of intervention and support should come from the parent who ideally has established a secure and close relationship with the child. This primary attachment relationship can serve as a functional buffer to the effects of fearful arousal in the young child,<sup>82</sup> and foster the child's resilience and capacity to cope. The caregiver's emotional state and how those emotions are communicated to the child will help determine the infant or toddler's reaction. When the parent is unable or inadequate to effectively intervene, more formal efforts must be made to help the child recover.

Babies can be emotionally overwhelmed and terrified when their sense of safety or the safety of their primary caregiver has been threatened or lost. With the availability and support of the trusted primary caregiver, the young child will be equipped with coping capacities that regulate or altogether avoid severe or lasting reaction to trauma. For a caregiver to be most effective in responding to the needs of a child exposed to trauma, there are three primary requirements:<sup>83</sup> 1) The caregiver must respond with sincere belief and validation of the child's experience, 2) the caregiver must be poised to tolerate the child's response to terror, and 3) the emotions of the caregiver must be managed. Without validation from the caregiver, the infant or toddler will not be given a model of how to deal with adversity and lose trust in the caregiver. Far more detrimental than caregiver distress per se is the adverse effect of turning attention away from the needs of the child.<sup>84</sup> Young children who do not receive empathy from the adult may be forced to act as if the trauma did not occur.

In the absence of a close and calming attachment relationship, the young child is at risk of experiencing negative consequences to single or repeated trauma exposure. Without the appropriate courses of support and comfort, the young child may produce multiple, immediate, short and long-term psychological impairments that last into adulthood. If the young child experiences negative consequences from single or repeated exposure to potentially traumatic events without appropriate actions of support and comfort, then “cognitive processes and behavioral responses can lead to learning deficiencies, performance problems, and problematic behavior.”<sup>85</sup>

As indicated earlier, the cognitive and emotional processing capacity is not fully developed in young children, so they will experience psychological trauma differently from what adults or older children experience.<sup>86</sup> Of concern is that once the negative psychological consequences of trauma are experienced in early life, the child is susceptible to having severe response to trauma in the future. Additionally, young children coming out of environments where they were neglected or maltreated may continue to show symptoms of abnormal behavior or post-traumatic stress even after moving to a safe and loving home.<sup>87</sup> Yet, even children who experience psychological trauma as a result of personal abuse or neglect can be receptive to early treatment <sup>88</sup> and restored to normal living.

While the family’s nurturing and sensitivity may sometimes be sufficient to alleviate the child’s difficulties in single instances of trauma enough to support his or her return to an optimal developmental path, situations of complex trauma experienced by the child may need professional support. In such circumstances, the infant mental health literature describes several models or strategies for interventions.

*Parent psycho education* is used to help the parent learn skills for nurturing and caring for her young child and to allow her to ask questions about her child. Parental guidance and other work with the parent include teaching and modeling appropriate expectations and interactions relative to the child’s developmental needs. This intervention approach also emphasizes exploration and awareness of the parent’s own unresolved issues from childhood that might be interfering with attachment.<sup>89</sup>

*“Speaking for baby”* is an intervention strategy that has been used to promote the parent’s sensitivity and understanding of their non-verbal child’s feelings.<sup>90</sup> This therapeutic strategy allows the therapist to express what the baby may be

feeling in words to help the mother understand what the child's play and behaviors may mean. Rather than telling the parent something about the baby from the therapist's point of view, the therapist takes on "the voice" of the baby. For example, when a parent is feeding their infant, the therapist might say "Mommy, I love it when you smile and talk to me while I am eating." This might assist the mother in both appreciating how important she is to the baby and how much the baby wants her positive attention and love. Often, it is very difficult for mothers who experienced poor mothering and other adversities themselves to be empathic with the babies' feelings. Many mothers also do not know how to understand what behaviors and emotions may mean. "Speaking for baby" can provide an indirect way to influence changes in parenting behavior, and the indirect quality may be especially helpful in cases in which the parent may be more resistant or hesitant to respond to more direct psycho-educational strategies.

*Child-parent psychotherapy (CPP)* is an evidence-based intervention demonstrating the improvement of mental health and behavioral outcomes of young children exposed to trauma, maltreatment and other forms of impaired parenting.<sup>91 92 93 94</sup> Extensive scientific support for this approach with high-risk infants and toddlers has led to its being classified as "well supported and efficacious" on the list of *Empirically Supported and Promising Practices* for the National Child Traumatic Stress Network.<sup>95</sup> CPP is the integration of attachment, psychoanalytic, and trauma theory with intervention approaches derived from cognitive-behavioral and social-learning therapies.<sup>96 97 98</sup> Attachment research has provided critical insights into understanding of the role of the parent-child relationship as a regulator of the young child's emotional experience.<sup>99 100</sup> Infants and toddlers who are able to develop secure attachments have a better capacity to self-regulate and have more positive interactions with adults and peers than children who lack secure attachments.<sup>101</sup> If trauma, maternal deprivation and separation, maternal frightening and unpredictable behaviors, chaos, distrust, and fear mark these first relationships, then clinical disturbances of attachment can occur. As a relationship-based approach, CPP assumes the harm sustained by the infant as a result of maltreatment must be healed within the context of the mother-child relationship.<sup>102</sup> CPP uses behavior-based strategies, play, and verbal interpretation to bring about therapeutic change in the context of dyadic interaction.

Attention to the cultural values of the parents and the family is an integral

component of the intervention plan and is woven into the intervention approach. Substantial efforts to engage families are often necessary to maintain the therapeutic work.<sup>103 104</sup> The core principles of the intervention are outlined briefly below:

1. Joint sessions centered on the child's free play with carefully selected therapeutic toys to facilitate focus on the child's trauma experience and on the child-parent interaction, with individual collateral sessions with the parent as needed.
2. Translating the developmental and emotional meaning of the child's behavior to the parent in order to increase parental understanding and empathy.
3. Targeting for intervention affect-dysregulation in the child and the parent, maladaptive child behavior, parenting patterns that are punitive or developmentally inappropriate, and patterns of parent-child interaction that reflect mistrust and misunderstanding of each other's developmental agendas.
4. Joint parent-child activities that promote mutual pleasure and foster the child's trust in the parent.
5. Starting with the most simple and direct intervention strategies, with more complex modalities such as insight-oriented interventions used only when simpler interventions are not successful in producing child improvement.
6. Employing a variety of intervention strategies that are individually tailored to the needs of the child and the parent. These strategies include developmental guidance, role modeling, emotional support, crisis intervention, assistance with problems of living, and insight-oriented intervention. Activities may include home visiting, visiting the child at child care, helping to arrange transportation, and making referrals for other services. Case management in conjunction with psycho education contributes to growth in the parent and the success of the intervention.

## Core Components of Child-Parent Psychotherapy<sup>105</sup>

- **Providing reflective developmental guidance:** Practitioner describes child's stage of motor and cognitive development to help caregiver adjust expectations, understand how child's behavior may be linked to emotional conflicts typical of child's developmental stage and how trauma intensifies developmentally typical emotional conflicts. Offers guidance directed to child about how trauma and developmentally typical emotional conflicts work together to affect child's behavior.
- **Providing assistance with problems of living:** Practitioner listens to caregiver's description of problem, helps reflect on strategies to address the problem, offers specific resources as needed; helps reflect on barriers to successfully implement strategies and helps to identify and address underlying issues to avoid similar problems in future.
- **Helping caregiver provide physical safety :** Practitioner identifies for caregiver ways in which child and caregiver are not safe, praises any areas in which improvements are made, engages in concrete safety planning with caregiver (and with caregiver and child together, after consulting with caregiver about ways child can be appropriately involved in activities that provide safety), reflects with caregiver on potential barriers to implementing safety plan, helps caregiver consider how to balance needs for safety with other needs and how to achieve safety in a variety of circumstances.
- **Helping caregiver provide emotional safety:** Practitioner facilitates discussions of non-aggressive ways for child and/or caregiver to express negative emotions and healthy/ effective strategies for coping with difficult emotions; helps caregiver understand emotional meaning behind child's behavior, making links to trauma reminders; helps caregiver reflect on own emotional responses to child's behavior, facilitates interaction in which caregiver can calm him/herself and offer child reassurance and guidance in coping with difficult emotions.
- **Constructing a joint trauma narrative:** Practitioner facilitates joint play between parent and child about trauma themes, makes links between play and/or behavior and traumatic experiences, and facilitates caregiver's attempts to talk with child about traumatic experiences and to make links between present feelings and memories of the trauma.
- **Attending to family's cultural norms and values:** Practitioner engages in behaviors that honor family's cultural norms, engages and initiates conversations about cultural differences, and reflects with caregiver on cultural roles and norms and the ways in which their different cultures view the roles of parents and children, attitudes about trauma and mental health treatment.
- **Collaborative engagement with family:** Practitioner asks questions about caregiver's goals for child and/or treatment, facilitates caregiver's reflection on what she and child need to develop a positive relationship, and helps caregiver reflect on caregiver's own experience.
- **Reflective supervision:** Practitioner and supervisor reflect on therapist's responses to caregiver and/or child, therapist's emotional experience in the presence of the family, and parallel processes in therapy and supervision.

Child-parent psychotherapy offers many opportunities for maltreating parents to express and understand their own emotions surrounding personal traumas or unresolved losses suffered earlier in life. This experience may enable the parent to build a more functional relationship with the infant or toddler and reduce the risk of maltreatment recurrence.

*Individual play therapy* with the child might also be used as an adjunct to family-focused interventions. If the trauma that the child has experienced is difficult at

first for the parent to hear or see through play, the therapist may choose to work with the child without the parent present. This may arise more frequently in cases of abusive maltreatment, when the parent may share direct responsibility for the child's trauma experiences. When the parent is ready, she will join the play as a way of creating a new way of being together, thus creating a more positive relationship. Play therapy may also assist with self-regulation and appropriate expression of emotion.

*Court experiences* can serve as intervention for the maltreated young child and have a therapeutic function for families when judges give consideration to the types of interventions needed to support young children who have experienced trauma. In the process of ensuring the safety of the abused or neglected child from maltreating parents, courts often overlook the social and emotional threats to the young child's well-being associated with physical trauma, neglect, and also the separations from caregivers. In the court model being developed by Judge Cindy Lederman and her colleagues, the clinician helps focus the court's attention on the developmental needs of the infant and family at every stage of the process including the infant's removal from the parent and placement in foster care, the infant's return home after experiencing removal and foster care, the termination of parental rights, and the adoption of an infant who is in foster care.

Working within the court context, clinicians have to prepare and process with their clients the exposure of clinical information in the court and also integrate the feedback, recommendations and decisions of the judge into the therapeutic process. Specialists in child-parent psychotherapy are in a unique position to assess the strengths and concerns of the child-parent relationship, the parent's caregiving capacities, the availability of support, and the parent's ability to appropriately use the support. Clinicians can also readily collect observational and developmental information that takes into account the emotional health of the infant within caregiving relationships that include biological and foster parents. Despite the effectiveness of this intervention, its public health impact has been limited by poor service coordination across the key public systems concerned with child maltreatment, specifically, the judicial, child welfare, and child mental health systems.<sup>106 107</sup>

# 7 Why do agencies need trauma-informed services for young children?

Unlike trauma-specific care that gives attention to the infant and toddler's exposure, reaction, intervention and recovery needs on a clinical level, trauma-informed care makes agency-wide applications from the knowledge of how trauma affects young children, families and agency workers to the methods of delivering and evaluating program services. If the goal is for an agency to function effectively as it works with a high-risk and potentially traumatized population, then its workers must be trauma-informed and accurately understand the young child's developmental level; act with sensitivity toward the child's family, culture and language;<sup>108</sup> prepare to hear horrific stories; and consider the likelihood of personally experiencing intense feelings while in a workplace environment that often offers limited support.<sup>109</sup> The growing attention to the need for creating trauma-informed child welfare systems offers an opportunity for more awareness and responsiveness to the unique needs of vulnerable and traumatized infants and toddlers.

*Trauma-informed services avoid re-traumatizing infants and toddlers.* Within each agency, frontline workers must be educated to understand the impact of trauma on infants and toddlers so they have this in the forefront of their minds, recognize the signs and symptoms when in the field, and respond appropriately when ensuring the physical and emotional safety of babies. While the physical health and safety of the traumatized infant or toddler must remain the initial priority for first responders, practitioners, therapists, judges, and others, the immediate and long-term mental health of the child is substantively dependent on their implementation of services that do not re-traumatize the young child. Because the infant and toddler's unique view of what is perceived as life-threatening or overwhelming psychological trauma may not always be identical to that of older children or adults, there are implications for creating a combination of developmentally-informed and trauma-informed approaches for intervention that clinically optimizes the young child's recovery and long-term health and development.

Separation from a trusted caregiver is often stressful even for typical children. Especially during the "stranger anxiety" stage from around 8-18 months, young children who have bonded with their caregiver realize the new person is not their trusted nurse. Separation becomes "traumatic" when it is abrupt and an overwhelming change with loss of all things familiar. For children entering

protective service, multiple moves in the first few days or couple of weeks can repeat and intensify the trauma with each move. Young children in the foster care system already have a history of suffering at least one and often multiple traumas related to separation, loss and attachments.<sup>110</sup> “Young children grieve when their attachment relationships are disrupted, regardless of whether we as adults would consider it a positive, less than adequate or even abusive relationship.”<sup>111</sup>

Young children also grieve with the permanent loss of attachment figures through death, incarceration or termination of parental rights. Re-traumatization can occur throughout the lifespan with the loss of a pet or other loved one. Additionally, children who are directly victimized often experience multiple and cumulative victimizations as they grow older.<sup>112</sup> Childhood trauma is also not confined to one generation. The children of victims of child abuse and neglect are at significantly increased risk of being victimized themselves.

*Trauma-informed services foster relationships that respect, teach, reinforce, and encourage the family’s competence.*<sup>113</sup> When young children are in imminent danger, it stands to reason that they cannot remain in toxic environments of stress without facing the chance of brain and life-altering ill effects. But, all system workers have a responsibility to deal with the family in the full context of all issues that contribute to the situation including such concerns as poverty, domestic violence, physical illness, mental illness, substance abuse, criminal justice involvement, inadequate nutrition, inadequate housing, substandard or no access to child care, and minimal knowledge of child development. People who serve these families should have the knowledge, skills, tools and resources to adequately help families achieve positive outcomes. A trauma-informed approach will acknowledge the effects of trauma on a child’s behavior, development, relationships, and survival strategies and, then, help connect families to services that empower them by ensuring protection, choice and control of their futures. Giving families choices in selecting services allows them to participate in their recovery. In fact, the family’s voice should be reflected in the individualized planning and service delivery models.

The trauma-informed worker should have cultural training and understand that a number of factors contribute to disparities among races. African American children, for example, do not receive mental health services as commonly as white children due to poverty, racism, differences in referrals, variations in identifying problems, varying beliefs regarding causes of disorders, stigma regarding mental health, lack of knowledge about available services, negative perceptions of treatment, and a lack of culturally appropriate services.<sup>114</sup>

Significant racial disparities persist as African American infants are less likely to experience reunification than white infants, and African-American children in foster care are less likely to receive developmental or specialty mental health services compared with non-Hispanic whites.<sup>115</sup>

*Trauma-informed agencies will screen children and families for trauma-exposure prior to providing services.* From the clinical viewpoint, trauma-specific care is individualized to the child and family; yet, many agencies working with children and families may fail to screen families for trauma exposure upon intake or families may be hesitant to disclose trauma experiences. Although agencies should not make an assumption that its clients are traumatized, community and domestic violence occurs so frequently that many families may need specialized services if negatively impacted by violence. A 2007 study of violence exposure to children of both genders across all age ranges of childhood conducted by the Office of Juvenile Justice and Delinquency Prevention, questioned children and the parents of nonverbal infants and toddlers reporting on their behalf, which revealed that 60% of the children surveyed had been exposed to violence in the past year and more than 1 in 10 children reported 5 or more exposures.

The Adverse Childhood Experiences (ACE) Study provides the evidence base for doing careful and comprehensive screening of young children for a history of exposure to maltreatment or adverse conditions. The need for early intervention and prevention to achieve better health results for children was identified as crucial. The ACE study information and numerous related studies all point to growing up in dysfunctional households and childhood trauma such as abuse or other complex conditions as a common pathway for social, emotional, and cognitive impairments that lead to increased risk of unhealthy behaviors, risk of violence or re-victimization, disease, disability and other factors causing premature death.<sup>116</sup>

Agency workers who are trauma-informed with screening results can integrate an understanding of the home environment and trauma-exposure into actions and planning for the child and family to better prepare everyone in their respective roles for responding to the young child's traumatic stress. This trauma-informed early intervention and prevention can effectively reduce the long-term physical and emotional problems of young children with trauma experience. Additionally, a strength-based approach should drive the needs and preferences for supports and services recommended or required of the family and improve the child and family's mental health.

*A trauma-informed approach that collaborates across agencies produces better placement and process determinations for maltreated young children.* Many weighty issues affecting the entire family are being considered daily, and up until recently, most decisions in the child protection system were not made entirely from the viewpoint of serving the young child's most critical and emotional needs. A trauma-informed approach addresses trauma-related issues that may help with family stability and may also positively affect a child's course for mental health, safety, well-being, and emotional development. For that reason, the fullest context of determining what is best for the child must take a trauma-informed approach.

Professionals and caregivers at the state and local levels need to develop a common base of knowledge and values regarding the traumatic experiences of young children.<sup>117</sup> Doing so will help provide effective support and early intervention that works to achieve positive outcomes in all domains for the babies and infants within the child protection system. When agencies are drawn together in a multi-collaborative environment, a systems-wide, trauma-informed approach becomes possible. A system that is able to adopt consistent policy across organizations equips the system with "one-voice" of concern that speaks the same message to families.

Culturally sensitive communities can recognize and respond to the needs of its children and families comprehensively with more responsive direct services that are aligned with the characteristics of the populations served. Sharing information saves resources and helps enhance working relationships between the parties involved. More importantly, system collaboration saves families from being shuttled from one place to another or prevents them from being required to provide repetitive personal information when accessing the next service.

*Trauma-informed agencies will train and sustain its staff.* When equipped with a trauma-informed staff, agencies are better prepared to delivery trauma-specific services. Agency workers exposed to infant or toddler trauma victims in especially horrific situations may experience unanticipated feelings of anger, hopelessness or helplessness that mirror what emerges in the young children. The cumulative effects of this secondary trauma-exposure create an inconstant workforce within most child welfare systems that only complicates achieving the goals of safety, permanency and well-being. To help its workers cope and to stabilize the workforce for the long-term, agencies need to educate, fully equip and provide ongoing support to those people working with victimized infant and toddler populations. Professional trauma-informed workers are most able to help babies become trauma survivors when they have age-specific training in

child development, anticipate issues of compassion fatigue or burnout, and receive ongoing reflective supervision as an outlet for discussing their own intense feelings.<sup>118</sup> Supports that help the worker reframe and use feelings of anger or distress to achieve positive outcomes for the infant or toddler are important. Research on young children has shown the integrity, strength and capacity of an individual to cope can be reinforced by positive stressors early or later in life; but, for positive stressors to have this effect, they must be predictable, within the person's control, escapable if too intense, and include the contact with a responsive caregiver who helps reinstate safe opportunities for exploration.<sup>119</sup> The same is needed for adults expected to cope. Because working in isolation is ineffective, too many workers escape the intensity of their jobs by changing careers when regular contact with an understanding supervisor could give guidance that broadens the worker's resourcefulness and ability to handle the needs and stress of the young child.

*Trauma-informed agencies will set program policy and evaluate the effectiveness of those programs using a trauma-informed perspective.* Agencies are working hard to implement evidence-based practices across disciplines. Adding a component requiring agency policies and procedures to be family-driven and trauma-informed will do much to assure quality service delivery. New policy discussion within agencies should include information on trauma, preferably directly from those individuals who have suffered the effects of abuse or trauma. Current policy should be reviewed to consider whether the policies, processes, or environments used for working with trauma-exposed victims can be changed to avoid retraumatization. A responsible and trauma-informed agency will modify its program and evaluation plans to include both process and objective-oriented evaluations that specifically examine and measure whether the agency did what it said it would do for its trauma-exposed children, families, and workers, and whether the objectives were sufficiently met so its trauma-informed services make a positive difference in the lives of the infants and toddlers it serves.

Finally, a quote from Theodore J. Gaensbauer who encourages an empathic relationship that shows respect and sensitivity to the needs of young children requiring trauma-informed services:

*An analogy drawn by a colleague who had witnessed a very traumatic situation in the course of a disaster response seems very appropriate here. In relating his experience to a group of us at a social occasion and being aware that his description of the scene was painful to imagine, he expressed his appreciation for our*

*willingness to listen. He went on to impart his perspective that the traumatic event for him was akin to a huge mountain. Each time he talked about his experience, whatever the context, a quantity of dirt was removed from the mountain. Although perhaps the mountain would never be leveled, each opportunity to share some aspect of his experience diminished the load he had to carry. Our work with severely and multiply traumatized young children can be conceptualized similarly. We cannot take away the mountain. However, by being sensitive to the manifestation of specific traumatic symptoms when they do occur and allowing the child to share his or her experience in ways that are respectful of the child's ego capacities and social support, we can contribute to a lightening of the child's burden, even if it is in small increments.<sup>120</sup>*

# ENDNOTES

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- <sup>1</sup> Agency for Health Care Administration. (2010). Attachment 1 scope of services. *AHCA Standard Contract MED110*.
- <sup>2</sup> See Agency for Health Care Administration in Endnote 1.
- <sup>3</sup> See Agency for Health Care Administration in Endnote 1.
- <sup>4</sup> Gaensbauer, T.J. (2004). Traumatized young child: Assessment and treatment processes. In: Osofsky J., editor. *Trauma in infancy and early childhood* (pp.260-284). New York: Guilford Press.
- <sup>5</sup> U.S. Department of Health and Human Services Administration on Children Youth and Families. (2010). *Child maltreatment 2006*. Washington, D.C.: U.S. Government Printing Office.
- <sup>6</sup> Smyke, A.T., Wajda-Johnston, V., & Zeanah, Jr., C.H. (2004). Working with traumatized infants and toddlers in the child welfare system. In: Osofsky, J., editor. *Young children and trauma: Intervention and treatment* (pp.260-284). New York: Guilford Press.
- <sup>7</sup> See Smyke, A.T., Wajda-Johnston, V., & Zeanah, Jr., C.H. in Endnote 6.
- <sup>8</sup> See Smyke, A.T., Wajda-Johnston, V., & Zeanah, Jr., C.H. in Endnote 6.
- <sup>9</sup> See Smyke, A.T., Wajda-Johnston, V., & Zeanah, Jr., C.H. in Endnote 6.
- <sup>10</sup> Taylor, L., Zuckerman, B., Harik, V., & Groves, B. M. (1994). Witnessing violence by young children and their mothers. *Journal of Developmental and Behavioral Pediatrics*, 15(2), 120-123.
- <sup>11</sup> Common Sense about Kids and Guns. (2010). *Fact file*. Retrieved from [http://www.kidsandguns.org/study/fact\\_file.asp](http://www.kidsandguns.org/study/fact_file.asp)
- <sup>12</sup> National Vital Statistics Reports. (2009). *Deaths: Preliminary data for 2007*. Retrieved from [http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\\_01.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_01.pdf)
- <sup>13</sup> Carter, L.S., Weithorn, L.A., and Behrman, R.E. (1999). Domestic violence and children: analysis and recommendations. *The Future of Children*, 9(3):4-20.
- <sup>14</sup> Office of Juvenile Justice and Delinquency Prevention. (2009). National Survey of Children's Exposure to Violence. Retrieved from <http://www.ncjrs.gov/pdffiles1/ojdp/227744.pdf>
- <sup>15</sup> Campbell, J., Campbell, D.W., Gary, F., Nedd, D., Price-Lea, P., & Sharps, P. (2008). African American women's responses to intimate partner violence: An examination of cultural context. *Journal of Aggression, Maltreatment & Trauma*, 16(3) 227-295.
- <sup>16</sup> Martin SL, English KT, Andersen K, Cilenti D, Kupper LL. (1996). Violence and substance use among North Carolina pregnant women. *American Journal Public Health*, 86:991-998.
- <sup>17</sup> Ringeisen, H., Casanueva, C. E., Urato, M. P., & Cross, T. P. (2008). Special health care needs among children in child welfare. *Pediatrics*, 122(1), 232-241.
- <sup>18</sup> Casanueva, C. E., Cross, T. P., & Ringeisen, H. (2008). Developmental needs and individualized family service plans among infants and toddlers in the child welfare system. *Child Maltreatment*, 13, 245-258.

- 
- <sup>19</sup> Stahmer, A. C., Leslie, L. K., Hurlburt, M., Barth, R. P., Webb, M. B., Landsverk, J., et al. (2005). Developmental and behavioral needs and service use for young children in child welfare. *Pediatrics*, *116* (4) 891-900.
- <sup>20</sup> See Casanueva, C. E., Cross, T. P., & Ringeisen, H. in Endnote 17.
- <sup>21</sup> Perry, B. D. (1997). Incubated in terror: Neurodevelopmental factors in the "cycle of violence." In Osofsky, J. (Ed.), *Children in a violent society* (pp. 124-149). New York: Guilford Press.
- <sup>22</sup> Shonkoff, J. P. (2005). Excessive stress disrupts the architecture of the developing brain. Retrieved April, 2008, from [http://www.developingchild.net/pubs/wp/Stress\\_Disrupts\\_Architecture\\_Developing\\_Brain.pdf](http://www.developingchild.net/pubs/wp/Stress_Disrupts_Architecture_Developing_Brain.pdf)
- <sup>23</sup> Shonkoff, J. P., & Phillips, D. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- <sup>24</sup> Widom, C. S., Marmorstein, N. R., & White, H. R. (2006). Childhood victimization and illicit drug use in middle adulthood. *Psychology of Addictive Behaviors*, *20*(4), 394-403.
- <sup>25</sup> MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E., Boyle, M. H., Jamieson, E., et al. (2001). Childhood abuse and lifetime psychopathology in a community sample. *American Journal of Psychiatry*, *158*(11), 1878-1883.
- <sup>26</sup> Egeland, B., Yates, T., Appleyard, K., & Van Dulmen, M. (2002). The long-term consequences of maltreatment in the early years: A developmental pathway model to antisocial behavior. *Children's Services: Social Policy, Research and Practice*, *5*, 249-260.
- <sup>27</sup> Cicchetti, D. V., & Lynch, M. (1995). Failures in the expectable environment and their impact on individual development: The case of child maltreatment. In D. V. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Vol. 2. Risk, disorder, and adaptation* (pp. 32-71). New York: Wiley.
- <sup>28</sup> Rice, K.F. and Groves, B.M. (2005). *Hope and healing: A caregiver's guide to helping young children affected by trauma*. Washington, DC: ZERO TO THREE Press.
- <sup>29</sup> Clay, R.A. (2010). Treating children traumatized: Five years after Katrina, new data are illuminating the best ways to help children after natural disasters. *Monitor on Psychology*, *41*:7 p.36.
- <sup>30</sup> Mongillo, E.A., Briggs-Gowan, M., Ford, J.D., & Carter, A.S. (2009). Impact of Traumatic Life Events in a Community Sample of Toddlers. *Journal of Abnormal Child Psychology*, *37*, 455-468. doi: 10.1007/s10802-008-9283-z
- <sup>31</sup> The National Child Traumatic Stress Network. (2004, October). *Psychological and Behavioral Impact of Trauma: Preschool Children*. Los Angeles, CA. Retrieved from [http://www.nctsn.org/nccts/nav.do?pid=typ\\_early2](http://www.nctsn.org/nccts/nav.do?pid=typ_early2)
- <sup>32</sup> See Rice and Groves in Endnote 28.
- <sup>33</sup> Saarni, C. (1999). *The Development of Emotional Competence. The Guilford Series on Social and emotional Development* New York, NY: Guilford Press/Guilford Publications, Inc.
- <sup>34</sup> See Rice and Groves in Endnote 28.
- <sup>35</sup> See Rice and Groves in Endnote 28.
- <sup>36</sup> See Rice and Groves in Endnote 28.

- 
- 37 Hummer, V. (2010). *Applied behavioral analysis within a trauma-informed framework*. Retrieved from [http://www.powershow.com/view/1f6c79-ZjEzZ/Applied\\_Behavioral\\_Analysis\\_within\\_a\\_Traumainformed\\_Framework](http://www.powershow.com/view/1f6c79-ZjEzZ/Applied_Behavioral_Analysis_within_a_Traumainformed_Framework)
- 38 Champagne, F.A. (2010). Epigenetic influences of social experiences across the lifespan. *Developmental Psychobiology*, 1-13.
- 39 Das, R., Hampton, D. D., & Jirtle, R. L. (2009). Imprinting evolution and human health. *Mammalian Genome*, 20(9-10), 563.
- 40 Balakrishnan, B., Henare, K., Thorstensen, E. B., Ponnampalam, A.P., Mitchell DPhil, M.D.(2010). Transfer of bisphenol A across the human placenta. *American Journal of Obstetrics and Gynecology*, 202, 393.e1-393.e7
- 41 Wadwa, P. D., Sandman, C. A., Porto, M., Dunkel-Schetter, C., & Garite, T. J. (1993). The association between prenatal stress and infant birth weight and gestational age at birth: A prospective investigation. *American Journal of Obstetrics and Gynecology*, 169, 858-865.
- 42 DeMuylder, M. D. (1989). Psychological factors and preterm labor. *Journal of Reproductive Psychology*, 7, 55-59.
- 43 Shonkoff, J. P., Boyce, W. T. , & McEwen, B S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *JAMA*, 301(21), 2252-2259.
- 44 National Scientific Council on the Developing Child. (2005). *Excessive Stress Disrupts the Architecture of the Development Brain: Working Paper #3*. <http://www.developingchild.net>
- 45 Schuder, M., Lyons-Ruth, K. (2004). Hidden trauma" in infancy: attachment, fearful arousal, and early dysfunction of the stress response system. In: Osofsky J, editor. *Trauma in Infancy and Early Childhood* (pp. 69-104) New York: Guilford Press.
- 46 See Schuder, M., Lyons-Ruth, K. in Endnote 45.
- 47 See National Scientific Council on the Developing Child in Endnote 44.
- 48 See Schuder, M., Lyons-Ruth, K. in Endnote 45.
- 49 Dearing, E., Berry, D., & Zaslow, M. (2008). Poverty during early childhood. In K. McCartney & D. Phillips (Eds.), *The Blackwell Handbook of Early Childhood Development* (pp. 399-423). Oxford, UK: Blackwell.
- 50 Brooks-Gunn, J., & Duncan, G.J. (1997). The effects of poverty on children. *The Future of Children*, 7(2), 55-71.
- 51 Bolig, E.E., Borkowski, J., & Brandenberger, J. (1999). Poverty and health across the life span. In T.L. Whitman, T.V. Merluzzi, & R.D. White (Eds.), *Life-span perspective on health and illness* (pp. 67-84). Mahwah, NJ: Lawrence Erlbaum Associates.
- 52 Child Welfare League of America. (2010). *Child mental health: Facts and figures*. Retrieved from <http://www.cwla.org/programs/bhd/mhfacts.htm>
- 53 Florida Department of Children and Families, Office of Family Safety. (2009, October 13). *Child maltreatment, Age at Removal FY 08-09, 2009*. Tallahassee, FL: Author.

- 
- <sup>54</sup> Bureau of Labor Statistics, & The Bureau of the Census. (2004). *Current population survey: Annual demographic survey: March supplement (Pov01)*. Retrieved from: <http://www.bls.census.gov/cps/ads/adsmain.htm>
- <sup>55</sup> Dicker, S., Gordon, E., & Knitzer, J. (2001). Improving the odds for the healthy development of young children in foster care. New York: Columbia University, National Center for Children in Poverty. Retrieved October 19, 2009, from <http://www.ithaca.edu/mbentley/pdf/dicker.pdf>
- <sup>56</sup> See Florida Department of Children and Families, Office of Family Safety in Endnote 53.
- <sup>57</sup> Moore, K.A., & Redd, Z. (2002). *Children in poverty: Trends, consequences, and policy options*. Washington, DC: Child Trends.
- <sup>58</sup> See Brooks-Gunn, J., & Duncan, G.J. in Endnote 50.
- <sup>59</sup> See Bolig, E.E., Borkowski, J., & Brandenberger, J. in Endnote 51.
- <sup>60</sup> Lawrence, S., Chau, M., & Lennon, M.C. (2004). *Depression, substance abuse, and domestic violence: Little is known about co-occurrence and combined effects on low-income families*. New York, NY: National Center for Children in Poverty.
- <sup>61</sup> Bosquet, M., & Egeland, B. (2001). Associations among maternal depressive symptomatology, state of mind and parent and child behaviors: Implications for attachment-based interventions. *Attachment & Human Development*, 3(2), 173-199.
- <sup>62</sup> National Research Council and Institute of Medicine. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- <sup>63</sup> Bender, E. (2003). Depression in pregnancy often goes untreated. *Psychiatric News*, 38, 20-30.
- <sup>64</sup> See Brooks-Gunn, J., & Duncan, G. J. in Endnote 58.
- <sup>65</sup> The National Child Traumatic Stress Network. (2008). *Child Trauma Toolkit for Educators: Trauma Facts for Educators*. Retrieved from [http://www.nctsn.org/nctsn\\_assets/pdfs/ctte\\_facts.pdf](http://www.nctsn.org/nctsn_assets/pdfs/ctte_facts.pdf)
- <sup>66</sup> American Academy of Child & Adolescent Psychiatry. (2010). *Posttraumatic Stress disorder (PTSD)*. No. 70; Updated October 1999. Retrieved from [http://www.aacap.org/cs/root/facts\\_for\\_families/posttraumatic\\_stress\\_disorder\\_ptsd](http://www.aacap.org/cs/root/facts_for_families/posttraumatic_stress_disorder_ptsd)
- <sup>67</sup> See Saarni, C. in Endnote 33.
- <sup>68</sup> The National Child Traumatic Stress Network. (2010). *Early childhood trauma: Symptoms and behaviors associated with exposure to trauma*. Retrieved from [http://www.nctsn.org/nctsn/nav.do?pid=typ\\_early4](http://www.nctsn.org/nctsn/nav.do?pid=typ_early4)
- <sup>69</sup> Hennighausen K. and Lyons-Ruth K. (2010). Disorganization of attachment strategies in infancy and childhood. Rev ed. In: Tremblay RE, Barr RG, Peters RdeV, Boivin M, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2010:1-7. Available at: [http://www.child-encyclopedia.com/documents/Hennighausen-LyonsRuthANGxp\\_rev.pdf](http://www.child-encyclopedia.com/documents/Hennighausen-LyonsRuthANGxp_rev.pdf). Accessed 6.28.10.
- <sup>70</sup> Smith, P.K., Hart, C.H. (Ed.) (2002). *Blackwell handbook of childhood social development*. Great Britain, Cornwall. Blackwell Publishers.

- 
- 71 The National Child Traumatic Stress Network. (2004, October). *Psychological and Behavioral Impact of Trauma: Preschool Children*. Los Angeles, CA. Retrieved from [http://www.nctsn.net/assets/pdfs/preschool\\_children.pdf](http://www.nctsn.net/assets/pdfs/preschool_children.pdf)
- 72 Stover, C.S. & Berkowitz, S. (2005). Assessing Violence Exposure and Trauma Symptoms in Young Children: A Critical Review of Measures. *Journal of Traumatic Stress, 18*(6), 707-717. doi: 10.1002/jts.20079
- 73 See Mongillo, E.A., Briggs-Gowan, M., Ford, J.D., & Carter, A.S. in Endnote 30.
- 74 Osofsky, J.D. (2009). *Helping Young Children and Families Cope with Trauma*. New Orleans, LA: LSU Health Sciences Center.
- 75 @Health.com (2010). *Complex trauma in children and adolescents*. Retrieved from <http://www.athealth.com/consumer/disorders/complextrauma.html>
- 76 Richardson, M., Henry, J., Black-Pond, C., & Sloane, M. (2008). Multiple types of maltreatment: Behavioral and developmental impact on children in the child welfare system. *Journal of Child & Adolescent Trauma, 1*:317-330. doi: 10.1080/19361520802505735
- 77 See Smyke, A.T., Wajda-Johnston, V., & Zeanah, Jr., C.H. in Endnote 6.
- 78 Cook, A., Spinazzola, J., Ford, J., Lanktree, C., et al. (2005). Complex trauma in children and adolescents. *Psychiatric Annals, 35*(5) p 5
- 79 Perry, B. D. (1997). Incubated in terror: Neurodevelopmental factors in the "cycle of violence." In J. Osofsky(Ed.), *Children in a violent society* (pp. 124-149). New York: Guilford Press.
- 80 See Shonkoff, J. P. in Endnote 22.
- 81 See Shonkoff, J. P., & Phillips, D. (Eds.) in Endnote 23.
- 82 Schuder, M., Lyons-Ruth, K. (2004). Hidden trauma" in infancy: attachment, fearful arousal, and early dysfunction of the stress response system. In: Osofsky J, editor. *Trauma in Infancy and Early Childhood* (pp. 69-104) New York: Guilford Press.
- 83 See Cook, A., Spinazzola, J., Ford, J., Lanktree, C., et al. in Endnote 78.
- 84 See Cook, A., Spinazzola, J., Ford, J., Lanktree, C., et al. in Endnote 78.
- 85 Steele, W. (2009) When Cognitive Interventions Fail with Children of Trauma: Memory, Learning and Trauma Intervention. *The National Institute for Trauma and Loss in Children*. Retrieved from <http://www.startraining.org/research>
- 86 See Mongillo, E.A., Briggs-Gowan, M., Ford, J.D., & Carter, A.S. in Endnote 30.
- 87 National Scientific Council on the Developing Child. (2005). *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper #3*. <http://www.developingchild.net>
- 88 See National Scientific Council on the Developing Child in Endnote 87.
- 89 Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to problems of impaired infant-mother relationship. *Journal of the American Academy of Child and Adolescent Psychiatry, 14*(3), 387-421.

- 
- <sup>90</sup> Carter, S. L., Osofsky, J. D., & Hann, D. M. (1991). Speaking for the baby: A therapeutic intervention with adolescent mothers and their infants. *Infant Mental Health Journal, 12*(4), 291-301.
- <sup>91</sup> Cicchetti, D. V., Rogosch, F. A., & Toth, S. L. (2006). Fostering secure attachment in infants in maltreating families through preventive interventions. *Development and Psychopathology, 18*(3), 623-649.
- <sup>92</sup> Lieberman, A. F., Ippen, C. G., & Van Horn, P. (2006). Child-parent psychotherapy: 6-month follow-up of a randomized control trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 45*(8), 913-918.
- <sup>93</sup> Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(12), 1241-1248.
- <sup>94</sup> Toth, S. L., Rogosch, F. A., Manly, J. T., & Cicchetti, D. (2006). The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with major depressive disorder: A randomized preventive trial. *Journal of Consulting and Clinical Psychology, 74*(6), 1006-1016.
- <sup>95</sup> National Child Traumatic Stress Network. (2010). *Empirically Supported and Promising Practices*. See al Section 4, Preliminary Studies Retrieved from [http://www.nctsn.org/nctsn\\_assets/pdfs/promising\\_practices/cpp\\_general.pdf](http://www.nctsn.org/nctsn_assets/pdfs/promising_practices/cpp_general.pdf)
- <sup>96</sup> Lieberman, A. F. (2007). Ghosts and angels: Intergenerational patterns in the transmission and treatment of the traumatic sequelae of domestic violence. *Infant Mental Health Journal, 28*(4), 422-439.
- <sup>97</sup> Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(12), 1241-1248.
- <sup>98</sup> Ainsworth, M., & Eichberg, C. (1991). Effects on infant-mother attachment of mother's unresolved loss of an attachment figure or other traumatic experience. In P. Marris, J. Stevenson-Hinde & C. Parkes (Eds.), *Attachment across the life cycle*. New York: Routledge.
- <sup>99</sup> See Ainsworth, M., & Eichberg, C. (1991). In Endnote 98.
- <sup>100</sup> Bowlby, J. (1973). *Attachment and loss* (Vol. 2). New York: Basic Books.
- <sup>101</sup> See Ainsworth & Eichberg in Endnote 98.
- <sup>102</sup> See Lieberman & Van Horn in Endnote 97.
- <sup>103</sup> See Lieberman & Van Horn (2005) in Endnote 97.
- <sup>104</sup> Lieberman, A. F., & Van Horn, P. (2008). *Psychotherapy with infants and young children: Repairing the effects of stress and trauma on early attachment*. New York, NY: The Guilford Press.
- <sup>105</sup> Lieberman, A. F., & Van Horn, P. (2005). *Don't hit my mommy!: A manual for child parent psychotherapy for young witness of family violence*. Washington, D.C.: ZERO TO THREE Press.
- <sup>106</sup> Johnson, K., & Knitzer, J. (2005). Spending smarter: A funding guide for policymakers and advocate to promote social and emotional health and school readiness. National Center for Children and Poverty. Retrieved August 18, 2008, from [http://www.nccp.org/publications/pub\\_634.html](http://www.nccp.org/publications/pub_634.html)

- 
- 107 Doctors, J. V., Gebhard, B., Jones, L., & Wat, A. (2007). *Common visions, different paths: Five states' journeys toward comprehensive prenatal-to-five systems*. Washington, DC: Institute for Educational Leadership and Zero to Three.
- 108 Hummer, V. (2010). *Trauma-informed responses to children during and after removal*. Retrieved from <http://centervideo.forest.usf.edu/regional610/traumacare/traumacare.pdf>
- 109 Osofsky, J.D. (2004). Perspectives on work with traumatized young children: How to deal with the feelings emerging from trauma work. In Osofsky, J.D., editor. (2007.) *Young children and trauma: Intervention and treatment*. (Paperback ed.). New York, NY: The Guilford Press.
- 110 Osofsky, J. D. (Ed.) (2007). *Young Children and Trauma: Intervention and Treatment* (Paperback ed.). New York, NY: The Guilford Press.
- 111 See National Research Council and Institute of Medicine in Endnote 62.
- 112 U.S. Department of Justice. (2009). Children's Exposure to Violence: A Comprehensive National Survey. *Juvenile Justice Bulletin*. Retrieved from <http://www.ncjrs.gov/pdffiles1/ojdp/227744.pdf>
- 113 See Hummer, V. in Endnote 108.
- 114 Holm-Hansen, C. (2006). *Racial and ethnic disparities in children's mental health*. Saint Paul, MN: Wilder Research.
- 115 Dunbar, K., & Barth, R. P. (2007). Racial disproportionality, race disparity, and other race-related findings in published works derived from the National Survey of Child and Adolescent Well-Being. Casey-CSSP Alliance; Washington University; The Annie E. Casey Foundation. Retrieved October 2008, from <http://www.aecf.org/KnowledgeCenter/Publications.aspx?pubguid={C43DF3DA-45D1-4EDA-AC79-DBA926E28CF6>
- 116 Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., and Marks, J.S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal of Preventive Medicine* 14(4), 245-258.
- 117 THRIVE System of Care. (2010). *Trauma-informed system of care memorandum of understanding*. Retrieved from <http://thriveinitiative.org/about/system-of-care-partners/>
- 118 See Osofsky, J. in Endnote 109.
- 119 Cook, A., Spinazzola, J., Ford, J., Lanktree, C., et al. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, 35(5) p 5 Retrieved from <http://psychrights.org/Research/Digest/CriticalThinkRxCites/cook.pdf>
- 120 See Gaensbauer, T.J. in Endnote 4.