

“Right from the Start” and Other Attachment Interventions

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- Attachment Theory
- Attachment Research:
 - Characterizing variations
 - Developmental & neurological implications
- Evidence-based Interventions
- Right from the Start
- Questions/Comments/Discussion





A Bit of History

- 1915 - children raised in institutions
- Skeel - effects on mental and social functioning, cause vs effect
- Rene Spitz - movies
- WWII orphans
WHO commissioned Bowlby,
“Maternal Care & Mental Health”
- Attachment theory
“Attachment & Loss” 1969-1980

What is Attachment?

an affectional bond or tie between an infant and his/her mother figure

Bowlby's Attachment Theory

- proximity-maintaining behaviours
- for protection
- in balance with exploration system
- “secure base”

What is NOT Attachment?

Other parental roles:

teacher, playmate, physical caregiver

Ainsworth's Strange Situation Procedure



- infant & mother
- (*stranger enters*) infant, mother, & stranger
- (*mother leaves*) infant & stranger
- (*mother returns, stranger leaves*) infant & mother (FIRST REUNION)
- (*mother leaves*) infant alone
- (*stranger returns*) infant & stranger
- (*mother returns*) infant & mother (SECOND REUNION)

I'm only going out
for a few hours,
Robert... and
DADDY'S here...



Attachment Classifications

B (Secure)

- settles easily with mother upon reunion
- history of consistently responsive caregiving

A (Insecure - Avoidant)

- ignores or avoids mother upon reunion
- history of predictably unavailable or unresponsive caregiving

C (Insecure - Resistant)

- difficulty settling upon reunion
- history of inconsistent, unpredictable caregiving

D (Insecure - Disorganized)

- odd behaviour, confusion, fear upon reunion
- history of abuse/neglect

Developmental Implications of Insecure Attachment

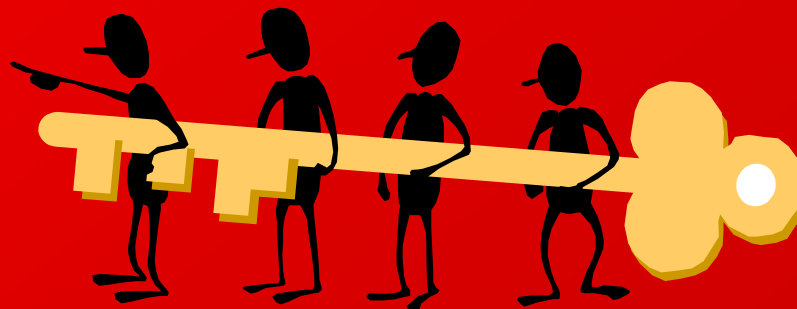
- ↑ social withdrawal
- ↑ aggression towards peers
- ↑ parent-child conflict
- ↑ behaviour problems

- ↓ persistence with challenging tasks
- ↓ cognitive problem-solving competence
- ↓ mental health
- ↓ physical health



Research on Early Brain Development

- Stress reactions
- Animals
- Humans
- Traumatized infants



Secure attachment buffers cortisol reactivity, in general.



Rethinking the Brain (Shore, 1997)

Old Thinking/*New Thinking*:

How a brain develops depends on the genes you were born with.

How a brain develops depends on a complex interplay between the genes you were born with and the experiences you have.

The experiences you have before age 3 have a limited impact on later development.

Early experiences have a big impact on the structure of the brain, and on adult capacities.

A secure relationship with a primary caregiver helps early development and learning.

Early interactions don't just help, they directly affect the way the brain is "wired".

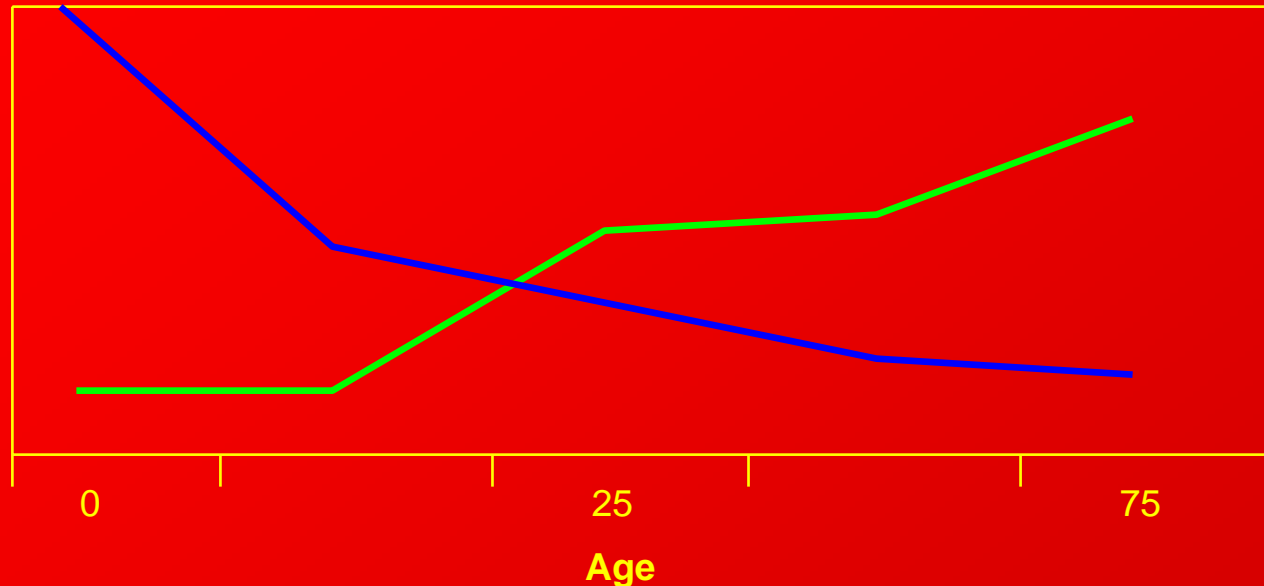
The brain's capacity to learn and change grows steadily as an infant progresses toward adulthood.

There are prime times for acquiring different kinds of knowledge and skills.

A toddler's brain is much less active than the brain of a college student.

By the time a child is 3, their brain is twice as active as an adult. Brain activity levels drop during adolescence.

Mismatch in Spending



- Most of **SOCIAL SPENDING** misses the years of greatest brain malleability
- The brain's **MALLEABILITY** decreases with age



What Influences Attachment?

Mother

- responsiveness
- her own childhood experiences
- personality
- depression
- stress - parenting, life events
- marital satisfaction, social support

Infant

- unique characteristics
- reactivity to environment and people
- special needs (e.g., premature, delayed)



Video

A Simple Gift: Comforting Your Baby



Attachment Interventions

- **Mother-child psychotherapy**
(e.g., Fraiberg, Erickson, Lieberman)
- **Supportive home visiting**
(e.g., Barnard, Beckwith, Jacobson, Lyons-Ruth, Van den Boom)
- **Brief parent education**
(e.g., Anisfeld, Juffer, Meij, Lambermon)

Issues in Evaluating Attachment Interventions



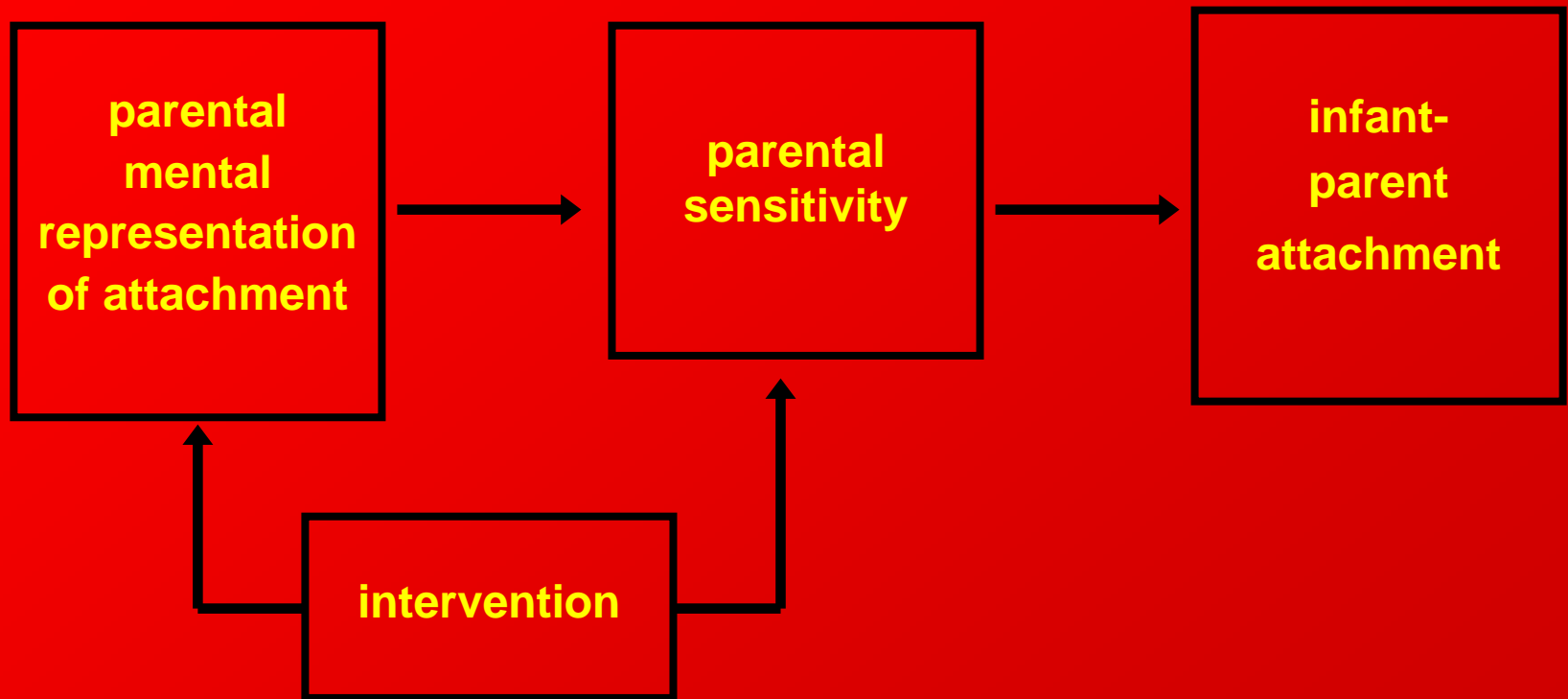
Who? At-risk (prevention) vs. identified (treatment)

What? Behavioural vs. representational intervention

Goals? Attachment vs attachment+

What assessed? Sensitivity, attachment, both

A Model of Attachment Interventions



Evidence-based

Attachment Interventions 1995

- **Meta-analysis by Van IJzendoorn et al., 1995**
- **12 studies assessing both sensitivity & attachment (N = 869)**
- **Interventions more effective in improving sensitivity ($d = .58$) than attachment ($d = .17$)**
- **Brief behavioural interventions more effective in improving attachment ($d = .48$) than long-term representational interventions ($d = .00$)**
- **Unknown if the effects of brief behavioural interventions are temporary or long term**

Evidence-based

Attachment Interventions 2003

- Meta-analysis by Bakermans-Kranenburg, van Ijzendoorn, & Juffer (in press, Psych. Bull., & WAIMH, 2002)
- 81 studies (N = 7636)
- Interventions more effective in improving sensitivity (d = .44) than attachment (d = small but significant)
- Only behavioural interventions (targeting sensitivity) impacted on attachment, not supportive or representational interventions
- Interventions starting > 6 mo. better than prenatal or < 6 mo.
- Brief (< 5 sessions) and moderate (5-16 sessions) better than longer (>16 sessions) interventions



Promising Attachment Interventions

- **Hybrids:**
supportive home visits/behavioural/play-based (e.g., Watch, Wait, & Wonder; Krupka, McDonough Interaction Guidance, Benoit Modified Interaction Guidance, etc.)
- **Parent education in groups:**
Right from the Start

Effect Sizes*

	Sensitivity	Attachment
Niccols (2003) RCT		
Right from the Start	small	large
Home Visiting	small	0
(Nothing/Non-Attend)	(--large)	(--small)
Bakermans-Kranenburg et al. (2003)	medium	small
Van IJzendoorn et al. (1995)	medium	small
-Brief behavioural		medium
-Long, representational		0

*Cohen (1988) d's small=0.20, medium=0.50, large=0.80

Right from the Start:

An 8-session Attachment Course for Parents of Infants under 2

Alison Niccols, Ph.D.

Infant-Parent Program

Hamilton Health Sciences & McMaster University

Features of “Right from the Start”

Why Parent-Child Interaction?

Why Groups?

RFTS Content

Who Attends?

RFTS Evaluation



Right from the Start:

An Attachment Course for Parents of Infants under 2

Features



- Free, open to any parent
- Focus on parent-child interaction skills
- Active learning model
 - video segments of common parenting challenges
 - small group problem solving
 - large group discussion
 - homework to practice skills
- Various community locations & collaboration
- 3-5x/Year (a.m./p.m.)
- Free parking
- Bus tickets
- Free onsite childcare

Frequently Asked Questions



Who should attend?

Any parent of an infant under 2 years at-risk for problems in social, emotional, physical, and/or cognitive development.

Who should not attend?

Those who are not actively parenting or caring for an infant (i.e., those who do not have custody and/or only very limited visitation; expectant parents).

How do parents access the group?

Parents must register themselves (and their children for childcare, if needed) by calling the contact number.

What is NOT addressed?

Basic parenting skills (e.g., child safety & nutrition), parenting capacity assessment.

Why Parent-Child Interaction? (Attachment Theory & Research)



- Secure attachment has implications for social, emotional, and cognitive development
- Sensitive, responsive parenting is associated with secure attachment
- Some infants and parents are at risk for insecure attachment: infants who are fussy or have developmental or medical needs, parents who experienced poor parenting themselves, are anxious, depressed, or have other limitations
- Interventions that target parental sensitivity may improve the attachment relationship, which may have implications for future development

Why Parent Groups? (Group Theory & Research)

- Normalizing (i.e., less stigma than individual intervention)
- Social/peer support
- Parent modeling
- Group self-regulation
- Parent control/readiness for change
- Potential for primary and secondary prevention (i.e., population-based community service)
- Cost saving



Video Session 2 Clip 1

The Coping Modeling Problem-solving Model

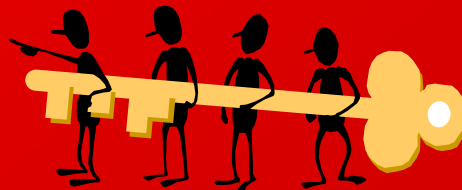
- Active adult learning - what is it?
- Why use it? - Benefits
- Resistance vs. empowerment
- Role of the Leader (facilitation)



Right from the Start

Goals

- To help parents facilitate their infant's development through sensitive, responsive parent-child interactions
- To help parents develop confidence in parenting their infant
- To educate parents about emotional, social, and communication development in infants
- To provide parents with support and networking opportunities with other parents



Right from the Start

Content



1. *Attachment Security:*

“What is it and why is it important?”

2. *Parent-Child Interaction:*

“How do you show me you love me?”

3. *Child and Parent Personality:*

“I am unique and so are you”

4. *Disengage Cues:*

“I don’t like what you’re doing right now”

5. *Engage/Approach Cues:*

“I like what you’re doing right now” / “I need you”

6. *Following Your Child’s Lead:*

“This is what I’m interested in right now”

7. *Building a Healthy Relationship:*

“I like being with you”

8. *Wrap Up*

Who Usually Attends?

A very mixed group of parents in terms of age, SES/cultural status, and psychiatric and cognitive functioning.

Group size & attrition

Specific Families

Examples of families who have attended in the past

- illiterate father with sole custody of “fussy” daughter
- what parents say they like
- parents of premature infant (ONtv spot)





Videos

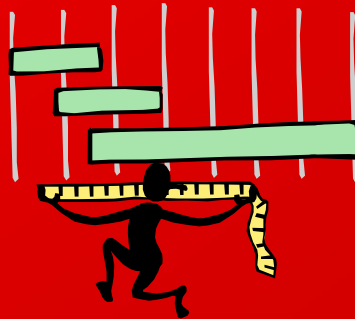
ONtv Health Spot

Interview with Sunni

Pilot Study Results

Niccols & Mohamed, Journal of Early intervention, 2000, 23, 133-143

- RFTS is viewed by clients as highly effective and valuable
- RFTS may be effective in:
 - ↓ dysfunctional parent-child interaction
 - ↓ parenting distress
 - ↓ sadness/depression
- Less intense follow-up services are requested





**Is RFTS really effective?
Isn't individual in-home
intervention better?**

Research Questions & Current/Future Directions



- **further study:**
 - a) factors affecting attendance**
 - b) objective measures of impact on parent & child & interaction**
 - c) compare to home visiting**

-media attention, training leaders in other communities

Randomized Clinical Trial (RCT)

Registrants for “*Right from the Start*”



Study Participants



Random Assignment



8-session RFTS

8 sessions HV

RCT Interventions

Group (“*Right from the Start*”):

- 8-session parenting course
- uses attachment theory as a framework to improve parent-child interaction (reading and responding to babies’ cues)
- incorporates active learning model and peer support

Individual (Home Visiting):

- 8 weekly in-home sessions
- family-centred intervention
- incorporates Barrera’s Transactional Model and Dunst’s Family Support Model

Family Characteristics

	RFTS (n=11)	HV (n=16)	Non-Attend (n=7)
Maternal age <u>M</u> yrs (SD)	29 (7)	30 (7)	26 (5)
Education (high school)	91%	88%	63%
SES (% low)	64%	44%	50%
Single parent	27%	25%	38%
Child age (<u>M</u> months)	8	11	8
Infant attachment security (<u>M</u> AQS score)*	low	low	low
Child/family risks ≥ 1	73%	75%	88%
<u>M</u> # child/family risks	1.8	1.4	2.0

RCT Measures

(Pre-test, Post-test, and 6-month Follow-up)

Observational Measures

Infant Attachment Security:

Attachment Q-sort (AQS; Waters & Deane, 1985)

Maternal Sensitivity:

Maternal Behaviour Q-sort (MBQS; Pederson et al., 1990)

Home Environment:

Home Observation for Msrmnt. of Env (HOME; Caldwell & Bradley, 1984)

Standardized, Parent-report Measures

Maternal Depression:

Centre for Epidemiol'l Studies Dep. Scale (CESD; Devins & Orme, 1985)

Parenting Stress, Perception of child as difficult, Dysfunctional interaction:

Parenting Stress Index (PSI-SF; Abidin, 1990)

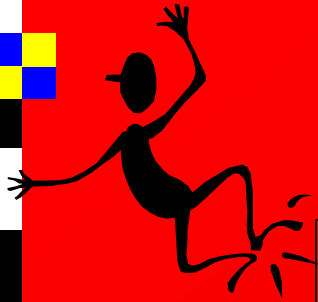
Coping:

Family Crisis Oriented Personal Scales (F-COPES; McCubbin, 1982)

Other Measures

Demographic information, participant characteristics, adherence & participation measures, intervention fidelity, Client Satisfaction Questionnaire (Niccols, 1996), cost, follow-up service requests

Client Satisfaction: Overall/General



	RFTS %	HV %
Quality – good/excellent	89	100
Met most of your needs?	78	92
Would you recommend to others?	100	92
Would you come back?	89	92
Satisfied with session number, frequency, duration, scheduling?	78-100	91-100

Client Satisfaction: Perceived Effects of RFTS & HV

	RFTS % Agree	HV % Agree
Learned how to & interact better with baby	89-100	92
Increased knowledge about early development, at-risk infants, & own baby	78-100	92-100
Better at problem solving	78	100
Learned how to interact with other children in family	100	86
Increased knowledge of community resources	89	100
More confident in reading baby's cues & dealing with baby	78-89	82-92
Made new friends	78	N/A
Feel less stressed	88	100

Pre- to 6-mo Follow-up Comparisons*

*Results are similar for Pre-Post comparisons

	RFTS (<u>n</u> =11)	HV (<u>n</u> =16)	Non-Attend (<u>n</u> =7)
Parent-child dysfunctional interaction (PSI-PCDI)	↓	↓	↓
Parenting Stress (PSI-Total)	↓	↓	↓
Perceive child as difficult (PSI-DC)	↓	↓	—
Coping (F-COPES Total)	↑	↑	↓
Maternal Depression (CESD)	—	↓	—
Home Environment (HOME Total)	—	↑	—

Maternal Sensitivity & Infant Attachment Pre- to 6-mo Follow-up Comparisons*

	Sensitivity <u>d</u>	<u>n</u>	Attachment <u>d</u>	<u>n</u>
Right from the Start	0.1	13	0.7	5
Home Visiting	0.3	16	0.0	9
Non-Attendees	-0.7	7	-0.2	4

*Results are similar for Pre-Post comparisons

Costs and Requests for Further Service*



	RFTS <u>M</u> (SD)	HV <u>M</u> (SD)
Cost (per person per session)	\$53.19 (20.94)	\$87.10 (45.36)

	RFTS (<u>n</u> = 11)	HV (<u>n</u> = 16)	Non-Attend (<u>n</u> = 5)
Request for further service	9%	38%	80%

*significant group differences, $p < .05$



Results Summary

- **Infants of parents who registered for RFTS and volunteered for the study were at risk (i.e., parents self-identified/referred appropriately)**
- **Both RFTS & HV were viewed by clients as highly effective and valuable**
- **Nonattenders and parents who attended RFTS or had HV showed decreased levels of parent-child dysfunctional interaction and parenting stress**



Results Summary Cont'd

- **Parents who attended RFTS or had HV reported decreased levels of difficult child behaviour and improvements in coping**
- **HV may be effective in decreasing maternal depression and improving maternal sensitivity and the home environment**
- **RFTS may be effective in improving infant attachment security and costs significantly less than HV**
- **Fewer parents request follow-up services after Right from the Start than Home Visiting or non-attendance.**

Caveat

SMALL SAMPLE SIZE!



Questions

What factors affect attendance?

What are the long term effects of RFTS?

What types of clients benefit most from RFTS?

What types of clients benefit most from HV?

How do we best integrate RFTS into an efficient, effective service delivery model in the early years?