

A Relational Health Perspective on Early Development

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“Mom, why are so many songs written about love? And why are the songs always so sad?”

- E, age 5 years



Image: nbcnews.com



Image: aarp.com



Images: pixabay.com



What *IS* a relationship? And why do relationships matter?

Affinity, Association, **Connection**, Kinship, Linkage

-- MW

- **CONNECTION**

- “Something works in me because of what you bring to the table.”

<https://shcs.ucdavis.edu/wellness/social/#.VwwWH7n2aJI>



Image: cognitive-surplus.com



Figure 3. Cloth mother surrogate.

“...The surrogate was made from a block of wood, covered with sponge rubber, and sheathed in tan cotton terry cloth. A light bulb behind her radiated heat. The result was a mother, soft, warm, and tender, a mother with infinite patience, a mother available twenty-four hours a day, a mother that never scolded her infant and never struck or bit her baby in anger. The data obtained make it obvious that **contact comfort** is a variable of overwhelming importance in the development of affectional responses...”

Image/Quote: Harlow, H. F. (1958).
The Nature of Love. *American Psychologist*, 13, 673-685.

Beyond Contact Comfort? Back to Music.

- Fallin' (Alicia Keys)
- Come Away with Me (Norah Jones)
- Crazy in Love (Beyonce)
- Better as a Memory (Kenny Chesney)
- Black Coffee in Bed (Squeeze)
- She Shouldn't Be Gone (Blake Shelton)

JOY

EXHILARATION

NURTURANCE/SECURITY

“ANGELS”

CO-REGULATION



Image: bhg.com

DISCONNECT

REGRET

GRIEF, LOSS, SEPARATION

“GHOSTS”

Why study relationships?

Positive relationship qualities are associated with a range of positive correlates and outcomes (social, emotional , language, physical, cognitive)

- ❖ Early parent-child relationships (often described as attachments)
 - ❖ Peer relationships (friendships)
 - ❖ Intimate partner relationships
 - ❖ Relationships at work (horizontal and hierarchical)
- ❖ So.... We know relationships matter.

The Challenge of Studying Relationships

- ❖ Engaging Participation
- ❖ Assessment and Measurement (tools, contexts, systems)
Different literatures focus on different features of relationships and they may not “talk” to each other.
- ❖ Recognition of Power and Bias
- ❖ Cultural Responsiveness: Learning & Relating
Cultural beliefs, influences, expectations
(e.g., mother/son? mother/mother-in-law)

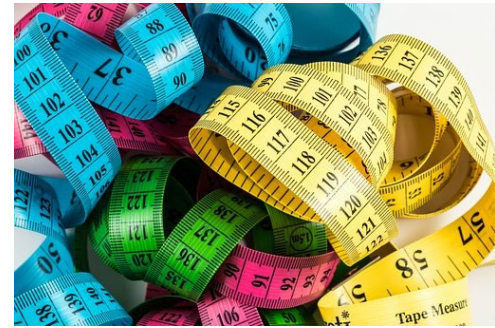


Image: pixabay.com

Which Relationships Should We Study?

Acknowledging Our (Many) Relational Contexts

Relationships within Families

- Parent-Child
- Intimate Partner/Marital
- Coparenting
- Intergenerational
- Sibling

Relationships within Work Settings

- Co-Worker
- Supervisor-Supervisee
- Professional-Client

Relationships within Childcare Settings

- Peer
- Provider/Teacher-Student
- Provider/Teacher-Parent

Relationships at School

- Peer
- Teacher-Student
- Teacher-Parent

Relationships within the Community

- Health Care Provider/Parent-Child
- Education/Prevention/Intervention Settings
CCF; Juega Conmigo; Creche Conmigo

And more

❖ Defining Relational Health

Relational health reflects a sense of “**connectedness**” with attuned others, including caregivers, family members, and other individuals within the community.

- Hambrick EP, Brawner TW, Perry BD, Brandt K, Hofmeister C, Collins JO. Beyond the ACE score: examining relationships between timing of developmental adversity, relational health and developmental outcomes in children. *Arch of Psychiatr Nurs*. Published online November 9, 2018. doi:10.1016/j.apnu.2018.11.001.

❖ The Value of a Relational Health Approach: (*REACH*)

Reduces blame and burden/destigmatizes difficulty

- (parents affect children; children affect parents; last CCF Lecture!)

Emphasizes the establishment and maintenance of connection (connection is a process)

Acknowledges how relationships impact health and well-being across the lifespan

- Wider, developmental lens --- bridges physical and psychosocial health

Considers the role of “other” as co-facilitators or co-supporters of healthy relationships

- E.g., A multi-level approach
- NICU Specialists, Pediatricians and Health Care Providers, Home Visiting and Early Childhood Intervention Professionals, Child Care Providers and Early Childhood Educators

Hopeful – repair is possible

Relational Health: Parent-Child Relationships

*“If a community values its children it must
cherish their parents.”*

-- John Bowlby

❖ Theoretical Contributions to the Study of Parent-Child Relational Health – ABC

Attachment Theory (e.g., Bowlby and Ainsworth)

Bronfenbrenner's Bioecological Model (e.g., Bronfenbenner & Morris)

Calming Cycle Theory (e.g., Welch & Ludwig, Hane, Browne and NSP colleagues)

- And more (e.g., Family Systems Theory)

Attachment Theory (Ainsworth, Bowlby)

Has been applied across the lifespan.

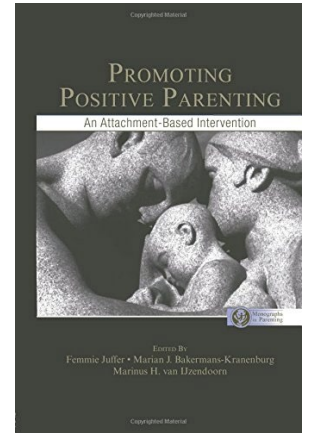
- ❖ Parent-infant attachment security

- ❖ Secure/Insecure

- ❖ Increase security? Increase parental sensitivity.



Image: amazon.com



- ❖ Attachment styles in romantic and intimate partner relationships

- ❖ The intergenerational transmission of attachment

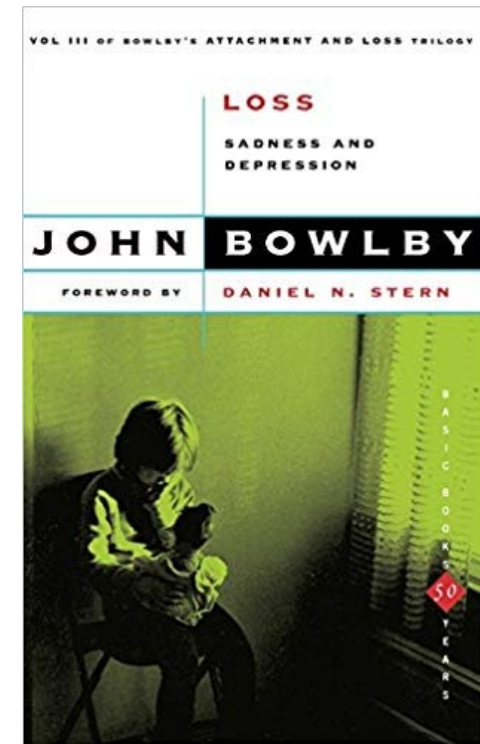
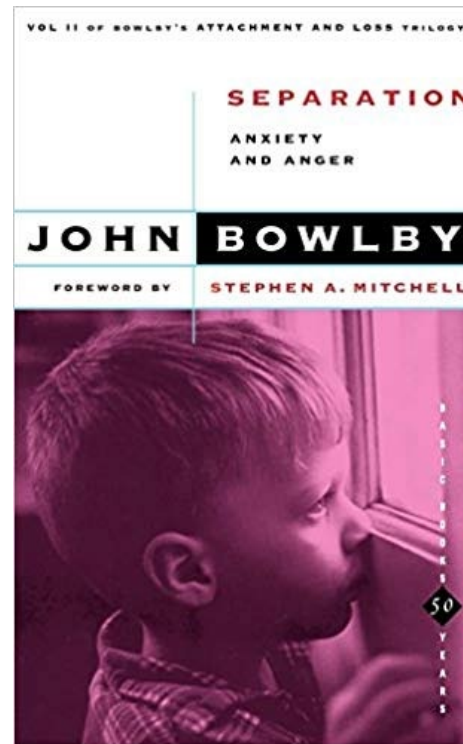
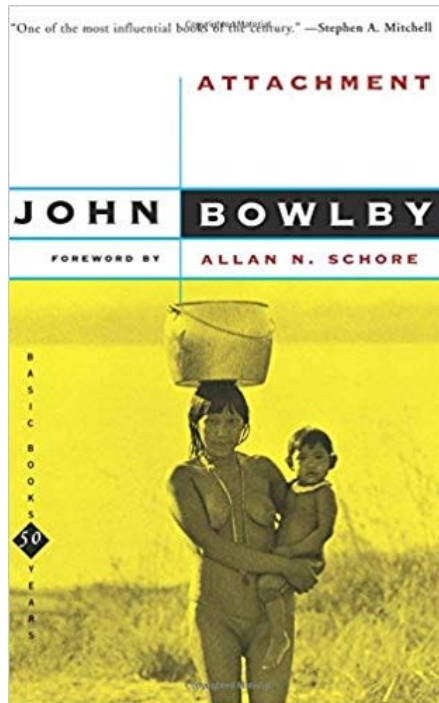
- ❖ Adults' representations of attachment histories

- ❖ The promise of RF – reflective functioning (“hold” the other)



Image: abcintervention.org

Parent-Child Attachment Processes

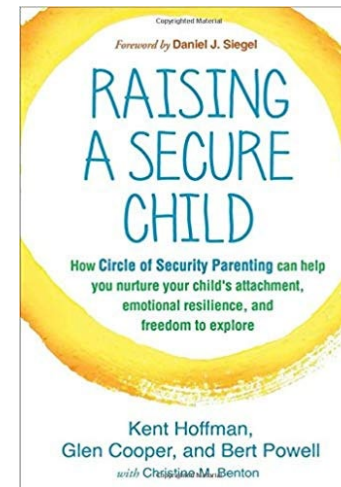


Increasing Caregiver Sensitivity: Circle of Security

“Every time you show that you understand how your child feels and what your child wants, you’re demonstrating the power of a primal connection that all of us are born seeking. Every time you help your baby or toddler manage the discomfort and frustration of being a newcomer to the human condition, you’re teaching your child acceptance of emotions (even the “ugly” ones), of himself, and of others.

- Hoffman, Cooper, and Powell (2017): *Raising a Secure Child*

Image: amazon.com



Bronfenbrenner's Bioecological Model

“In order to develop normally, a child requires progressively more complex joint activity with one or more adults who have an irrational emotional relationship with the child. Somebody’s got to be crazy about that kid. That’s number one. First, last and always.”

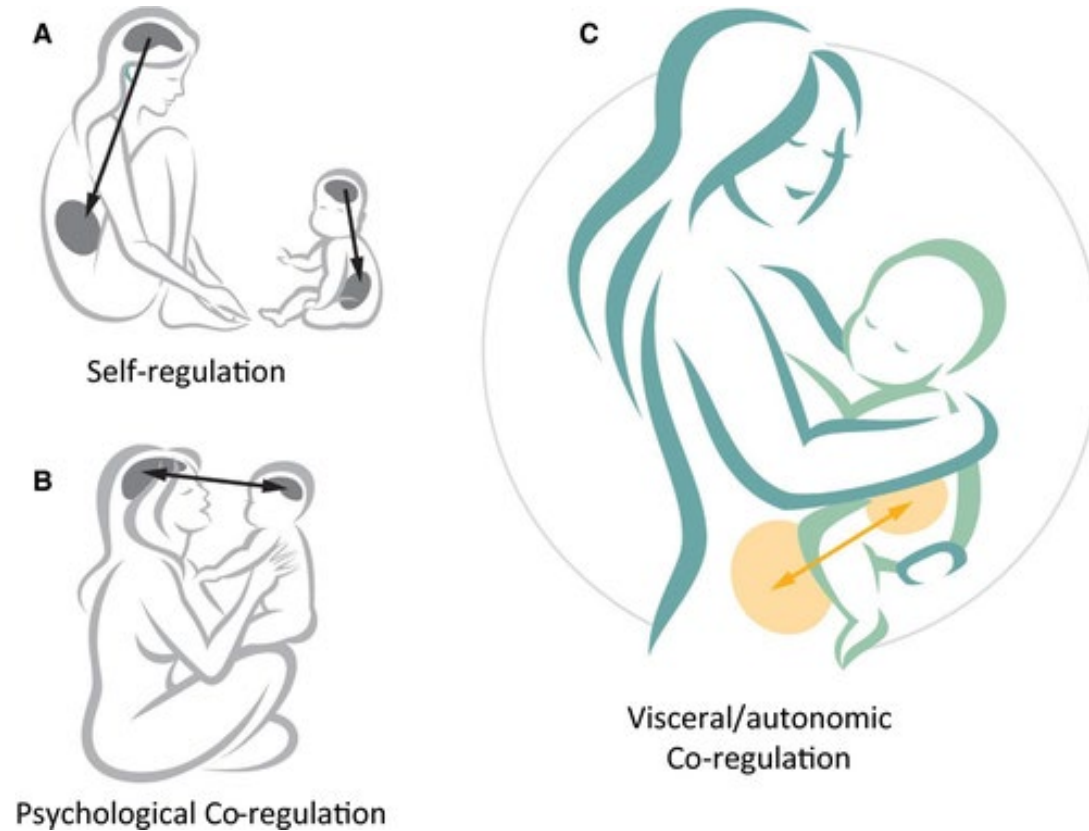
- --Urie Bronfenbrenner
- Individual interacts with a series of nested systems (microsystem, mesosystem, exosystem, macrosystem, chronosystem).
- The mesosystem represents connections among microsystems (child-parent; child-peer; child-teacher).



Image:
<https://www.psychologicalscience.org/observer/in-appreciation-urie-bronfenbrenner>

Calming Cycle Theory (Welch, 2016; Welch & Ludwig, 2017)

- Proposes that the mother and infant **co-regulate** one another at the autonomic state level via regular physical and social contact
- Emphasizes dyadic-level **Emotional Connection**, rather than individual partners' behaviors.
- EC is not a psychological or cognitive process; but a physiological one.
- EC can be established or repaired by regular, calming contact.



Welch, M. G. (2016), Calming cycle theory: the role of visceral/autonomic learning in early mother and infant/child behaviour and development. *Acta Paediatr*, 105: 1266-1274. doi:[10.1111/apa.13547](https://doi.org/10.1111/apa.13547)

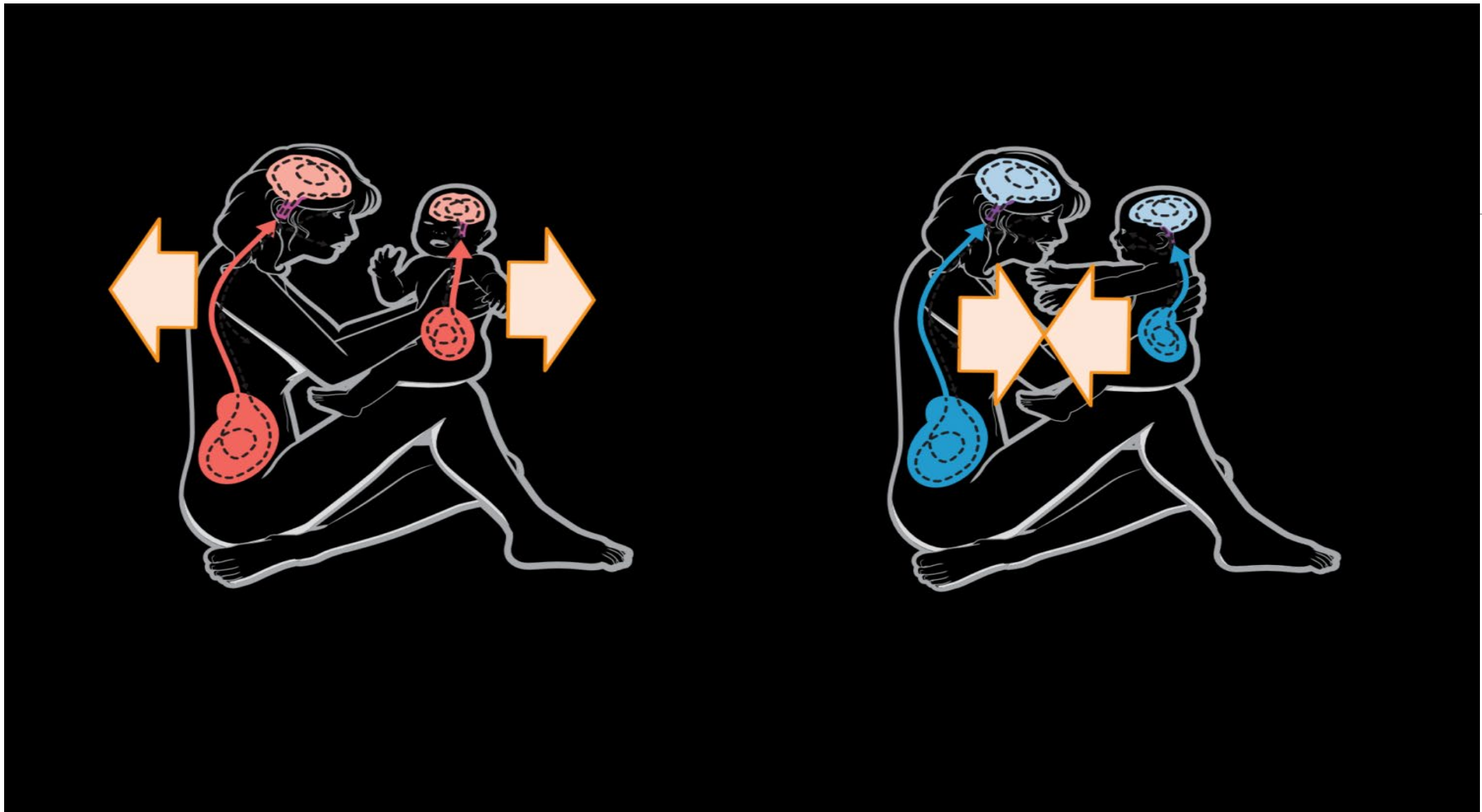


Image:<https://nurturescienceprogram.org/emotional-connection/>

According to Welch and colleagues,
emotional connection is:

Mutual, co-regulated

Autonomic

Measurable

Actionable

Emphasis on Co-regulation reflects a shift in messaging.

Foundational process for the development of health and well-being.

Acknowledges the relational **co**ntext of development.

Something not done “to” a child but a process of being “with” a child.

What factors might affect emotional connection?

Premature Birth & the NICU Experience

- Family Nurture Intervention (FNI)
 - + changes in maternal caregiving behavior
 - + changes in levels of maternal anxiety and depressive symptoms
 - Lower developmental risk for infants
- Follow-up work is on-going

FAMILY NURTURE INTERVENTION

was designed to overcome the adverse effects of premature birth by facilitating a *calming, emotional connection* between mother and infant through use of:

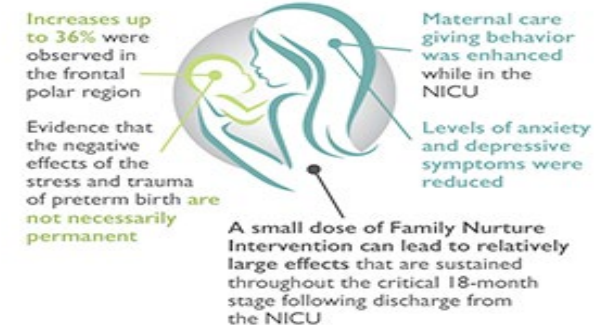


Mother and baby experience four emotional phases during the calming session ...



Image: Nurture Science Program, Columbia University

STUDY RESULTS



❖ Measuring Emotional Connection

The WECS: Welch Emotional Connection Screen (Hane et al., 2018)

- Focus on 4 mutual dimensions (3 point scale, .25 increments)
 - Attraction
 - Vocal communication
 - Facial expressiveness
 - Sensitivity/reciprocity
- Overall rating of EC+ (emotionally connected) or EC- (not emotionally connected)

EC+ and EC- Examples

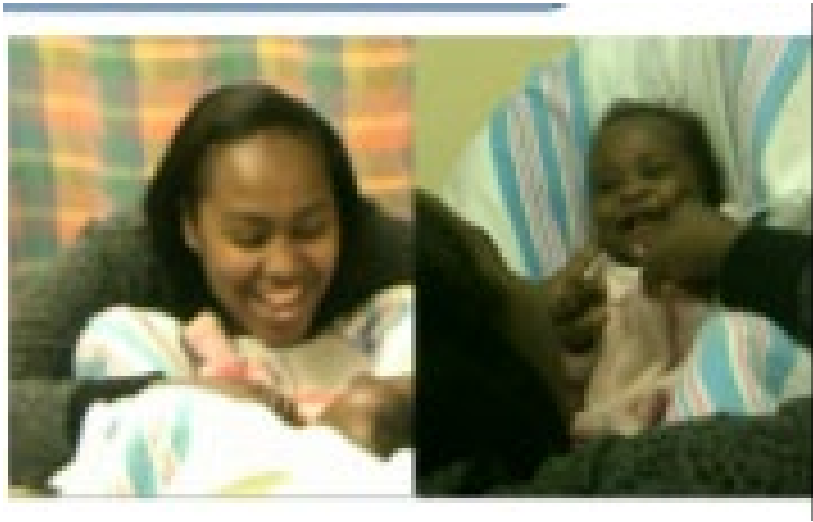


Image: Nurture Science
Program, Columbia University

Attraction
Vocal communication
Facial expressiveness
Sensitivity/reciprocity



Images: pixabay.com



Exploring EC in a preterm sample

- N = 76 preterm infants and their mothers (at 4 months)
- Key Findings:
 - Infants in EC- dyads displayed autonomic dysregulation and less approach-seeking behavior with mother
 - EC as rated by the WECS was associated with healthier infant biobehavioral stress responding
- (Hane et al., 2018)



Image:
<https://www.pediatrics.columbia.edu/about-us/divisions/neonatology-and-perinatology>

Exploring EC in a full-term sample:

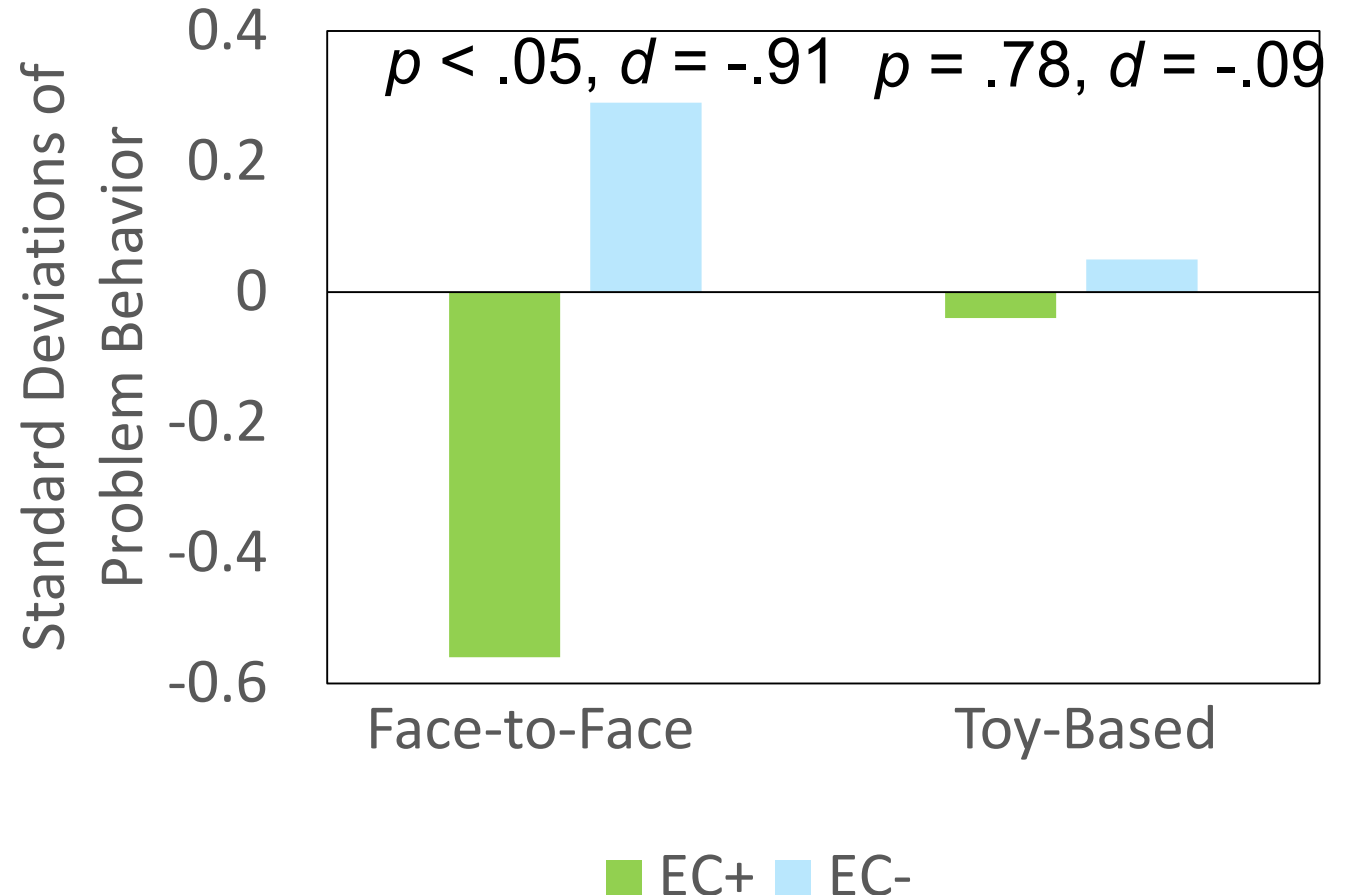
N = 49 mother-infant dyads

- Community sample of full-term infants and their families
- Home Visit at infant age 6 months; Questionnaire completion at age 3
- Videos of mother-infant interaction coded with the Welch Emotional Connection Screen (WECS)
 - Toy-based play (5 minutes)
 - Face-to-face interaction (2 minutes)
- Maternal reports of child behavior problems on the Achenbach Child Behavior Checklist at age 3 years
 - Frosch, Fagan, Lopez, Middlemiss, Chang, Hane, & Welch (2019)

Q1: How does EC at 6 months relate to child behavioral problems at age 3 years?

Infant-mother EC is associated with fewer behavior problems 2.5 years later

- Context matters (only assessment of EC during face-to-face play; not toy-based play predicted)
- The WECS holds promise as a valid relational health screening tool for identifying infants who may be at risk for later behavioral problems.
- Frosch et al. (2019). *Acta Paediatrica*.



Q2: How does EC relate to ratings on an established measure of parent-infant relationship quality?

Mother-Infant Interaction Rating Scales (MIIRS)

(Owen, 2016; 5-point adaptation of the NICHD SECCYD rating scales)

Maternal Scales:

- Sensitivity, detachment, intrusiveness, positive regard, negative regard animation

Child Scales: Positive mood, negative mood, sustained attention

Dyadic Scale: Dyadic mutuality

Results:

EC+ (emotionally connected) on the WECS?

- **Mothers** were rated as significantly more sensitive, less intrusive, less detached, more positive, and less negative on the MIIRS.
- **Children** were rates as significantly more positive, and less negative, and exhibited higher sustained attention.
- At the **dyadic** level, EC+ mother-infant pairs exhibited higher levels of dyadic mutuality on the MIIRS.

◦ (Fagan et al., manuscript in preparation; SRCD, 2019)

What about father-infant EC?

Preliminary: Father-infant EC does not relate to behavioral problems at age 3.

- But.... maternal report on the CBCL only
- Other developmental outcomes might be related more strongly (e.g., executive function)

RQ: How does father-infant EC as measured by the WECS relate to ratings of relationship quality on the MIIRS?



Image: pixabay.com

Limitations????

- Sample size and characteristics
- How might “normative” interaction look different in the age of technology
- Limited outcome data

Current Explorations and Future Directions

AAPP: Parents' Reports of EC

How do parents' perceive the emotional connections they share with their preschool-age children? And what parent and child factors relate to those perceptions?

Contextual factors?

Next Steps -Extending the WECS to applied settings:

RQ: Can home visitors be trained as reliable raters of EC using the WECS?

Collaborative partnership – UNT-Columbia University – First3Years



Summary and Take-Home Messages

- ❖ A relational health approach to child development offers **REACH**.
- ❖ **Emotional connection** is a mutual, relational health construct reflecting a physiological process, not simply a cognitive or psychological one.
- ❖ The WECS hold promises as a valid, rapid relational health screening tool.
- ❖ Relational health screening may be beneficial across research, clinical, and applied settings



And (the unknowns)



- ❖ Application of WECS to diverse relationships (e.g., father-infant) and with diverse samples
- ❖ Is reliable assessment possible in “live” clinical and applied settings (home visiting; pediatric residency training)
- ❖ Does building professional capacity around **EC** *actually change* **EC** within families?
- ❖ How can the FNI be adapted and applied effectively outside of the NICU?

❖ Building Relational Health within Families: A 3-Step Approach



1. Promote **EC** directly

- Draw from the Family Nurture Intervention (focus on emotional expression)
- Engage in repeated, calming interactions that serve to build and/or repair **EC**
 - Emerging: Cuddles and Calm® intervention
- Emphasize face-to-face interaction without distractions

2. Support the well-being & efficacy of those who care for children and families

- Parents, Early Childhood Intervention/Home Visiting Professionals, Pediatric/Primary Care Health Providers, Child care providers/ECEs
- Consider mindfulness practices along with opportunities to grow reflective functioning
 - The promise of Reflective Supervision/Consultation

3. Message the literature on co-regulation and relational health for parents, professionals, and community stakeholders

- Children are embedded in a system of relationships; healthy relationships support physical, social, emotional, cognitive, and brain health.
- **Emotional connection** is a relational construct that supports healthy co-regulation.
- In early childhood, the relationship can be viewed as the client/patient.

Thank you to my partners in relational health!

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