

SOCIAL & EMOTIONAL DEVELOPMENT IN THE EARLY YEARS



The B.C. Healthy Child Development Alliance

Refer to presenter's manual

- ✓ *What is healthy development?*
- ✓ *How does it happen?*
- ✓ *What can derail child development?*
- ✓ *How can we help?*



1) Review housekeeping items, introductions, etc.

2) Review the plans for the presentation:

- how long
- breaks
- when it will finish

Take Home Messages

1. *Early experiences make a difference*
2. *Babies develop in the context of relationships*



Core Concepts:

- **Healthy Development Occurs in the Context of a Relationship**
- **The Ability to Change Brains and Behaviour Decreases Over Time**

There are two fundamental messages to this entire presentation:

- 1) The first is that development in the first few years lays the foundation for everything that follows.
 - People can always change, but the first few years provide the critical foundation. (Emphasize that this doesn't mean it is all over by age three.)
 - Development occurs throughout the lifespan and development depends on healthy relationships in adulthood just as in childhood. The difference is that it gets harder to influence development as you get older – but not impossible.
- 2) The second message is that we should think about the baby as a person involved in relationships.
 - Those relationships, for good or ill – will tell the story of how the child develops. We truly are defined by our relatedness to others.

What is Child Development?

Healthy physical, mental, emotional, cognitive, spiritual & social development.



Source: Harvard Center on the Developing Child developingchild.harvard.edu

Core Concepts:

- **Cognitive, Emotional, and Social Development Are Connected: You Can't Do One Without the Other**
- **Healthy Development Occurs in the Context of a Relationship**

When we talk about healthy child development we are talking about the physical, mental, emotional, cognitive, spiritual & social development.

Key Points

- Healthy development is more than just physical development
- development is interconnected
- relationships are the key to all aspects of healthy development

Source: Harvard Center on the Developing Child developingchild.harvard.edu

What is Infant Mental Health?

- *The emerging ability to cope with emotions & manage behaviour*
- *The ability to form close emotional ties to others*
- *The ability to play, explore & learn*

Source: Zero To Three

Core Concept: Cognitive, Emotional and Social Development Are Connected - You Can't Do One Without the Other

“ZERO TO THREE: National Center for Infants, Toddlers and Families defines “infant mental health” as the capacity of the child from birth to three to:

- experience, regulate and express emotions
- form close and secure interpersonal relationships
- and explore the environment and learn

Infant mental health is synonymous with healthy social and emotional development. It is how the child fits into the world around them:

- attachment with primary caregiver
- relationships with important others
- smooth developmental progress
- the increasing ability to control behaviour and express emotions
- and the ability to explore and play

Source: Zero To Three

Infant mental health...
...& healthy development
...are two sides of the *same* coin

Core Concept: Cognitive, Emotional and Social Development Are Connected - You Can't Do One Without the Other

- Infant mental health and healthy development are integrated
- When a child is preoccupied, scared, lonely or otherwise in distress, they cannot explore, learn and develop the way we would expect them to. They are two sides of the same coin. When you are talking about the mental health of a baby, you are talking about healthy development
- Early intervention workers are also infant mental health workers and vice versa

Relationships & Mental Health

- *Forming at least one close emotional tie is critical*
- *Infants use the parent or caregiver to interact with the world & to regulate distress*
- *Interfering with important relationships increases stress*
- *Emotional trauma can be transmitted across generations*

Source: Perry, 2001; Appleyard & Berlin, 2007; Benoit, 2004

Core Concept: Healthy Development Occurs in the Context of a Relationship

- Forming at least one close emotional tie to a consistent, responsive caregiver is critical to mental health regardless of the culture or community the baby comes from – this is a characteristic of being human
- Infants use the parent or caregiver to manage and regulate their distress so it isn't overwhelming
- Interfering with important relationships increases stress on the infant & prolonged stress can interfere with development. No matter how intellectually gifted a child is, prolonged stress will impair learning. When we talk about preparing children for school we cannot separate cognitive development from social and emotional development – you can't have one without the other. All development builds on what comes before
- If the baby can't rely on a relationship with the caregiver, if the caregiver is impatient, unpredictable, preoccupied with worry or frightening, all aspects of the baby's development will be affected
- Emotional trauma can be transmitted across generations because early childhood trauma affects later parenting – community wide trauma will impact parenting across the community

Source: Perry, 2001; Appleyard & Berlin, 2007; Benoit, 2004

Child Development Happens In the Context of *Relationships*

- Brains are built from the bottom up
- Brains are built on the 'serve & return' of human interaction
- Brain development is integrated – you can't do one part without the others

Source: Harvard Center on the Developing Child developingchild.harvard.edu

Core Concepts:

- **Brains Are Built from the Bottom Up: Skills Beget Skills**
- **Serve and Return Interaction Builds Healthy Brain Architecture**
- **Cognitive, Emotional and Social Development Are Connected - You Can't Do One Without the Other**
- The basic architecture of the brain is constructed in a bottom-up sequence, and in a highly integrated way, with simple structures such as sensory pathways for vision and hearing forming first, and then language and higher cognitive functions coming after
- Emotional stability and opportunities to develop social competence also form an important foundation for later development. You can't do one without the other; the early capacities are important prerequisites for later skills
- Take language – we don't just suddenly start to talk; babies begin with eye contact, smiling, babbling, pointing; In order for language to develop the baby needs a reason to communicate and someone to communicate with

Two important factors shape the developing brain:

1. The genetic endowment you are born with is one that most of us are familiar with
2. What is less well understood is the way in which **early experiences** also shape the developing architecture of the brain. A major component in this process is the 'serve and return' of human interaction that begins at birth and is extremely important to the developing brain

Source: Harvard Center on the Developing Child developingchild.harvard.edu

What Develops?

- ✓ *The Brain*
- ✓ *Mind Reading*
- ✓ *The Triangle*
- ✓ *Focus & Self Control*

Source: Rubin, J. (2008). *What Makes Us Human?* & Galinsky, E. (2010) *Mind in the Making Vol I*.
<http://www.pbs.org/wgbh/nova/body/what-makes-us-human.html>

Core Concept: Brains Are Built from the Bottom Up - Skills Beget Skills

- The basic architecture of the human brain is constructed through an ongoing process that begins before birth and continues into adulthood
- Think about building a home, the building process begins with laying the foundation, framing the rooms and wiring the electrical system in a predictable sequence
- Early experiences are laying the foundation too. The daily, minute interactions with adult caregivers literally shape how the brain gets built:
 - o a strong foundation in the early years increases the probability of positive outcomes
 - o a weak foundation increases the odds of later difficulties

Four particular aspects of development we are going to discuss in more detail are:

1. How the brain uses experiences to develop
2. How children learn what is in the minds of others
3. The development of triadic communication: you, me and this object I want you to look at – and why it's so important
4. The developing ability to manage feelings, constrain behaviour and focus attention

Source: Rubin, J. (2008). *What Makes Us Human?* & Galinsky, E. (2010) *Mind in the Making Vol I*. <http://www.pbs.org/wgbh/nova/body/what-makes-us-human.html>

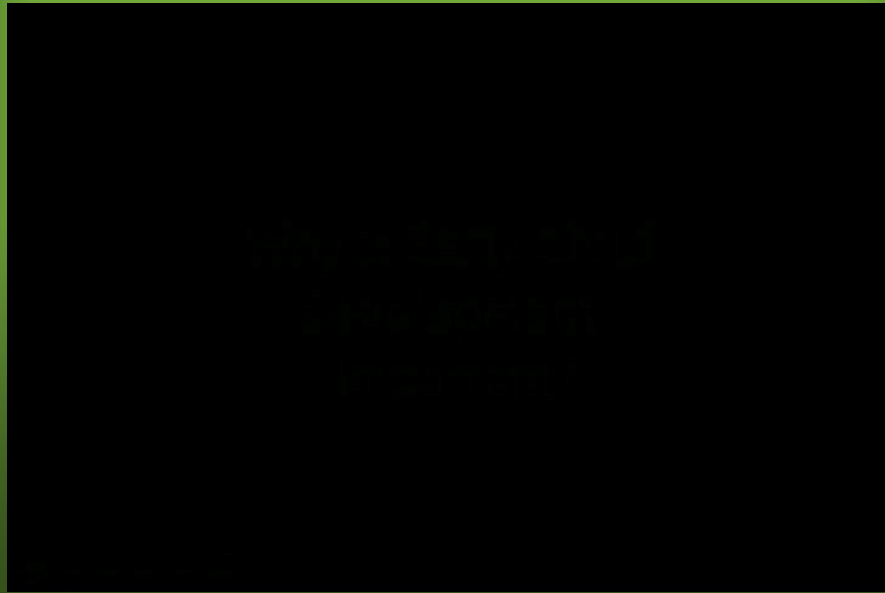
How the Brain Develops: Brain Growth in the Early Months



Core Concept: Experience Shapes Brain Architecture by Over-Production of Connections Followed by Pruning

- You can see the difference between the 6 month old brain and the newborn brain
- What is happening here is not so much that new neurons, or brain cells, are forming. Rather, the brain cells are forming connections to one another called 'synapses'
- Through a process called 'synaptogenesis' the brain is rapidly developing these connections - about 700 new neural connections are formed every second during this period (this is mentioned in the Schonkoff lecture referenced earlier <http://www.norlien.org/pages/player2.php?v=Jshonkoff>)
- At its peak the infant brain has more of these connections than there are stars in the Milky Way
- These connections are then pruned according to usage – if the connection isn't used, it is lost

Sensitive Periods in Brain Development



Core concept: Impact of sensitive periods in early brain development on the entire life course

This clip, by Dr Clyde Hertzman, describes sensitive periods in the early years of the developing brain. It emphasizes the importance of early social experiences and relationships on the health, well-being, learning and behaviour across the entire life course.

Brain Development Depends on Relationships

*Babies need new stimuli to be offered
in ways that are “safe, nurturing,
predictable, repetitive, gradual, and
attuned” to the infant’s developmental
stage – D. Glaser*

Source: Glaser, D. (2000).

Source: Glaser, D. (2000).

Babies Are Relationship Ready



Core Concept: Serve and Return Interaction Builds Healthy Brain Architecture

•Ask the audience if anyone else was surprised at how readily Jordon engaged in an interaction with his grandfather (Confess to having been surprised even if this was not the first time you saw this clip. It helps others acknowledge their own lack of information about development)

- Babies are born “relationship ready”. They need to engage in a relationship in order to survive
- How many strategies do babies have to keep a caregiver engaged? (smiling, cooing, imitation)
- We have literally been bred to socialize with others of our kind. Over the millennia babies that engaged in social interactions were more likely to survive and reproduce
- You think you are entertaining the baby but really the baby is entertaining YOU
- Ask what can happen when babies turn away to rest? Parents can misunderstand and try to keep the baby engaged. What happens next? The baby gets fussy and parents feel rejected
- Talk about how easy it is to intervene when you catch this early on and how much harder it is once a baby becomes fussy

Serve & Return



Photo Courtesy Sean Dreilinger

Source: Harvard Center on the Developing Child developingchild.harvard.edu

Core Concept: Serve and Return Interaction Builds Healthy Brain Architecture

- The interactive influences of genes and experience shape the developing brain
- Scientists now know a major ingredient in this developmental process is the “serve and return” relationship between children and their parents or other caregivers in the family or community
- Young children naturally reach out for interaction through babbling, facial expressions, and gestures, and adults respond with the same kind of vocalizing and gesturing back at them
- In the absence of such responses—or if the responses are unreliable or inappropriate—the brain’s architecture does not form as expected, which can lead to problems with learning and behaviour

Source: Harvard Center on the Developing Child developingchild.harvard.edu

Mindreading

- *Babies discern intentions of others very early*
- *Pointing is an early signal*
- *Increasing ability to take the perspective of others as children mature*
- *Maturity requires inhibitory control, cognitive flexibility & reflective functioning*

Source: Rubin, J. (2008); Galinsky, E. (2010); Gopnik, et al (2001)

Core Concept: Cognitive, Emotional and Social Development Are Connected - You Can't Do One Without the Other

- Mindreading: Humans are very good at thinking about what's on other people's minds
- This ability to consider the perspective of another person, for simplicity's sake call it 'mindreading' – this ability starts in the first year of life and is critically important for the development of language and social skills such as empathy
- As we mature we become better at suppressing our impulses and we are more flexible in how we think
- When we can suppress our impulses and imagine what it is like to be somebody else – we are prepared to consider differing points of view – the beginning of empathy for others
- As we grow and mature, we can reflect on our own perspective and recognize how our own points of view may be limited or faulty
- These skills are all developing much, much earlier than we used to think – even in the first 12 months
- Ask the audience how they can tell when a baby is starting to realize that different people have different points of view
- (Pointing – once a baby starts to point we know that he or she realizes that you aren't seeing the same thing he or she is seeing. If babies aren't pointing by the first birthday or sooner, developmental screening and referral should be started)

Source: Rubin, J. (2008); Galinsky, E. (2010); Gopnik, et al (2001)

The Triangle



Source: Rubin, J. (2008).

Core Concept: Cognitive, Emotional and Social Development Are Connected - You Can't Do One Without the Other

- The Triangle. Watch a human parent building a block tower with a child and you'll see a special skill at work. Let's call it the Triangle: its three points are the adult, the youngster, and the tower
- Both adult and child are not only focused on the same object, they know the other is focused on it too. The Triangle is the foundation for teaching—a mentor and pupil must jointly pay attention to the lesson at hand
- This ability – often called 'joint attention' or 'triadic communication' develops very early and is critical in all learning. It is no longer just 'you and me' - it is now 'you, me and this thing I want to share with you.' Children who don't have the 'serve and return' experiences have difficulty with joint attention
- The triangle is important for language acquisition
- Think about it – when a baby is looking at a ball and mom says, 'oh look at the birdie!' & how does the baby know she isn't talking about this round thing in front of him she means something else? The baby has to look at mom and then follow her gaze to see the birdie is
- When babies start to point at things we know they have developed this 'mindreading' ability. When the baby points at things that are interesting, it tells us that the baby realizes that what he is looking at is different from what Mom is looking at. If he wants Mom to attend to something, he has to get her to look at it first

Source: Rubin, J. (2008).

Focus & Self Control

- *Self-regulation – the maturation of our ability to focus attention, constrain behaviour, manage emotions*
- *Stress response – the maturation of our response to challenges*



Source: Rubin, J. (2008), Galinsky, 2010).

Core Concept: Cognitive, Emotional and Social Development Are Connected - You Can't Do One Without the Other

- Impulse control. Whereas mind-reading and the Triangle are cognitive skills, the third mental talent that sets us apart as humans is emotional
- We seem to have much greater control over our emotions than other animals
- Being less reactive and impulsive is a good way to get to the head of the class
- Impulse control can be thought of as having two parts:
 1. the ability to *regulate* our arousal level to match the context (sit still when necessary, pay attention, avoid outbursts, play boisterously when appropriate) and
 2. the ability to respond to challenges or stressors when they arise
 - All three of these abilities develop through the 'serve and return' of human interaction – but not just anyone will do. Babies need at least one consistent, loving relationship with a primary caregiver in order to develop properly

Source: Rubin, J. (2008), Galinsky, 2010).

What is Good Enough?

- *Babies need at least one caregiver who can accurately read their cues and respond sensitively most of the time*
- *All babies need a chance to play & explore*
- *Safety, nutrition & basic needs are met*
- *Remember: Nobody's perfect*



Source: Rubin, J. (2008), Galinsky, E. (2010).

Core Concepts: Healthy Development Occurs in the Context of a Relationship

How it Works

Serve and Return Interaction Builds Healthy Brain Architecture

Source: Rubin, J. (2008), Galinsky, E. (2010).

What Derails Development?

- *Unpredictable or frightening caregiver behaviour*
- *Persistent stress & fear*
- *Lack of opportunities to play*
- *Poor prenatal care, poor nutrition*



Source: Center on the Developing Child at Harvard University. *The Foundations of Lifelong Health Are Built in Early Childhood*. 2010 www.developingchild.harvard.edu

Core Concepts: Toxic Stress Damages Developing Brain Architecture - The Ability to Change Brains and Behaviour Decreases Over Time

- Unpredictable or frightening caregiver behaviour can permanently damage the parent/infant relationship
- Persistent stress & fear can elevate stress hormones that impair the developing brain
- Lack of opportunities for playful interactions or exploration limits the development of important connections in the brain & important social skills

Source: Center on the Developing Child at Harvard University. *The Foundations of Lifelong Health Are Built in Early Childhood*. 2010 www.developingchild.harvard.edu

The Stress Response System



Was Designed for This

Source: Adapted from: Dr. M. Hill. Early Brain & Biological Development Lecture. 2010. <http://ebbd.banffcentre.ca/course/view.php?id=2> & National Scientific Council on the Developing Child. *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper #3*. 2005. <http://www.developingchild.net>

Core Concept: Toxic Stress Damages Developing Brain Architecture

- There is a lot written about the stress response from psychology, neurobiology, and so on but when you drill down to the basics what you really need to know is that the stress response system has evolved over the millennium to respond to an imminent threat – like a predator
- The whole body mobilizes in response to an immediate threat, to run away or fight it off

Source: Adapted from: Dr. M. Hill. Early Brain & Biological Development Lecture. 2010. <http://ebbd.banffcentre.ca/course/view.php?id=2> & National Scientific Council on the Developing Child. *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper #3*. 2005. <http://www.developingchild.net>

...But What About This?



Source: Adapted from: Dr. M. Hill. Early Brain & Biological Development Lecture. 2010.
<http://ebbd.banffcentre.ca/course/view.php?id=2>

Core Concept: Toxic Stress Damages Developing Brain Architecture

- What the human body is poorly adapted for, however, is chronic, daily stress
- Our stress response is poorly designed for chronic activation such as we see in cases of exposure to chronic violence, or chronic neglect

Source: Adapted from: Dr. M. Hill. Early Brain & Biological Development Lecture. 2010.
<http://ebbd.banffcentre.ca/course/view.php?id=2>

Stress Response System

Highly integrated repertoire of responses including

- *Secretion of stress hormones, adrenaline, cortisol*
- *Mobilization of energy, increase glucose*
- *Increased heart rate, blood pressure*
- *Immune system, inflammatory response modified*
- *Redirection of blood perfusion to brain*
- *Suppression of higher order cognition – instinctual response – vigilance & fear*
- *Suppression of motivation for rewarding stimuli*

Source: Adapted from: Dr. M. Hill. Early Brain & Biological Development Lecture. 2010.
<http://ebbd.banffcentre.ca/course/view.php?id=2>

Core Concept: Toxic Stress Damages Developing Brain Architecture

- The stress response system is operational at birth but not mature
- You can see from this list that every organ in the body – including the brain – is mobilized when the baby is stressed
- Babies can experience stress much like an adult can, but can't regulate the stress response or put fearful events into context
- Babies rely on caregivers to help them manage stress
- Chronic stress during sensitive periods of development has a disproportionate effect, and most of the sensitive periods occur early in life

Source: Adapted from: Dr. M. Hill. Early Brain & Biological Development Lecture. 2010.
<http://ebbd.banffcentre.ca/course/view.php?id=2>

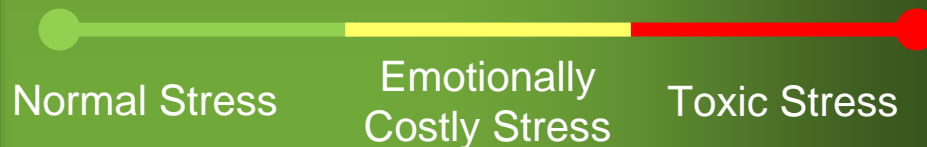
How Babies Regulate Stress



Core Concept: Healthy Development Occurs in the Context of a Relationship

- What stresses a baby?
- Babies are stressed when they fail to get the expected response from their caregiver. The Still Face Experiment illustrates this very well
- How many people found that stressful to watch? Most people do. Why?
- The baby wasn't hurt physically in any way, she wasn't dirty and she doesn't appear to be hungry. Why is it so upsetting?
- How did the baby respond? What cues did she use to try to engage her mother in an interaction?
- What do you think the baby would do if the mother stopped interacting with her all the time?
- What if the baby couldn't predict how the mother would respond?
- What if the mother responded sometimes but not others, or if sometimes she was scary and other times she was caring?
- What if the mother only responded when the baby got very upset?

Not All Stress is Bad



Source: Zero to Three. National Scientific Council on the Developing Child. Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper #3.2005. <http://www.developingchild.net>

Core Concept: Toxic Stress Damages Developing Brain Architecture

- Some stress is normal and **even necessary** – like the stress babies experience when they are learning to sleep alone, or when they get a vaccine
- Babies need some opportunities to experience discomfort to learn how to regulate their stress response
- Some stress, the death of a parent for example, can be emotionally costly but it is manageable if the baby has support
- All families go through difficult times; with support and nurturing care the baby can overcome it
- Every child is different – what is tolerable stress for one child will be unmanageable for another. It all depends on whether the child can rely on adults to help them and it also depends on what else the baby has to contend with
- Too many stressors, even smaller ones, can create a toxic stress environment
- When researchers refer to toxic stress they are talking about something quite apart from normal events and stressors or one time events. (Ask the audience why it's called Toxic Stress? Do they really meant toxic?)
- Yes - toxic stress is excessive, prolonged stress (stress that is chronic, pervasive and uncontrollable)
- The brain is bathed in stress hormones that disrupt the developing brain architecture as it's being built - and over time, can cause wear and tear to the other organs of the body. This is why the severity, timing and chronicity of stress are significant
- Stress that occurs early and lasts for long periods impacts learning and behaviour in the short term and can impact physical and mental health throughout the life span. It is sometimes called Cumulative Stress, referring to the cumulative effects over time, not just the immediate impact

Source: Zero to Three. National Scientific Council on the Developing Child. Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper #3.2005. <http://www.developingchild.net>

What is Normal? Period of Purple Crying

- **P**eaks around 2 months or so
- **U**nexpected and hard to predict
- **R**esists soothing
- **P**ain-like face
- **L**ong-lasting
- **E**vening – more likely in the evening



This can be a dangerous time for infants in a high risk environment

Source: Purplecrying.info

Core Concept: Toxic Stress Damages Developing Brain Architecture

- For parents and professionals it can be challenging to distinguish between developmentally normal stress and toxic stress
 - For example, the Period of PURPLE Crying is a normal phase of development that begins at about 2 weeks of age and continues until about 3-4 months
 - All babies go through this period - some can cry a lot, some far less, but they all do go through it. The crying tends to be unexpected - it comes out of the blue. Nothing seems to soothe them
 - During this phase of a baby's life he can cry for hours and still be healthy and normal
 - Babies who are in an otherwise safe and supported environment can overcome this difficult phase but when parents are immature, under stress, preoccupied with poverty or insecure housing, or when the environment is violent or unpredictable, this can elevate the risk to the baby very quickly and dramatically
- It is important to consider both developmentally normal difficulties and the context of adversity when evaluating the needs of the caregiver and child, or the need for immediate intervention.

Source: Purplecrying.info

What is Toxic Stress?

- *Uncontrollable, frightening, unpredictable & pervasive*
- *Persistently elevated stress response*
- *Highly individual*
- *Persistent stress exacts a price*

Source: Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.

Core Concept: Toxic Stress Damages Developing Brain Architecture

- Uncontrollable, unpredictable & pervasive adversity – (Ask audience what might constitute toxic stress vs. developmentally normal stress)
- Persistently elevated stress response
- Highly individual – what is tolerable for some is toxic for others
- Persistent stress exacts a price in terms of wear & tear on the organs including the brain – especially the hippocampus and prefrontal cortex and especially when it continues across developmental phases

Source: Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.

Long-Term Health Outcomes of Chronic Stress Early in Life

- *Coronary artery disease*
- *Chronic pulmonary disease*
- *Cardiovascular disease*
- *Asthma*
- *Cancer*
- *Obesity*
- *Type II Diabetes*



Source: Shonkoff, J.; Boyce, W.T.; McEwen, B. (2009): Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework *JAMA*. 2009;301(21):2252-2259
Dr. M. Hill. Early Brain & Biological Development Lectures. 2010. <http://ebbd.banffcentre.ca/course/view.php?id=2>

Core Concept: Healthy Development Depends on Relationships

Source: Shonkoff, J.; Boyce, W.T.; McEwen, B. (2009): Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework *JAMA*. 2009;301(21):2252-2259. Dr. M. Hill. Early Brain & Biological Development Lectures. 2010. <http://ebbd.banffcentre.ca/course/view.php?id=2>

Traumatized Babies are Challenging

- *Cue giving difficulties*
- *Self soothing*
- *Developmental delays*
- *Hyper-compliance or tantrums*
- *'Good baby'*
- *Food, sleep issues*
- *Other congenital factors quickly escalate risk*

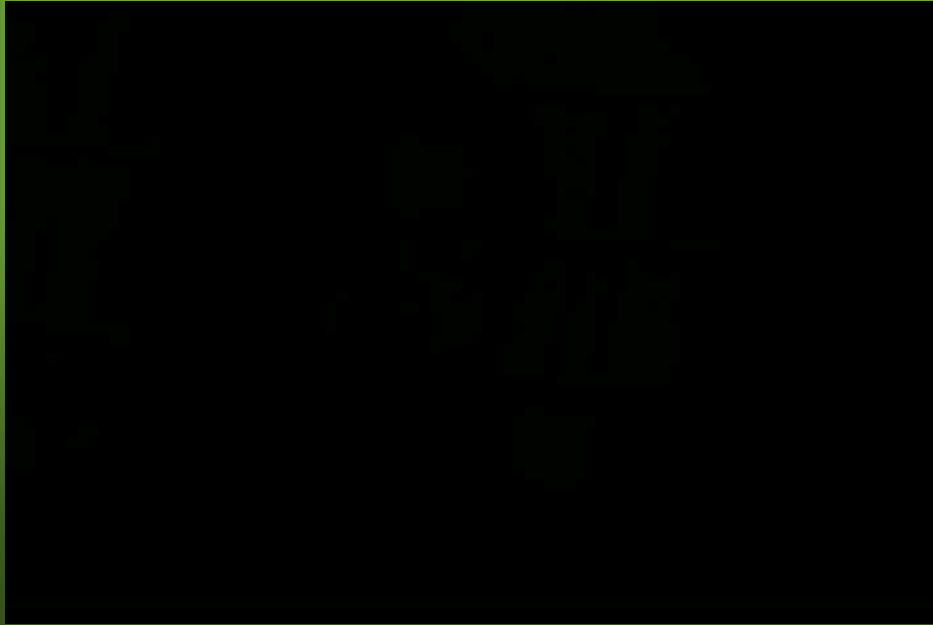
Source: Wotherspoon, E., Hawkins, E., Clinton, J., Vellet, S., Pirie, J. Infant emotional trauma: Bringing the science of early childhood development into family court, Michigan Child Welfare Law Journal, 13(2). Spring, 2010.

Core Concepts: Toxic Stress Damages Developing Brain Architecture - Healthy Development Depends on Relationships

- Trauma for a baby is different. Its not the one-time traumatic event like a fire or flood
 - Babies who are chronically stressed become traumatized over time. When this happens they can be puzzling to read and difficult to care for
 - They can show their distress in a number of ways; children will tell you their stories if you are observant
- 1) Sometimes babies whose needs are chronically neglected actually become easier to care for because they have learned not to make demands. A good baby is not always a happy baby. When babies stop giving cues to their needs, they become puzzling for adults to understand. If the parent was already struggling to read the baby's cues, it becomes even more difficult if the baby is no longer cuing the caregiver. That is why we need to intervene quickly to support parents and children who are stressed
 - 1) Some babies become very demanding and inconsolable, even when they are offered soothing. These babies have not learned how to use the caregiver to help them regulate physical and emotional response to stress
 - Babies often show their distress through sleep and eating problems. When babies become hard to read, or hard to soothe, they are in greater danger of frustrating their caregiver. If there are other risk factors it can quickly escalate the chances of further mistreatment

Source: Wotherspoon, E., Hawkins, E., Clinton, J., Vellet, S., Pirie, J. Infant emotional trauma: Bringing the science of early childhood development into family court, Michigan Child Welfare Law Journal, 13(2). Spring, 2010.

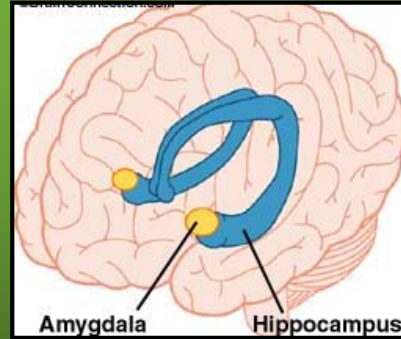
Trauma Symptoms in Infants



- Ask members of the audience if they have ever seen children who looked like these children?
- Would it concern you if a child was inconsolable one time, but not most of the time?
- What if every time you saw the baby the mother was struggling to soothe him/her?
- What would you do if you were concerned?

When Babies Witness Violence

- *Amygdala decides if stimulus or event is frightening*
- *Hippocampus links the frightening event to a context*
- *Together they trigger a stress response*



Source: Harvard Center for the Developing Child Working Paper #9: Persistent Fear & Anxiety Can Affect Young Children's Learning & Development

Core Concept: Toxic Stress Damages Developing Brain Architecture

- Walking people through how the brain and body work to respond to a threat is important to understanding why it's so bad for young children to experience stress without comforting

Source: Harvard Center for the Developing Child Working Paper #9: *Persistent Fear & Anxiety Can Affect Young Children's Learning & Development*

Trauma Lives in the Body

- *Fearful events become linked with context*
- *Even young babies can 'learn' to be fearful (fear conditioning)*
- *Once conditioned, the context can trigger a stress response*

Source: Harvard Center for the Developing Child Working Paper #9: *Persistent Fear & Anxiety Can Affect Young Children's Learning & Development*

Core Concept: Toxic Stress Damages Developing Brain Architecture

- Fearful events become closely linked with the context that accompanied them
- Even very young children (within a few weeks after birth) can 'learn' to be fearful (fear conditioning) even though they don't recall events
- The context can trigger a stress response involving the whole body – long after the fearful event is over

Source: Harvard Center for the Developing Child Working Paper #9: *Persistent Fear & Anxiety Can Affect Young Children's Learning & Development*

Trauma Crosses Generations

- Childhood trauma has been linked to later parenting challenges
- *Heightened sensitivity + impaired response to stress*
- *Communities that experience widespread traumatic events may see inter-generational effects long afterwards*

- A history of early childhood abuse, disruptions in caregiving or other trauma has been linked to later difficulties forming a close emotional tie with offspring as well as impairments to the stress response system
- The problem is that individuals exposed to chronic and unrelenting stress early in life are more sensitive to stress and less able to regulate their stress response appropriately
- When traumatic events affect an entire community, such as the '60s scoop' or residential school policies - it's reasonable to expect that trauma will be communicated across generations through a dysregulated response to stress and/or attachment difficulties with offspring
- This is why many First Nation and refugee families continue to struggle, long after the trauma has passed. This also explains why placement disruptions for children in foster care predict mental health, school, socialization and behavioural difficulties which lead to further placement instability

Promoting Infant Mental Health Relationships is the Key

1. *Reading cues accurately*
2. *Face-to-face at child's level*
3. *Comfort strategies*
4. *Child led play*



Refer to the parent handout

Promoting Infant Mental Health Stack the Odds in the Child's Favour

1. *Tackle problems that contribute to stress*
2. *High quality child care*
3. *Routine screening*
4. *Celebrate family strengths*



Refer to handouts for the professional group you are presenting to (health, child welfare or early childhood/community) under What should I do if I am concerned? Modify this slide according to the specific local resources or particular strategies you want to emphasize. These are suggestions:

- Generate ideas from the group – what kinds of things do they do to help parents and children now?
- What works really well?
- What hasn't been as helpful?
- Talk about using a strength based approach – pointing out the things that are working well
- Parents are inundated with advice/criticism implied or more blatant. The professional who is in the habit of pointing out the small victories has a more memorable impact

Take Home Messages (Review)

1. *Why are early experiences so important?*
2. *Why are relationships so important?*
3. *What are the take-home messages?*



- because development is happening so quickly in the first three years, early experiences have a disproportionate effect on later health mental health, and cognitive development
- relationships are important because:
 - o adult caregivers are the primary means of delivering experiences to the baby (good or bad)
 - o babies regulate their stress through their relationship with a primary caregiver
 - o early relationships form the template for future relationships and are the foundation for social emotional growth

THE TAKE HOME MESSAGES ARE:

1. Early experiences make a difference
2. Babies develop in the context of relationships

Thank
You!



Acknowledgements for Video Clips

- Attachment Network of Manitoba - *Listening to Baby*
<http://www.attachmentnetwork.ca/index.php?act=viewProd&productId=2>
- Hertzman, Clyde. *Sensitive Periods in Early Brain Development*
<http://www.youtube.com/HumanEarlyLearning#p/u/1/M89VFlk4D-s>
- Klaus M, Klaus P. *The Amazing Talents of the Newborn: A Video Guide for Healthcare Professionals and Parents*; Johnson & Johnson Pediatric Institute
www.parentsaaction.com Phone: 877 565-5465 Fax: 877 565-3299
- Tronick, E. *Still Face Experiment*
<http://www.youtube.com/watch?v=apzXGEbZht0>
- Santa Barbara Graduate Institute – *Trauma, Brain and Relationship: Helping Children Heal* Email: tr@sbg.i.edu Phone: 805 963-6896
order from: traumabrainrelationship@gmail.com
- Attachment Network of Manitoba - *Listening to Baby*
<http://www.attachmentnetwork.ca/index.php?act=viewProd&productId=2>

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http://developingchild.harvard.edu/resources/reports_and_working_papers/working_papers/

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- Alberta Centre for Child Family & Community Research (ACCFCR). www.research4children.com
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www.calgaryhealthregion.ca/mh/collaborative
- Circle of Security. www.circleofsecurity.org/
- Dr. M. Hill - Early Brain & Biological Development Lectures.
<http://ebbd.banffcentre.ca/course/view.php?id=2>
- FrameWorks Institute. www.frameworksinstitute.org
- Mind in the Making. www.mindinthemaking.org
- Zero To Three. zerotothree.org