Building Healthy Brains: Implications for Your Daily Work

Sheri L. Hill, PhD
Early Childhood Policy Specialist
hill@earlychildhoodpolicy.com
www.earlychildhoodpolicy.com
Mobile: 206.940.0892

Today’s Topics
- Relationships, Brains & Memory
- Relationships, Stress & Risky Beginnings
- Top Five To Do’s
- Resources

PP Handout at:
www.earlychildhoodpolicy.com/ECTrain.html

The Developing Brain

Brain Changing Prime Time
- Newborn - 400 grams
- 3 Year Old - 1100 grams
- Adult - 1500 grams

Experience Changes the Brain
- “…our experiences are what create the unique connections and mold the basic structure of each individual’s brain.”
- “Neurons that fire together, wire together.” - Hebb’s Law
  Donald Hebb (1949)
- Today will change your brain!
Building “Normal”

“Normal is as normal does --- every day.” 

(Sheri Hill)

Slide 7

The Power of Relationships:

Slide 8

Babies Come Relationship Ready

- Monkey See – Monkey Do
- Video Learning a No Go for Babies

http://ilabs.uw.edu/

www.pbs.org/wgbh/nova/body/mirror-neurons.html

Slide 9

Early Relationships Are Important!!

“Each achievement - language and learning, social development, the emergence of self-regulation - occurs in the context of close relationships with others.”

From Neurons to Neighborhoods, National Academy of Science, 2000

Slide 10

Skills Develop In Relationships

“The computational brain is controlled by the social brain.” Shonkoff, Seattle, 1/7/10

Slide 11

Skills Impact Relationships

Slide 12
Relationships Move Change for Families

- Provider-Parent Relationships Predict Intervention Outcomes
  (Kelly, 1999 in Edelman, 2004)
- “It takes a relationship to build a relationship.”
  (Shahmoon-Shanok, 2003 in Foley & Hochman, 2006)

“I don’t care how much you know until I know how much you care.” -- Opalanga Pugh

(Browne and Talmi, 12/10/10, NTI Phoenix, AZ)

Learning About Relationships From the Very Beginning

Babies Do Remember!

The power of routines.

Expectations → The Way the World “Is” → What it Means

First Memories - Implicit Memory

“This summary of experiences becomes part of memory.

“Implicit memory is a form of nonverbal memory that is present at birth and continues throughout the life span.”

Amygdala
Explicit Memory

- Autobiographical Memory
- Narrative Memory
- Hippocampus Based
  - Not coming fully online until about 3 and continues development until early 20s

Relationships, Stress, and Risky Beginnings

Relationships Key to Setting Biological Stress Systems

Stress Types
- Positive
- Tolerable
- Toxic

National Scientific Council on the Developing Child
www.developingchild.net

“The good, the bad and the ugly.” (Tronick)

Setting the Stress Thermostat

Elevated Stress Risk

- Children under age 6 are disproportionately exposed to trauma, particularly interpersonal violence.
  - Chadwick Center, 2012
- Active Duty Children – 40% 0-5
- National Guard Families – 25% 0-5
  - www.zerotothree.org/about-us/funded-projects/military-families/
  - www.babiesonthehomefront.org
- 20% of youth in custody have or are expecting a child
  - (Richeda et al 2015)

Washington Baby Facts

- 1 in 4 maltreated children <3
- 44% poor or near poor 0-3
- 26% residential mobility in year 1
- 39% entering foster care <3
- Disproportionately children of color

Toxic Stress ➔ Disrupted Brains

- Relationship trauma by two ➔ Lower IQ scores (7.25 points) at 5 & 8
  - (Enlow, et al 2012)
- Poverty ➔ Cognitive disparities by 9 months
  - Smaller brains
  - [hippocampus, frontal and temporal lobes]
  - JAMA Pediatrics July 2015

Disrupted Behavior
Flying out of Child Care

- Illinois 0-3 Expulsion
- 42% of programs unable to handle social-emotional problems (Colin et al., 2003)
- US Preschool Expulsion
  - African American - 48% >1
  - 18% of enroll (US Dept of Ed, 2015)
- WA Pre-K Expulsion
  - 1 in 10 teachers
  - Twice the school-age rate

Disrupted Bodies: Violence and Breath

Community violence and parental conflict impacts early childhood lung function.

- Similar magnitude as:
  - Prenatal tobacco smoke exposure
  - Postnatal environmental tobacco smoke
  - Suglia, et al. (2008)

“Violence takes their breath away.” (S.Hill)

“Early Life Experiences are Built Into Our Bodies (for Better or for Worse)”
Shonkoff, 1/7/10


TOP FIVE

1) Address Relationships
2) Support Social Emotional Development, Mental Health & Well Being
3) Support and Monitor Development
4) Support Stability
5) Respect History

Everybody’s Relationship Story
Matters …

- What info do we rely on?
- What do we prefer?
- Why am I acting just like my mother?

- Babies Bring Up Your Stuff!!! …
  - Powerful Remembering Context (Winnicott)
  - Video Courtesy of Circle of Security in Spokane
    - www.circleofsecurity.net

Sheri L. Hill, PhD, LLC Copyright 2015, All rights reserved.
Make Time to Cultivate Security

- Be warm & sensitively attuned
- Be consistent
- Respond quickly to baby's cries
- Be strong at repair

www.zerotothree.org/parenting-resources/MOEM/moem-series-1.html

Directly Address Attachment and Relationships

Sometimes intervention is needed to get things "right side up" for young children and their caregivers.

TOP FIVE
1) Address Relationships
2) Support Social Emotional Development, Mental Health & Well Being

Value Caregiver Emotions and Mental Health & Well Being

How are the grown-ups feeling?

Value Social-Emotional Development

Talk about FEEL-ings not just DO-ings.

www.parentingcounts.org http://emotioncoaching.gottman.com/
Support Young Children’s Mental Health

- Key Capacities
  - Experience, regulate and express emotions
  - Form close and secure interpersonal relationships
  - Explore the environment and learn

- Health & Well-Being
  - Synonymous with healthy social-emotional development.

www.zerotothree.org

Babies Can Suffer & Need Treatment

- Traumatic Stress Responses (PTSD) and Depression
  - Identified in Babies 3-6 months old
- ZERO TO THREE: National Center for Infants, Toddlers, and Families. (2005) Diagnostic Classification of Mental Health and Development Disorders of Infancy and Early Childhood, Revised
  - *Or in short – the DC: 0-3R
  - DC: 0-5 Coming December 2016!!!
- Washington Association for Infant Mental Health
  - www.wa-aimh.org

TOP FIVE

1) Address Relationships
2) Support Social Emotional Development, Mental Health & Well Being
3) Support and Monitor Development

Talk Talk Talk Talk Talk

- Give those little scientists lots of data points.
  - Singing,
  - Talking, and
  - Reading with Babies

www.ted.com/talks/patricia_kuhl_the_linguistic_genius_of_babies.html

Keep an Eye on Development!

~1 in 6 children have developmental needs

Smoothing the road right from the start.

Developmental Screening @ WithinReach

www.withinreachwa.org and www.parenthelp123.org

- Help Me Grow Washington
  - A free program that connects families to the resources needed to give all kids the best start and to make sure they are growing and developing on track.
- Two Ways to Screen
  - Call our friendly and knowledgeable staff at the Family Health Hotline 1-800-322-2588 to learn about developmental screening for your child and the Ages and Stages Questionnaire,
  - or you can get started right now. It's easy and there is no cost involved!
**TOP FIVE**

1) Address Relationships
2) Support Social Emotional Development, Mental Health & Well Being
3) Support and Monitor Development
4) Support Stability

---

**Disruptions to Relationships Matter**

Young children grieve when their attachment relationships are disrupted - regardless of whether we as adults would consider it a positive, less than adequate or even abusive relationship.

*Neurons to Neighborhoods*

---

**Sitting on Stable Shoulders**

What can you keep the same for me?

---

**TOP FIVE**

1) Address Relationships
2) Support Social Emotional Development, Mental Health & Well Being
3) Support and Monitor Development
4) Support Stability
5) Respect History

---

**Keep in Mind: Knowledge and Relationships Are Based in Culture**

“A baby can be understood only through the cultural outlook of the adults interpreting him.”

*Lieberman (1990)*

---

**Early Experiences Matter**

**Everyone**

Brings Unique Experiences to the Interaction

*Risks & Resiliencies*

*Miami-Dade Child Parent Psychotherapy*
Reflect on What You Bring

What factors influence your thinking?

What is your shark music?

TOP FIVE

1) Address Relationships
2) Support Social Emotional Development, Mental Health & Well Being
3) Support and Monitor Development
4) Support Stability
5) Respect History

Help Everyone Remember

- You can't spoil a baby!!
- And .....
Resources to Help

General Early Childhood
(Starting Mostly in WA)

\( S = \) Resources Available in Spanish

Spotting Challenges, Accessing Support

Individuals with Disabilities Education Act (IDEA) Part C

Provides individualized early intervention services to families with children birth to three who have developmental delays or disabilities.

- Part C: Individualized Family Service Plans (IFSP) 0-3
- Part B: Individualized Education Plans (IEP) 3-21

WA Part C aka Birth to Three
Early Support for Infants and Toddlers

Family Health Hotline
1-800-322-2588

www.del.wa.gov/esit

Please Ask Video
www.youtube.com/watch?v=JoALG6mSUJU

Guiding Concepts Video
www.youtube.com/watch?v=QcAQZxOQU&feature=youtube

Supporting Caregivers

- WA State Postpartum Depression Awareness Campaign: Speak Up When You're Down
  - www.del.wa.gov/development/strengthening/speakup.aspx
- Resources for Kinship Caregivers
  - www.dhs.wa.gov/kinshipcare/
  - Great example there of an easy form so that relative and other non-parental caregivers can take kids in for health care
- Washington Information Network (WIN) 2-1-1
  - www.win211.org

How is the child developing?

- Child Profile – Developmental Charts and Letters
  - www.childprofile.org
- www.cdc.gov/actearly
- www.cdc.gov/parents/infants/
- The Importance of Early Intervention for Infants and Toddlers with Disabilities and their Families.
  - July 2011 Fact Sheet
  - www.nectac.org/~pdfs/pubs/importanceofearlyintervention.pdf

Home Visiting Programs and Parent Support in WA

Support Development and Reduce Child Abuse and Neglect

- Department of Early Learning
  - www.del.wa.gov/development/visiting/
- Thrive by Five Washington
  - www.thrivewa.org
- Parent Trust for Washington Children
  - www.parenttrust.org
- Family Help Line – 1.800.932.HOPE

www.del.wa.gov/development/strengthening/speakup.aspx

www.youtube.com/watch?v=GcAQZxOQU&feature=youtube
Developmental Resources for Parents

www.zerotothree.org

Many of the resources at their bookstore come in Spanish and free materials (see below) can be purchased there in full color print.

- What’s Best for My Baby and Me?: A 3-Step Guide for Parents (comes in packs of 12)
- Dr. Hill’s favorite for families
- Tons of Free Parent Brochures and Guides


WA Early Learning Plan

- DEL: www.del.wa.gov/plan/
- Infant and Toddler Plan
  www.del.wa.gov/publications/research/docs/Birthto3Plan.pdf
- Birth to 3 Subcommittee Investment Rec’s FY13-15
- Office of Superintendent of Public Instruction
  www.k12.wa.us/earlylearning/

Regional Public Health Activity

- Northwest Bulletin
  - Serving maternal and child public health professionals in AK, ID, OR, and WA
  - http://depts.washington.edu/nwbfch/
- Topics of Interest
  - Monitoring the Development and Health of Young Children (Spring 2014)
  - Health Care Reform and Maternal and Child Health in Region X (Fall 2013)
  - Federal Home Vetting Legislation and its Implementation in Region X (Spring 2013)
  - Place Matters: Preventive Health Programs to Reach Rural Women (Fall 2012)
  - Systems and Services Supporting Maternal and Child Health in Rural Areas (Spring 2012)
  - Preventing Fetal Alcohol Spectrum Disorders Starts with Young Girls (Fall 2011)
  - Emerging Issues in Maternal and Child Health (Spring 2011)
  - Military Family Health (Fall 2010)

National Scientific Council on the Developing Child

www.developingchild.net

- Collaboration - neuroscience, early childhood development, pediatrics, and economics.
- Don’t Miss the In Brief Series!
- Short Videos and 2-Page Briefs On:
  - The Science of Early Childhood Development
  - The Impact of Early Adversity on Brain Development
  - Early Childhood Program Effectiveness

Early Childhood Policy Websites

- ZERO TO THREE Policy Center
  - General Link - They send out great info and updates!
  - www.zerotothree.org/public-policy/
  - Early Intervention Page
- For Our Babies! www.forourbabies.org
- Ounce of Prevention Fund www.ounceofprevention.org
- First Five Years Fund www.ffyf.org
Some Recommended Very Approachable Books

- How to Measure a Relationship: A Practical Approach to Dyadic Interventions (Stroud, 2012)
  - Has companion DVD in English and Spanish
- Intentional Living: Finding the inner peace to create successful relationships (Stroud, 2014)
  - www.drbarbarastroud.com (links to both of the above)
- Your Baby is Speaking to You: A visual guide to the amazing behaviors of your newborn and growing baby. By Dr. Kevin Nugent (Photos by Abelardo Morell)

Resources to Help

Trauma

S = Resource is Available in Spanish

Resources on Trauma

- In WA: Addressing Secondary Trauma
  - www.tramastewardship.com
- Office of Juvenile Justice and Delinquency Prevention & National Council of Juvenile and Family Court Judges
  - www.ojjdp.gov & www.njcj.org
- Lots of focus on trauma-informed practice
- Don’t Miss: Toward a Conceptual Framework for Trauma-Informed Practice in Juvenile and Family Court (July 2013)
  - www.njcj.org/sites/default/files/Summer%202013%20Today%20Magazine%20WEB.pdf

- The ChildTrauma Academy
  - www.childtrauma.org
- Yale Childhood Violence Trauma Center
  - http://medicine.yale.edu/childstudycenter/ctvc/

Trauma Readings

(In Reverse Chronological Order)

- Understanding the Effects of Maltreatment on Brain Development
  - www.childwelfare.gov
  - www.nctsn.org/nctsn_assets/docs/reports/HarrisManuscript.pdf
More Trauma Readings


Child Parent Psychotherapy Key Readings


National Technical Assistance Center for Children's Mental Health

http://gucchd.georgetown.edu/67211.html

- Georgetown U Center for Child & Human Development
- Lots of great resources and free training conference calls
- Center for Early Childhood Mental Health Consultation: www.ecmhc.org
  - Great “Soc-Emot Tips for Providers/Families w/Infants”
  - Free online Trauma tutorial
  - Free downloadable short books to assist caregivers in tracking developmental progress and help young children develop an emotional vocabulary.

Depression, and Infant Mental Health Trauma Resources

www.ProjectABC-LA.org

- Infant Mental Health materials for parents and professionals. Don’t miss their resources page: www.projectabc-la.org/resources/project-abc-resources/
  - Trauma Brochure for Parents: What is Early Childhood Trauma?
- Short video related to Infants of Depressed Mothers Living in Poverty: Opportunities to Identify and Serve
  www.urban.org/publications/500205.html

References (not otherwise listed)


References (not otherwise listed)

References (not otherwise listed)

- Richeda, B; Smith, K; Perkins, E Simmons, S; Cowan, P; Cowan, CP; Rodriguez, J; Shaffer, C; Barr, R (2015). Zero to Three Journal, vol. 35, no. 5, p.25.

References (not otherwise listed)