When Brain Science Meets Public Policy:

Rethinking Young Child "Neglect" from a Science-Informed, Two-Generation Perspective

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For many of us, the words "child welfare" and "foster care" may bring to mind images of children who have experienced physical or sexual abuse. Certainly, the child protection system is designed to protect children from violence. What may come as a surprise is that our child welfare agencies much more often serve children who have experienced neglect—children whose basic needs for food, shelter, supervision and care have not been met.

In 2013, child welfare agencies managed cases of substantiated neglect for about 319,000 children between the ages of birth and six, of whom nearly 100,000 were infants. In fact, child neglect accounts for at least three-quarters of all child protective services substantiations in the United States today.

While the experience of neglect may not leave visible marks on a child's body, chronic neglect has a very real impact on the child's developing brain. In this paper we explore the prevalence and current conceptualizations of neglect, the impact that neglect has on a child's brain development, and how child welfare agencies can respond by employing the four science-informed, two-generation "common sense" strategies below:

- Adopt a Theory of Change to both promote the process of "rethinking" child neglect policy and guide organizational change for very young, vulnerable children
- Assure the early identification of delays and address challenges in children's first five years, including in language development, mental health and early behavioral self-regulation
- Address the impact of Adverse Childhood Experiences (ACEs), toxic stress and depression on parental caregiving capacity, kinship foster families, and child welfare case workers and supervisory staff
- Collaborate with and invest in an intergenerational, cross-sector service system designed to better protect children, assure their age-appropriate development, and strengthen families as their primary caregivers.

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Other reports in the When Brain Science Meets Public Policy series:



- Rethinking the Governance of Early Childhood Systems
- Designing for Outcomes through a Two-Generation Lens—Good Science and Good Common Sense



If we adopt this approach, we will likely be able to alter the life and learning trajectory for thousands of young vulnerable children. If we don't, our child welfare systems may *themselves* become contributors to predictably poor outcomes for vulnerable young children's health and mental health, successful learning and age-appropriate well-being.

(what is neglect?)

In the world of child welfare and protective services, we often group child abuse and child neglect together under the term "maltreatment" as we measure the prevalence of these risks to children. Current data tell us that child maltreatment is a significant problem that touches millions of American youngsters every year. During the federal fiscal year ending in September of 2013, an estimated 3.5 million maltreatment referrals involving some 6.5 million children were made to child protection agencies across the nation. Of these referrals, 43% were screened into the system.



The rate of substantiated child maltreatment, as of 2013, has shown modest declines in the past six years, and is at a level lower than at any time since 1990. The rates of physical and sexual abuse have declined the most, and rates of neglect have declined the least.

Child Maltreatment, Child Trends Data Bank, 2015 Often, referrals in which there is a finding of abuse or a high risk for abuse are retained in the protective service system. Other referrals where "neglect" or the risk of neglect is confirmed may be retained within child protective services or referred back for community services through a state's differential response system. Although a child may have experienced "...multiple forms of maltreatment," 80 percent of substantiated cases of child maltreatment involve "neglect" rather than abuse. There are no significant gender differences in child maltreatment, and in nine of ten cases, the perpetrator(s) of child maltreatment is one or both parents.

Among all children, the youngest are most vulnerable to maltreatment. Nearly one in two child maltreatment cases (47%) involves children under the age of six years. Slightly more than one-quarter of these victims (27%) were younger than 3 years. The balance (20%) were ages three through five years. Young children also constitute a significant proportion of foster care placements. In 2013, children under the age of three represented 31% of all children entering foster care across the United States. Youngsters under the age

of five constituted 43% of those removed from their homes and placed in foster care. Young children are also most at risk of death as the result of child abuse or neglect. Across data sources and years, children ages three and younger account for 82% of all maltreatment deaths. Infants account for half of these.

Studies have shown that the real prevalence of neglect is greater than child welfare substantiation data reveal. One review of the child welfare literature published in 2005 suggests that, "Neglect is the elephant in the living room in modern child welfare systems. The often-mentioned "neglect of neglect" is arguably a form of denial which, at its base, is a stubborn refusal to come to grips with the centrality of neglect in child protection." A meta-analysis of research published between 1980 and 2008 suggests that the prevalence of neglect reported by America's child protection agencies may actually

dramatically underrepresent the actual presence of this type of maltreatment. The authors conclude that while child neglect "is a problem of considerable extent, [it] seems to be a neglected type of maltreatment in scientific research."

Summarizing Key Facts about Rates of Neglect

- As measured by case substantiations, over 300,000 young children live in circumstances that the child
 welfare system defines as neglectful. In 2013, these children constituted at least three-quarters of the
 America's child protective substantiated cases.
- Young children are at greatest risk for death related to neglect and/or abuse. In fact, nearly three-quarters of children who died of maltreatment experienced neglect alone or in combination with abuse.
- While rates of substantiated child abuse have declined over time in American, rates of substantiated neglect have not. Indeed, the actual rate of exposure to "neglectful" circumstances may be much higher than case substantiations by the child protective service system would suggest.

CHALLENGES IN DEFINING NEGLECT

When adults fail to engage in a set of behaviors predictably expected to promote children's health, safety and well-being, child welfare agencies may be contacted with an allegation of neglect against the family. The federal government defines these neglectful behaviors as "acts of omission." And, while recognizing that states and other jurisdictions differ in their laws, policies and definitions of neglect, the federal Administration for Children and Families (ACF) does provide a common definitional framework for understanding indicators of neglect in a child welfare context:

- Physical Neglect: Abandoning the child or refusing to accept custody; not providing for basic needs like nutrition, hygiene, or appropriate clothing
- Emotional Neglect: Isolating the child; not providing affection or emotional support; exposing the child to domestic violence or substance abuse
- Medical Neglect: Delaying or denying recommended health care for the child
- **Educational Neglect:** Failing to enroll the child in school or homeschool; ignoring special education needs; permitting chronic absenteeism from school
- Inadequate supervision: Leaving the child unsupervised (depending on the length of time and child's age/maturity); not protecting the child from safety hazards; providing inadequate caregivers, or engaging in harmful behavior.¹²

Given the fact that neglect is the most common reason for engaging protective services, it is particularly striking that there is still no broad-based agreement on clear and objective criteria for defining this form of maltreatment and authorizing state intervention."

The Science of NeglectCenter on the Developing Child
Harvard University 2012, p. 2



It is difficult to answer the next obvious question: How much do each of these types of neglect contribute to the overall prevalence of neglect among child protective services cases? Data by type of neglect is hard to obtain. Some state data suggests that physical neglect and inadequate supervision may constitute the most frequent reasons given for opening a child welfare neglect case. Moreover, there is mounting concern—based on incidents in Illinois and Maryland, for example—about the potential overuse of "inadequate supervision" as the basis for a child neglect substantion. In these two states, the child welfare system recently brought charges of neglect against parents whose behavior has come to be characterized by the media and parents themselves as "free-range parenting."

Clearly, all "acts of omission" do not require a formal child protective services response. In its important 2012 paper entitled *The Science of Neglect*, ¹⁶ the National Scientific Council on Child Development called out the need for more definitive criteria for both defining child neglect and authorizing the child welfare system to intervene. The Council offers up a typology of what it has come to call "unresponsive care." The typology makes a distinction between "occasional inattention" that does not require the involvement of child welfare professionals and both "chronic under-stimulation" and severe neglect in either a family or institutional context which do require for a system response. This characterization of neglect suggested by the Council is informed by neuroscience research on brain development and functioning beginning in early childhood and continuing through young adulthood when many individuals become parents.

Four Types of Unresponsive Care, The Science of Neglect (2012)					
	Occasional Inattention	Chronic Under-Stimulation	Severe Neglect (Family Context)	Severe Neglect (Institutional Setting)	
Features	Intermittent, diminished attention in an otherwise responsive environment	Ongoing, diminished level of child-focused respon- siveness and developmen- tal enrichment	Significant, ongoing absence of serve and return interaction, often associated with failure to provide for basic needs	"Warehouse-like" condi- tions with many children, few caregivers, and no individualized adult-child relationships that are reliably responsive	
Effects	Can be growth promoting under caring conditions	Often leads to develop- mental delays and may be caused by a variety of factors	Wide range of adverse impacts, from significant developmental impairments to immediate threat to health or survival	Basic survival needs may not be met, but lack of individualized adult responsiveness can lead to severe impairments in cognitive, physical, and psychosocial development	
Action	No intervention needed	Interventions that address the needs of caregivers combined with access to high-quality early care and education for children can be effective	Intervention to assure caregiver responsiveness and address the developmental needs of the child is required as soon as possible	Intervention and removal to a stable, caring, and socially responsive environment required as soon as possible	

UNDERSTANDING RISK

Child welfare interventions for neglect cases must be guided by the nature of the risk posed to young children and their families. In its 2006 guidance entitled *Child Neglect: A Guide for Prevention, Assessment and Intervention*, the Administration for Children and Families described three clusters of factors contributing to child neglect. These are shown in the chart that follows.

Adopting this socio-ecological approach makes explicit the responsibility for child well-being shared among individuals, families, communities, and society. It also distinguishes between those risk factors related to a specific "acute" situation or episode, those longer in duration, and those that result from or are related to underlying societal or "environmental circumstances."

Clearly, acute risk requires an immediate but not necessarily a lengthy response. Enduring risks require a more sustained engagement with families, although the services or support could come from community agencies rather than child protective services staff directly. Note the inclusion of poverty, racism, caregiver childhood adversity, and community violence as underlying risk factors in this federal guidance on neglect, offered to the child welfare field *nearly a decade ago*.

In a more recent publication, *Acts of Omission*, ACF describes risk factors in a slightly different way, organizing risk by child, parent, family and society.

- Child risk factors include age and the presence of developmental delays.
- Parent factors include unemployment (or low socioeconomic status), young maternal age, problems with health, mental health or substance use, and parenting stress.

Child Neglect: A Guide for Prevention, Assessment and Intervention (2006)

Situational Risk Factors

- Acute life stress
- Acute mental health & physical health crises
- Acute school problems
- Acute family relationship conflict

Enduring Risk Factors

- Child behavior, mental health or physical health problems
- Caregiver mental health & physical health problems, or substance abuse
- Impaired caregiver-child relationship
- Family conflict
- Social isolation
- Everyday stress

Underlying Risk Factors

- Poverty
- Caregiver childhood adversity
- Experiencing racism
- Violence in the community
- **Family risk** includes living as a single parent, experiencing domestic violence or other negative interactions and family stress.
- **Societal risk factors** include poverty, lack of social support and neighborhood distress.

ACF also calls upon the child welfare field to be especially observant of **chronic risk** as "...an 'ongoing, serious pattern of deprivation' of a child's basic needs that results in 'accumulation of harm.' Chronic neglect can be hard to identify and treat; affected families face complex problems that require specialized, often long-term interventions and coordinated community support." This guidance is completely aligned with *The Science of Neglect*, cited earlier. "Extensive biological and developmental research shows significant neglect — the ongoing disruption or significant absence of caregiver responsiveness — can cause more lasting harm to a young child's development than overt physical abuse, including subsequent cognitive delays, impairments in executive functioning, and disruptions of the body's stress response." 18

Summarizing Key Facts

- Neglectful behavior can be understood as one or more acts of "omission" or as "unresponsive care" that fails to meet the health, safety and learning needs of children.
- Young children and those with developmental delays experience the greatest negative impact of this failure to act.
- Chronically neglectful or unresponsive behaviors are more negatively impactful for children than are individual incidents of unresponsive care.
- Stressful circumstances involving adults, such as health and mental health challenges or substance abuse problems, can result in neglectful behaviors.

- Single, young parenting accompanied by lack of access to, or instability of, basic resources can result in neglectful behaviors
- Living with violence in the home or community places a child at risk of neglectful adult behaviors. The negative impact of chronic exposure to domestic violence cannot be overstated.
- Not all incidents of unresponsive care require a child welfare intervention. Chronic neglectful behavior does require specialized, longer-term, community-based intervention and support, although these services or support may not be provided by the child welfare agency itself.

(learning from the science of brain development and adversity)

Fundamental to children's physical, cognitive, emotional and social development is the presence of one or more consistent, positive adult caregivers who engage in a responsive, reciprocal relationship beginning at birth. This interaction has been called "serve and return" because these words so completely convey the responsive, back-and-forth nature of early, positive caregiving.

Parents who are unable or unwilling to engage in this critical relationship with their babies often suffer from a series of negative life experiences including ACEs (adverse childhood experiences) in their own childhood, trauma and toxic stress in their current lives, and the impact of poverty and economic challenge on their capacity to deliver even the most basic resources—such as essential nutrition and diapers—to their babies. ¹⁹ These are, as we have seen, risk factors for neglect and they can impact young children's health and brain development in significant, negative ways.

EARLY AND CONTINUED BRAIN DEVELOPMENT

Brain development begins before birth and proceeds at an amazing pace over the first years of a child's life. This is not surprising news if you are a parent, grandparent, other kin or even a friend or neighbor of a family with young children. At birth, the brain of a baby has nearly a billion neurons capable of receiving, processing and connecting information from all of the baby's senses. ²⁰ After birth, new connections across these neurons are made at the lightning fast rate of 700-1000 every second. ²¹ This development occurs as the child engages with nurturing environments in his or her immediate world and ongoing, positive responsive interactions with adult primary caregivers. Clearly, every sensory input—or the lack of it—impacts the development of a young child's brain in ways we are only coming to understand. ²²

One essential cognitive skill that is the subject of much current research in the field of applied social science is "executive function." Executive function is often described as analogous to the work of air traffic controllers at a busy airport. "Just as an air traffic controller...manages the arrivals and departures of many aircraft on multiple runways, executive function skills allow us to retain and work with information in our brains, focus our attention, filter distractions, and switch mental gears." These are not skills we are born with. They develop slowly, beginning in infancy, and take many years to mature. Often they are not fully developed until the middle twenties. Their growth trajectory and final levels of cognitive maturity are also influenced by experiences in our lives.

Three core cognitive skills comprise executive function and its partner, self-regulation: mental flexibility, inhibitory control and working memory. These core elements of executive functioning are critical to our successful organizational and behavioral skills as parents, workers and continued learners. ²⁴

An example of the development of executive function skills in early childhood is illustrative. "By age three, most children can organize themselves to complete tasks that involve two rules, thus showing that they can direct and redirect their attention to make deliberate choices (mental flexibility), maintain focus in the face of distractions (inhibitory control), and hold rules 'on line' as they figure things out (working memory)...Older preschoolers are capable of conscious problem-solving that involves

Three Basic Dimensions of Executive Function and Self-Regulation Skills

"Working Memory: The ability to hold information in mind and use it

Inhibitory Control: The ability to master thoughts and impulses so as to resist temptations, distractions, and habits, and to pause and think before acting

Cognitive Flexibility: The capacity to switch gears and adjust to changing demands, priorities or perspectives."

Center on the Developing Child, 2011 -2014

the ability to shift their attention from one rule to another that is incompatible with the first, and then back again...They also have the capacity to inhibit responses that are inappropriate even if they are highly desirable...or habitual...and to execute multi-step, deliberate plans."²⁵

Delayed or impaired executive function and self-regulation skills are a concern for all professionals at all stages of a person's life, from childhood through adulthood. Preschool and elementary school teachers report on the inability of some entering children to follow simple rules, contain outbursts and redirect behaviors. Seclusion, suspensions and expulsions beginning in preschool are clear examples of challenges faced by educators and the system's inability to address them without the removal of children. Social workers in our child welfare and human services systems help adults set personal, education and work goals but find that some individuals are unable to complete and sustain what appear to be even the simplest of these.

Our challenge as child welfare and human service professionals is to consider factors that may be inhibiting caregivers' ability to adequately provide for their children (like the lack of executive control or a history of trauma resulting in mental health challenges) rather than viewing these behaviors as evidence of willful neglect.

THE NEGATIVE IMPACT OF SCARCITY, TOXIC STRESS AND ADVERSITY

For many of us, healthy, age-appropriate language, social, emotional and executive function development seems like a completely natural, everyday process. And that is true, until it isn't. For some individuals, notably many who experience our child welfare and social service systems, living with scarcity, adversity,



When parents struggle to provide the day-to-day necessities of their children, they can feel anxious, depressed, fearful, and overwhelmed. The stress of living in harsh, deprived conditions can have a disabling effect on parenting capacities, resulting in inconsistent discipline, failure to respond to a child's emotional needs, or failure to prevent or address a potential risk to safety."

Addressing Poverty as a Major Risk Factor in Child Neglect 2010 trauma and toxic stress not only shapes the architecture of the brain but negatively influences how its circuitry works. From a social service perspective, the resulting behaviors, when exhibited by a parent, can look a lot like "neglect."

The Science of Scarcity

Among risk factors for neglect, one of the most pervasive is the impact that multi-generational poverty has on families, whether they reside in urban or rural poor communities, or pockets of invisible suburban poverty.²⁷ As a reference point, the 2015 Federal Poverty Level for a single parent headed family with one child is \$15,930. For a family of three with two children, the 2015 Federal Poverty Level is \$20,900.

In America in 2013—the most current year for which we have data—nearly one in two children under the age of six (48 percent) lived in low-income families (that is, at or below 200 percent of the Federal Poverty Level). One in four (25%) young children lived in families at or below the Federal Poverty Level. In real numbers, about 11 million young children lived in low-income families. Of these, nearly six million lived at our below the Federal Poverty Level. Ramong children of color,

the proportion of young children in low-income families rises to between 60 percent and 70 percent. Many of these children live in single-parent, teen- or young adult headed families. More low-income children now live in our rural areas and in newly poor suburban neighborhoods than live in our nation's cities.

A substantial body of research reveals that many children who grow up in poverty experience poorer outcomes than their economically advantaged peers. Described by some as the "stress of scarcity," it is now clear that living with chronic poverty can create biochemical changes in brain functioning of both children and adults that negatively impact their health, mental health and executive functioning. However, the impact of these biological changes is most significant for children in their early years because that is when brain growth is most rapid and the neural architecture is expanding and solidifying.²⁹

The impact of poverty does not stop, however, with its immediate impact on a young child's brain. Poor developmental outcomes, delayed or impaired executive functioning, lower levels of school and work success *all* owe some of their occurrence to the stressors and experiences of living in chronic poverty. Adolescents and young adults who have grown up with these experiences often carry them into their behaviors and lives as young parents.

Trauma and Toxic Stress

As all of us know through direct experience, stress is a common element in our everyday lives. Within our bodies, the "...capacity to deal with stress is controlled by a set of interrelated brain circuits and hormone systems that are specifically designed to respond adaptively to environmental challenges. When an individual is threatened, this system sends signals to the brain that trigger the production of brain chemicals as well as stress hormones that are sent throughout the body and cue the brain to prepare the individual to respond adaptively to threat."³⁰

Of considerable importance is the fact that the more frequently our bodies generate these biochemical stress responses, the lower will be the "set point" at which they are activated over time. In a child welfare context, this reduction in set point helps us to understand when children's tempers flame, or their behavior becomes explosive or they fall into a deep state of withdrawal—even when the precipitating event seems minor to us.

In a recent issue of *The Future of Children*, noted University of California Davis neuroscientist Ross Thompson reports, "The biological effects of stress undermine [children's] ability to concentrate, remember things, and control and focus their own thinking." And, the same is true for adults. Social scientists affiliated with the National Scientific Council on the Developing Child describe three levels of stress: positive stress, tolerable stress and toxic stress.

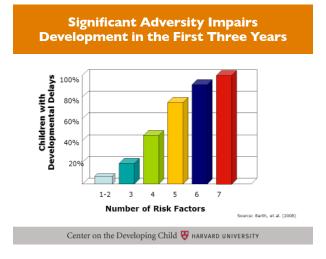
- Positive stress refers to "...moderate, short-lived stress responses, such as brief increases in heart
 rate or mild changes in the body's stress hormone levels. This kind of stress is a normal part of life."
 Perhaps like reading this paper!
- **Tolerable stress** refers to "... stress responses that have the potential to negatively affect the architecture of the developing brain but generally occur over limited time periods that allow for the brain to recover and thereby reverse potentially harmful effects." These events include the "...serious illness or death of a loved one; a frightening accident; an acrimonious parental separation or divorce; persistent discrimination." The negative impact of these stressors is buffered or mediated for children (and also adults) through the presence of supportive individuals "...who create safe environments that help children learn to cope and recover from major adverse experiences."
- *Toxic stress* refers to "...strong, frequent, or prolonged activation of the body's stress management system. Stressful events that are chronic, uncontrollable and/or experienced without children having access to support from caring adults tend to provide these types of toxic responses....In the extreme, such as in cases of severe, chronic abuse, especially during early, sensitive periods of brain development, the regions of the brain involved in fear, anxiety, and impulsive responses may overproduce neural connections while those regions dedicated to reasoning, planning, and behavioral control may produce fewer neural connections."³²

Adverse Childhood Experiences (ACEs)

The now famous Adverse Childhood Experiences study (ACEs) conducted between 1995 and 1997 by the Centers for Disease Control and Kaiser Permanente sheds further light on the immediate and lifelong impact of traumatic events in the lives of younger children.³³ These experiences include child abuse or neglect as well as adult and family disability and dysfunction, specifically parental health and mental health challenges, substance abuse, domestic violence and the incarceration of a parent.

Research has shown that the more types of ACEs experienced by a young child the greater the likelihood of early developmental delays in the first three years of life. In fact, three-quarters (or more) young children who experience five or more types of ACEs are likely to experience developmental delays.

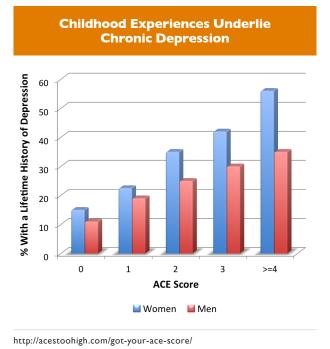
Of note, these are very likely many of the same children whose vocabulary development is limited at age two, who enter preschool behind at age three, stand at the kindergarten door without the knowledge, skills or behaviors needed for early school success and who, often, cannot read at a proficiency level by the end of the third grade. ³⁴



The impact of ACEs continues into later adulthood as well. Research also reveals that exposure to multiple types of ACEs demonstrably increases the likelihood of adult substance abuse, depression, cardiovascular disease, diabetes, cancer and premature mortality.³⁵ A recent research brief by Child Trends provides ACEs prevalence data for each state and the nation as a whole.³⁶

The Special Case of Maternal Depression among Low-Income Women

Particularly relevant to our discussion of neglect during the early childhood years is the impact of maternal mental health challenges that appear during pregnancy and often continue into the post-natal period. These challenges include both maternal depression and stress-induced anxiety. The effects of untreated maternal depression include babies born preterm and at low birth weight, poor physical health and "physical endangerment including abuse and neglect…as well as the increased risk that children will experience "depression, separation anxiety and oppositional defiant behaviors."³⁷



Of considerable concern is that four in ten babies (41%) born into poverty (already a risk factor) have been found by researchers to have mothers who experienced some form of depression, and one in ten (11%) had a mother with severe depression. These data were reported in a 2013 report entitled Linking Depressed Mothers to Effective Services and Supports: A Policy and Systems Agenda to Enhance Children's Development and Prevent Child Abuse and Neglect.³⁸

The study also found that "...infants born into poverty with depressed mothers are more likely than their peers with non-depressed mothers to be exposed to domestic violence and substance abuse." Nearly all of these babies with severely depressed mothers (96%) "...live with someone who receives benefits from the [federal] Women,

Infants and Children (WIC) program; 82% live with someone who received Medicaid; 70% live in household(s) receiving Supplemental Nutritional Assistance Program (SNAP) benefits. Finally, the researchers found that "...Uninsured low-income mothers with depression were less likely to receive treatment for their major depression than insured mothers with depression..."³⁹

The fact that nearly all of these depressed mothers have accessed income-based supports that involve their children argues for a much more collaborative and intentional set of relationships between child welfare and other public health and social services In order to serve both the child and parent together.

Summarizing the Brain Science

- Young children's brains develop within the
 context of the serve and return relationships that
 they have with their primary caregivers and in
 response to the environmental circumstances
 within which they live. Primary caregivers
 are most often birth parents but can include
 grandparents and other kin as well as family
 child care providers and foster parents.
- Early childhood is a period of explosive brain growth. Brain development is most plastic during these years because it is growing the fastest. It is also most vulnerable because it growing the fastest.
- Adult caregiving behaviors can be impacted negatively by prior early childhood adversity or current trauma and toxic stress. Trauma and toxic stress can impact the development of executive function in the brain, leading to an adulthood where delayed executive function can manifest in neglectful behaviors by parents.

- Early childhood stress has been linked to poor health outcomes in adults, including depression. Untreated maternal depression has especially negative consequences for the age-appropriate development of young poor children.
- Adversity, trauma and toxic stress can also change the biochemistry of the body in negative ways that may be transmitted across generations.
- Poverty, racism and other underlying risk factors increase the risk of "neglectful" behaviors on the part of parents and other primary caregivers.⁴⁰
- Not all instances of unresponsive care require a child welfare response. But when chronic neglect is substantiated through the child protective services process, interventions will need to be specialized according to the age and developmental status of the child, include a focus on adults in the family, and be of longer durations and coordinated with community supports.

Caregivers and Stress: Implications for Child Welfare

From a child welfare and mental health perspective, we frequently see adult caregiver responses to threat and high levels of chronic stress that range from externalizing behaviors such as fight or flight (e.g., aggressive or defiant responses) to internalizing responses (e.g., withdrawal and depression). In the context of current neglect definitions, any of these could result in a child protective services referral and subsequent substantiation—with or without an operational understanding of the impact of adversity on parental mental health and caregiving capacity.

Recent research has also begun to identify the ways in which changes in our genetic coding is impacted by toxic stressors and, thus, passed from generation to generation. Writing in 2010, scientists are at the Center on the Developing Child report, "The epigenome is the chemical signature that explains how early

life experiences become embedded in the circuitry of the developing brain and are associated with lifelong consequences. Research now shows that interaction between adverse environments and the genes we inherit—through the epigenome—can increase the risk for long-term negative mental and physical health outcomes." ⁴¹

This means that adverse childhood experiences and toxic stress visited upon young children—without the buffering effect of positive, responsive parenting—continue to impact health, mental health and behavior as these individuals become parents *themselves*, thus subjecting *their* children to some of the same stressors and developmental challenges that they experienced. Understanding the "biology of stress" can be instructive in revising our approach to families with multigenerational child welfare engagement, especially in circumstances of neglect.

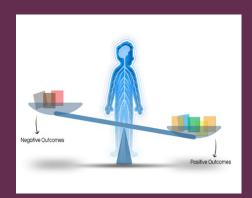
(the science of resilience)

All of us experience stress and some adversity in our lives. Some of us experience a lot. What is it that enables some of us to emerge and remain strong in the face of adversity? What enables us to respond to trauma with an adaptive response? The concept of strength and adaptability in the face of adversity is called "resilience." The Center on the Developing Child likens the development of resilience to a "…balance scale or seesaw. Protective experiences and adaptive skills on one side counterbalance significant adversity on the other."

In *The Science of Resilience*,⁴² the Center presents five principles essential to the understanding the development of resilience. These are cited directly.

- "Resilience requires supportive relationships and opportunities for skill building. No matter the source of hardship, the single most common factor for children who end up doing well is having the support of at least one stable and committed relationship with a parent, caregiver, or other adult."
- "Resilience results from a dynamic interaction between internal predispositions and external experiences. It is this interaction between biology and environment that builds the capacities to cope with adversity and overcome threats to healthy development. Resilience, therefore, is the result of a combination of protective factors."
- "Learning to cope with manageable threats to our physical and social well-being is critical for the development of resilience. Not all stress is harmful. There are numerous opportunities in every child's life to experience manageable stress—and with the help of supportive adults, this "positive stress" can be beneficial."
- "Some children respond in more extreme ways to both negative and positive experiences. These
 highly sensitive individuals show increased vulnerability in stressful circumstances but respond in
 exceptionally positive ways within environments that provide warmth and support."
- "Individuals never completely lose their ability to improve their coping skills, and they often learn how to adapt to new challenges. The brain and other biological systems are most adaptable early in life and the development that occurs in the earliest years lays the foundation for a wide range of resilient behaviors. However, resilience is shaped through life by the accumulation of experiences—both good and bad—and the continuing development of adaptive coping skills connected to those experiences."

In Brief: What is Resilience? Center on the Developing Child, Harvard University



"The science of resilience can help us understand why some children do well despite serious adversity. Resilience is a combination of protective factors that enable people to adapt in the face of serious hardship, and is essential to ensuring that children who experience adversity can still become healthy, productive citizens. Watch this video to learn about the fundamentals of resilience, which is built through interactions between children and their environments."

http://developingchild.harvard.edu/science/key-concepts/executive-function/

Child Welfare Today and the Special Needs of Young Children

It is useful to craft this part of our discussion around the needs of all children, but especially those who are the youngest. "Developing public policy to ensure that all children start school healthy and equipped for success requires a systematic focus that responds to the universal needs of all children, recognizing that children start from diverse backgrounds, under different conditions, and with different capacities." This guidance is provided by nationally-respected child policy expert, Charles Bruner of the Iowa-based Child and Family Policy Center. Bruner describes these universal needs as:

- "Consistent and nurturing parenting to guide and support their growth and development within
 a safe and supportive community, including meeting basic needs for shelter, clothing, food,
 and other necessities.
- "Timely responses to physical and mental growth, including primary and preventive health and nutrition services that support parents in keeping their children healthy and responding to illness and injury.
- "Early identification and response to special health, developmental, behavioral, or environmental needs that can jeopardize health and development, and
- "Continuous supervision throughout the day in developmentally appropriate environments, where
 young children can safely explore their world and learn, including intentional learning where children
 gain mastery across the domains of early learning." 44

With these universal needs in mind, it is imperative to ask: How is the child welfare field doing in assuring we address the special needs of very young children living in circumstances that "look like neglect" to the caseworker at the family's door? In *The Science of Neglect*, social scientists affiliated with the Harvard University Center on the Developing Child assert that the nation's child welfare field remains insufficiently informed about the need for neuroscience-guided policy and practice related to neglect in early childhood. Recent survey research conducted by Zero to Three in partnership with Child Trends confirms this assertion in a recent report entitled *Changing the Course for Infants and Toddlers: A Survey of State Child Welfare Policies and Initiatives* (2013).⁴⁵

From September 2012 through March 2013, state child welfare leaders responded to a survey designed to understand whether (and how) agency policy and practice have been customized to address the special developmental needs of very young children. Virtually all states completed the survey. The area of infant and toddler policy most frequently receiving state attention concerns foster care placements. Thirtynine states reported having a policy to avert multiple placements for infants and toddlers. But while 40 states specify the frequency of visitation between birth parents and their children in foster care, just nine require more frequenting visiting for infants and toddlers.

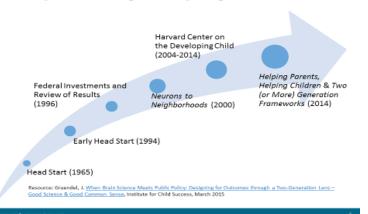
Similarly, fewer than four states reported having created specific policies *requiring* training on developmentally-appropriate case work, more frequent court reviews, greater use of family group decision making and increased case worker visits for infants in foster care. Also of concern, fewer than a quarter of states report having policies requiring health, dental or behavioral/mental health assessments for maltreated infants and toddlers, or even routine developmental screening and monitoring. ⁴⁶ And in the majority of states there is no mandatory provision of health, mental health and/or substance abuse services to parents of infants and toddlers on the caseload.

(building a science-informed, two-generation approach to "neglect")

Taking a science-informed approach to child welfare "neglect" referrals and case decision-making demands that we focus on the special needs of very young children because (a) they constitute a significant portion of the caseload and (b) it is during this period—in which their brains are growing the fastest and critical language, emotional, behavioral and early executive function skills are emerging—that adversity has its greatest impact. The brain science also tells us that we must focus on the primary caregivers of young children (usually but not always the birth parents) because it is within the context of the "serve and return" interactions with their children that age-appropriate early brain development occurs.

"Two-generation" frameworks do precisely this by requiring that we focus on *both* the child and primary caregivers together and simultaneously to the greatest extent possible. While research on the "mechanisms" of two-generation program designs is still in its own infancy,⁴⁷ rethinking human service and child welfare delivery systems through a two-generation lens offers the real possibility of disrupting the

50 years of two-gen and young children



cycle of intergenerational poverty and intervening in the biology of stress.

Importantly, attention to the "whole family," the key tenet of a two- (or more) generation approach, has long, strong roots in this nation.⁴⁸ Two-generation work was the cornerstone of the settlement movement in the 1880's and functions as a foundational principle for Head Start, launched in 1965, and Early Head Start designed in 1994.

Key players in the "two-gen space" include national service and philanthropic organizations such as the National Governors Association, ⁴⁹ CLASP, ⁵⁰ the Annie E. Casey Foundation, ⁵¹ Ascend at the Aspen Institute ⁵² and the Association of Public Human Services Administrators (APHSA) ⁵³. Academic institutions involved in two-generation research, training and program intervention include, notably, the Harvard University Center on the Developing Child, ⁵⁴ the Yale University School of Medicine ⁵⁵ and the Ray Marshall Center at the University of Austin. ⁵⁶ Please note that this is not an all-inclusive listing.

COMMON FEATURES OF TWO-GENERATION FRAMEWORKS

Because these two (or more) generational frameworks are now informed by the science of brain development and adversity, they tend to share common features. On the child side, access to high quality early education is a common element, with increasing attention also accorded evidence-based home visiting models."⁵⁷ Core features of two-generational frameworks on the adult side are:

- Adult post-secondary education (or completion of the high school degree/GED)
- Sector- and jurisdictional-specific workforce preparation, certification and skill-building
- Economic supports, including connections to existing financial benefits (e.g., EITC) and asset development
- Social capital networks, including peers, neighbors, coaches and mentors
- · Parenting supports and high quality child care for young children
- Attention to health and mental health needs and challenges, including the impact of toxic stressors and ACEs on developing executive function and self-regulation skills.⁵⁸

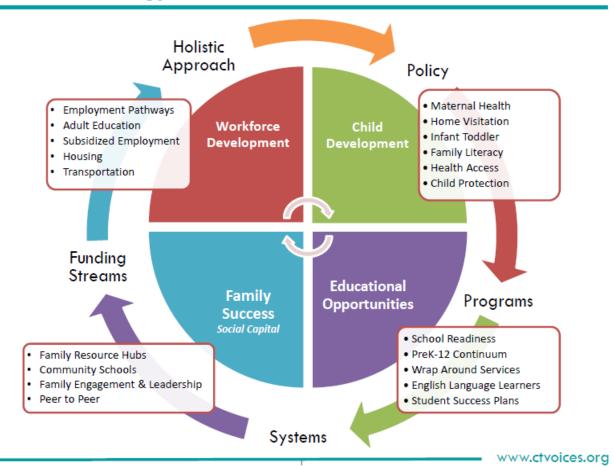
CORE OPERATING PRINCIPLES

Adherence to four core operating principles are essential to successful two-generation design. Presented below, these core principles have the potential to transform service delivery and to advance the development of resilience among children and families at risk of or struggling with adversity, trauma and toxic stress. Together they form the platform for rethinking the way we deliver child welfare services in child neglect situations.

- Supports and services quickly focus on individual and family strengths and assets, including within the extended family, and seek to build on family and community protective factors with the goal of helping families become more resilient, that is, strong in the face of adversity.
- The early identification of child and adult challenges is the responsibility of all providers, through the use of common tools (to the greatest extent possible) followed by either direct service provision or a "warm handoff" to a receiving provider.⁵⁹
- Community supports and services are reflective of the culture and heritage of the family and are wrapped around the family as a whole. They encourage and support family decision making, and are committed to family engagement over a period that will likely extend for one or more years.
- Supports and services are delivered simultaneously to the child and parent or other primary caregiver—as well as individually—and are integrated across service domains and sectors to (a) decrease cognitive load on the consumer, (b) increase service effectiveness for the provider, and (c) maximize resource efficiency and effectiveness for the funder.

While legislation has been adopted in a number of states designed to advance a two-generation approach to the delivery of human services and workforce preparation, just one state has reallocated funding to support this work. The 2015 Connecticut General Assembly reallocated \$2 million in TANF dollars to support six demonstration sites across the state in a two-year two-generation initiative. A graphic depicting Connecticut's two-generation framework can be found below.

Two Gen Strategy



(a Checklist for Change and some core resources)

The Zero to Three report provides a useful checklist by which child welfare agencies at the city, county and state level of government can reassess their progress toward developmentally appropriate policy and practice for young, vulnerable children and their families. But where do we go next? We suggest four common sense strategies organized as a "Checklist for Change" to advance a science-informed, two (or more) generation approach to the child welfare response to neglect referrals and case practice.



Adopt a Theory of Change to promote the process of "rethinking" child neglect policy and guide organizational change for very young, vulnerable children

Opportunities for action include:

- Develop a new Theory of Change for child welfare neglect services for families based on how brain development and adversity may be impacting parental behaviors. The Theory of Change developed by the Center on the Developing Child at Harvard University is a good place to begin.
- Require mandatory training in the neuroscience of child, adolescent and young adult learning and provide for all new staff, and annual research-informed refresher courses for all staff.
- Initiate interventions that focus on resilience for families (e.g., Strengthening Families).
- Review and modify agency policy and practice manuals to reflect the core principles of a science-informed, multi-generational resilience-focused framework.
- Review your agency's position with regard to poverty and racism as case practice issues and as areas for agency-wide data analysis and policy advocacy.
- Develop or expand formal partnerships with the pediatric community to assure that well-being in a child welfare context is anchored in health for children, their parents and primary caregiver.

Strengthening Families

"...is a research-informed approach to increase family strengths, enhance child development and reduce the likelihood of child abuse and neglect. It is based on engaging families, programs and communities in building five protective factors:

- Parental resilience
- Social connections
- Knowledge of parenting and child development
- Concrete support in times of need
- Social and emotional competence of children."

Building Adult Capabilities to Improve Child Outcomes: A Theory of Change. Center on the Developing Child, Harvard University



"This 5-minute video depicts a theory of change from the Frontiers of Innovation community for achieving breakthrough outcomes for vulnerable children and families. It describes the need to focus on building the capabilities of caregivers and strengthening the communities that together form the environment of relationships essential to children's lifelong learning, health and behavior."

http://developingchild.harvard.edu/resources/building-adult-capabilities-to-improve-child-outcomes-a-theory-of-change/



Assure the early identification of delays and address challenges in children's first three to five years, including in language development, mental health and early behavioral self-regulation.

Opportunities for action include:

- Require timely age-specific developmental screening for all young children and ACEs or trauma screening for adult family members on the child welfare caseload. This may require a new, formal partnership with the pediatric community. Share results with families and include in the family case planning process.
- Provide staff development so all caseworkers and supervisors have a working knowledge of and referral process for early intervention support and services (including B-3 IDEA Part C services). Make timely referrals.
- Train kinship and foster families in the child welfare placement system and members of the state or county court system on the special needs of young children who have been removed from the care of their birth parents. The national Safe Babies Court Team initiative 60 is helpful resource.
- Establish a collaboration and referral process with your state's pediatric chapter of the American
 Association of Pediatricians and your state's Infant Mental Health professional association(s) to
 support programs funded through a state Differential Response System based on the special needs of
 very young children.
- Create a formal affiliation with HELP ME GROW⁶¹ or other effective early childhood information, universal screening, family referral and service coordination network.
- Establish or expand priority (automatic) access for young children on the child welfare caseload to Early Head Start and Head Start.
- Establish or expand priority access to evidence-based Home Visiting services to all families with young children on the child welfare caseload.



The American Academy of Pediatrics (AAP) 2014 Bright Futures' Recommendations for Public Preventive Health Care (periodicity schedule) is a good place to start. Many norm-referenced tools are available for early childhood developmental screening, assessment and monitoring. Some of these are easily used by par-

ents, pediatricians, child welfare line staff and other professionals, including the Ages & Stages Questionnaire (ASQ) and ASQ SE for social and emotional development. This particular tool is available in both Spanish and English. In some jurisdictions, the use of ASQ is supported as part of the state's B-3 Early Intervention Program, and other states are promoting the development of a universal screening process based on the use of the ASQ, The national HELP ME GROW center is a resource available to all states, and 23 states have joined as affiliate members.



Address the impact of ACEs, toxic stress and depression on (a) parental caregiving capacity and essential executive function skills development, (b) kinship foster families, and (c) child welfare case worker and supervisory staff.

Opportunities for action include:

- Partner with your state Department of Public Health to employ an ACEs screen (including maternal depression) as part of your Family Assessment process or CPS Strength and Needs Assessment.
- Expand the use of genograms and a "whole family" assessment process. Expand multi-generation involvement in the Family Teaming Process.
- Create a two-generation program checklist to assure that all family plans address education and employment issues of parents, directly or through an interagency partnership.
- Establish a user-friendly process to meet basic needs for families on the child welfare caseload, the
 Differential Response System caseload or who are serving as kinship placement resources and who are
 experiencing toxic stress or have high ACEs scores.
- Create a knowledge resource for families, case workers and supervisors, and child welfare funded
 community programs on ACEs, toxic stress and trauma. Provide ongoing professional development
 including current state poverty data, evidence-based two-generational programs to address ACEs, and
 best practices in adult executive function skill development.
- Review policies and practice manuals to remove requirements and action steps that can unnecessarily
 increase "cognitive load" for adults experiencing trauma, toxic stress or ACEs and/or have limited
 executive function skills.
- Establish or expand priority access to evidence-based adult mental health and substance abuse services for parents with young children. (See Home Visiting above)
- Establish or expand supports and evidence-based interventions for kinship foster families and agency staff experiencing primary or secondary trauma.



ACESTooHigh

"...is a news site that reports on research about adverse childhood experiences, including developments in epidemiology, neurobiology, and the biomedical and epigenetic consequences of toxic stress. We also cover how people, organizations, agencies and communities are implementing practices based on the research. This includes developments in education, juvenile justice, criminal justice, public health, medicine, mental health, social services, and cities, counties and states."

http://acestoohigh.com/



Collaborate with and invest in an intergenerational, cross-sector service system designed to better protect children, assure their age-appropriate development, and strengthen families as their primary caregivers.

Opportunities for action include:

- Reduce cross-agency duplication of information gathering from families and establish a "no wrong door" intake process.
- Coordinate cross-agency community work to increase family finances, including expanding EITC applications among low-income families.
- Invest in peer coaching and support networks to help reduce isolation among vulnerable families with young children whose primary adult caregivers have high ACEs scores.
- Coordinate case/care management with sister agencies also serving children and/or adults at the community, county and state level.
- Advance development of an interagency data network and data sharing process.
- Improve cross-agency professional development among governmental staff and the pediatric sector as well as with community providers funded by the child and adult sectors.

Alliance

Change in Mind



Applying Neurosciences to Revitalize Communities

Change in Mind: Applying Neurosciences to Revitalize Communities

...is a three-year initiative of the Alliance for Strong Families and Communities in partnership with the Robert Wood Johnson Foundation and the Palix Foundation's Alberta Family Wellness Initiative. The initiative was launched in the summer of 2015. The initiative will invest in 15 organizations in the United States and Canada to align neuroscience knowledge with systems that can change the course of life outcomes.

(the last word)

First, "child time" is an expression too many of us take for granted. We work on our time or agency time, but it is always "grown up" time. Child time is different. Young children are only "one" for 365 days. We cannot give them back that year (or any other) when it is taken away by parental, family, community or societal factors, including decisions that we make as child welfare professionals.

Second, neglect is a complex, sometimes subtle, always challenging aspect of child welfare. It has been said that making case decisions when neglect is alleged is more art than science. We would argue otherwise. It is all about science:

- Science that is anchored in what we know about early brain development
- Science that demands we look at the intergenerational impacts of stress on "neglectful" parents or other primary caregivers
- Science that says the serve and return caring, reciprocal, responsive relationship between a young children and his or her caregivers must be supported and strengthened
- Science that focuses on building resilience in a multi-generation context.

Surely there is art in the child welfare experience, but science must become the knowledge base from which we build our child welfare practice models—remembering always that child time is everything.

Third, the field of child welfare will have to continue to grow in its comfort and capacity to engage with other helping agencies in our society, at both the community and county or state level of government. The two-generational lens so critical to addressing "unresponsive care" requires that we focus on the needs of the child and the needs of the parent or other primary adult caregiver *at the same time*. This means working with housing, workforce development, public health and mental health agencies as well as the emerging ACA-funded health care system and institutions of learning from early education to post-secondary training. This probably means sharing data in ways that we rarely do. It certainly means offering regular cross-agency professional development anchored in the science of brain development, adversity and scarcity.

Finally, it means learning how to build for resilience through interagency "serve and return" relationships with our families in order to foster both family and agency strength in the face of continued challenge and adversity.

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