

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 Do Babies REALLY Need?

Listening to Baby Exploration

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

In this clip you will see how babies use mothers to support exploration and play.

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>

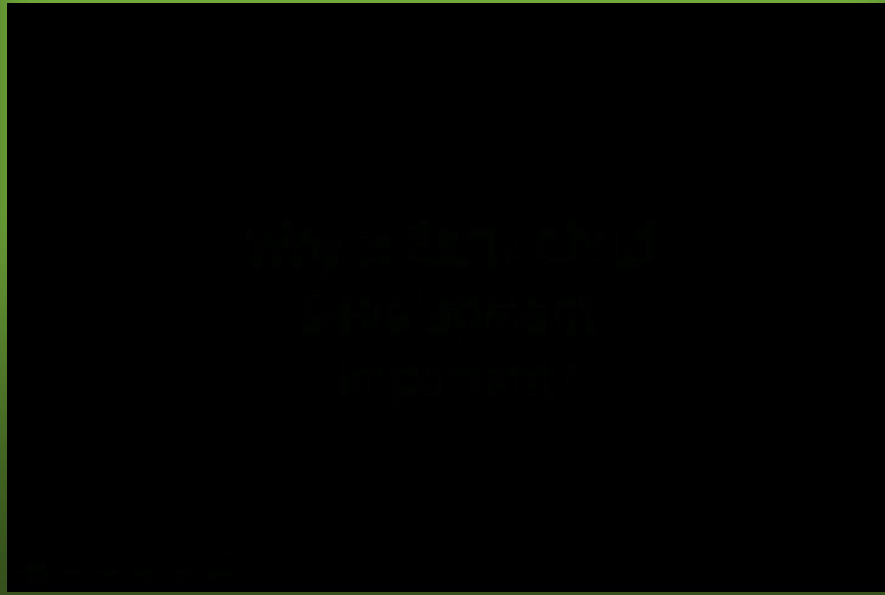
How the Brain Develops: Brain Growth in the Early Months



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).

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



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>

Take Home Messages (Review)

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

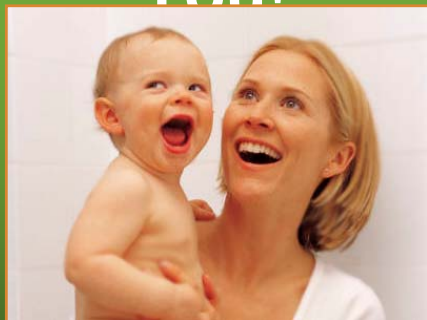


- because development is happening so quickly in the first three years, early experiences have a disproportionate effect on later health mental health, and cognitive development
- relationships are important because:
 - o adult caregivers are the primary means of delivering experiences to the baby (good 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.parentsaction.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@sbgi.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>

Acknowledgements

This presentation was prepared for the BC Healthy Child Development Alliance by Evelyn Wotherspoon (www.evelynwotherspoon.ca), in partnership with the Public Health Agency of Canada (PHAC). The views expressed do not necessarily reflect the official views of the Public Health Agency of Canada.

Research findings were mainly drawn from the Harvard Center for the Developing Child Working Papers, available for download at -
http://developingchild.harvard.edu/resources/reports_and_working_papers/working_papers/

Special acknowledgements:

- Alberta Centre for Child Family & Community Research (ACCFRC). www.research4children.com
- Alberta Health Services Collaborative Mental Health Care Team.
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