STUDYING THE SOCIAL AND EMOTIONAL PROCESSES THAT SHAPE HEALTH BY OBSERVING FAMILIES IN THEIR EVERYDAY LIVES

Rena Repetti
UCLA
Department of Psychology

Thanks to

Many Collaborators:
Ted Robles          Bridget Reynolds
Meredith Sears      Sunny Bai
Shu-wen Wang        Darby Saxbe
Shelley Taylor      Teresa Seeman

Countless research assistants

Alfred P. Sloan Foundation & WT Grant Foundation
Risky Families Model

Conflict and Aggression
Cold, Unsupportive and Neglectful Home

Biological Processes
CNS
Stress-Response Systems
Immune Functioning
Growth and Sexual Development

Emotion Processes
Social Competence

Risky Health Behaviors
(substance abuse, risky sexual behavior)

Mental and Physical Health

Crowing up in Families with Conflict and Aggression Cold, Unsupportive and Neglectful Home

Mental and Physical Health Problems in Adulthood

Repetti, Taylor, & Seeman, 2002
Risky Families Model

Conflict and Aggression
Cold, Unsupportive and Neglectful Home

Biological Processes

Emotion Processes

CNS
Stress-Response Systems
Immune Functioning
Growth and Sexual Development

Social Competence

Risky Health Behaviors
(substance abuse, risky sexual behavior)

Mental and Physical Health

Repetti, Taylor, & Seeman, 2002
Conflict and Aggression
Cold, Unsupportive and Neglectful Home

- Biological Processes
- Deficits in the control and expression of emotion

Conflict and Aggression
Cold, Unsupportive and Neglectful Home

- Deficits in the control and expression of emotion
- Social Competence
Conflict and Aggression
Cold, Unsupportive and Neglectful

Biological Processes

Emotion Processes

Social Competence

Risky Health Behaviors
(substance abuse, risky sexual behavior)

Risky Families Model

Mental and Physical Health

Repetti, Taylor, & Seeman, 2002
Getting from short-term processes to outcomes that last
Repetti, Robles & Reynolds (2011)
Methods to study short-term processes

Assessment of Family Life as it is lived
Family Portraits

Methods to study Short-Term Processes in Families

Observations
Methods to study Short-Term Processes in Families: Observations

“Artificial” laboratory settings
Methods to study Short-Term Processes in Families: *Naturalistic* Observations

Natural environments

Variety of methods are used to describe the characteristics of family life with precision *and ecological validity*

Electronically Activated Recorder (EAR)
The Electronically Activated Recorder (EAR) for young children

Actual size: 1” X 4”

Center on Everyday Lives of Families

- Generous support of the Alfred P. Sloan Foundation
- Collaborative research efforts of members of the UCLA Center on Everyday Lives of Families (CELF)
- Participating families in study
CELF Study: Multiple Methods

• Video ethnography of interaction
• Tracking space use in home
  (Who, where, what -- at 10 min intervals)
• Repeated measures on 3 weekdays:
  Saliva sampling to assess diurnal cortisol rhythms; mood

• And much more...
  • Ethnographic interviews
  • Questionnaires
  • Video tours, floor plans, photographs

CELF Scan Sampling: Tracking Family Members’ Locations and Activities
Characteristics of Family Life that are Associated with the Future Health and Development of All Members

Children’s expressions of:

- Positive Emotion
- Negative Emotion
during family interactions
Positive Emotion in Families
Sunhye Bai, UCLA

- What are the social circumstances in which children express positive emotion?
- What sustains children’s positive emotion?

- Parent-child clips (30-second slices)
- 4,045 unique 30-second child positive emotion clips

Bai, Repetti, & Sperling (2014, under review)

Sustainment and shared positive affect

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mean Proportion Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child PE Sustainment</td>
<td>The target child’s expression of positive emotion continues from one 30-second clip to the next consecutive clip</td>
<td>34%</td>
</tr>
<tr>
<td>Family Member Shared Positive Affect</td>
<td>A family member who was interacting with the target child also expressed a positive emotion during same 30-second period</td>
<td></td>
</tr>
<tr>
<td>Mother Shared Positive Affect</td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td>Father Shared Positive Affect</td>
<td></td>
<td>53%</td>
</tr>
<tr>
<td>Sibling Shared Positive Affect</td>
<td></td>
<td>55%</td>
</tr>
</tbody>
</table>

Bai, Repetti, & Sperling (2014, under review)
Positive Emotion in Families
Sunhye Bai, UCLA

Factors that increase the likelihood that positive emotion expression will be sustained into the next 30-second clip:

- another family member also expresses positive emotion
- physical contact with a family member
- leisure or play activity

Bai, Repetti, & Sperling (2014, under review)
Sustaining Children’s Positive Emotions in Everyday Family Life

Power of Touch!

Play

Shared Positive Affect

Meredith Sears, UCLA

Children’s Negative Emotion Expressions

- Parent-child negative emotion clips (30-second “slices”)
- Majority were of mild intensity and brief duration
- Frequent - Average rate of negative emotion or anger: 1x/5 mins
  low intensity 10x/hr
  high intensity 2x/hr

Sears, Repetti, Reynolds, & Sperling (Emotion, 2014)
Meredith Sears, UCLA
Children’s Negative Emotion Expressions

Most Common Situational Contexts (causes) of Anger:
1. verbal disagreements (5x/hour)
2. requests for compliance or reprimands
3. homework
4. physical acts
5. refusals of the children’s wishes

Sears, Repetti, Reynolds, & Sperling (Emotion, 2014)

Meredith Sears, UCLA
Children’s Negative Emotion Expressions

Physical acts instigated responses that involved:
- physical behavior (with an object or person)
- higher intensity expressions

Sears, Repetti, Reynolds, & Sperling (Emotion, 2014)
Meredith Sears, UCLA
Children’s Negative Emotion Expressions

Daily practice managing mild negative emotions may be critical to the development of emotion regulation.

Naturalistic Observations: Opportunities

- New insights
- Fresh approaches to old issues
- Unexplored questions
- Novel directions for analysis
Naturalistic Observations: Challenges

- Time consuming data collection
- Small sample sizes
- Reliable coding

Methods to study Short-Term Processes in Families: Self-monitoring

Intensive repeated measures designs
Intensive Repeated Measures Studies of Short-term Family Processes

(1) Child Reactions to Stressful Family Interactions
(2) Within-Family Spillover
(3) Emotional and Physiological Coregulation
(4) Stress Cross-Over

Child Responses to Social Behavior in the Family

Can we observe children’s short-term emotional and behavioral responses to parents’ social behavior at home?
The UCLA Families and Health Study
WT Grant Foundation
Ted Robles & Bridget Reynolds

47 families (47 mothers, 39 fathers)
- Diverse sample of two-parent households with at least one child aged 8-13
- Series of questionnaires & interviews (“snapshots”)

Daily diaries filled out on 56 consecutive days
- Separate mother, father, and child-reports
- Daily ratings of mood and naturally-occurring...
  - Marital conflict
  - Mother-child conflict
  - Father-child conflict

Bridget Reynolds: Children’s short-term (daily) responses to increases in marital conflict

- Increases in self-reported negative mood (sad, mean, tense, angry, worried, etc.) \((B = +.12, p<.01)\)

- Increases in parent-reported difficult behavior (angry, argumentative, cried, moody, whiny, demanded attention, etc.) \((B = +.36, p<.05)\)
Bridget Reynolds: Emotional and Behavioral Reactivity to Marital Conflict as Individual Difference Variables

On days when parents reported more marital conflict…

- Emotional reactivity: more child negative mood
- Behavioral reactivity: more parent reports of difficult child behavior

Individual differences in emotional and behavioral reactivity

Bridget Reynolds: Behavioral Reactivity and Anxiety
Within-Family Spillover

- **Conflict spillover**: when conflict in one family dyad increases the likelihood of conflict in another dyad¹

¹For reviews, see: Erel & Burman, 1995, and Krishnakumar & Buehler, 2000

---

The UCLA Families and Health Study
Meredith Sears

Same-day within-family conflict spillover

Between-family differences

(Sears, Repetti, Reynolds, Robles & Krull, under review)
Moderation by Child Externalizing: Marital conflict predicts same-day parent-child conflict

Emotion transmission and emotional coregulation or synchrony
Might Families Influence Health through Contagion of Negative Mood and Stress?

- Emotional Synchrony
- Emotional Transmission
- Physiological Synchrony

Unfolding of Biological Stress Responses in Everyday Family Life

Hypothalamic Pituitary Adrenal Axis

Cortisol
Unfolding of Biological Stress Responses in Everyday Family Life

Salivary cortisol

Physical Affection and Cortisol Secretion

Ditzen, Hoppmann, & Klumb (2008)
CELF Couples

“co-regulation” / synching-up

negative mood states
& levels of diurnal cortisol,

especially in less happy marriages.

Saxbe & Repetti (2010)

Diurnal Cortisol in Children

“Healthier” Patterns associated with:
- fewer interpersonal conflicts (EAR data)
- parenting characteristics: involvement and warmth, acceptance, support

(Ben-Dat Fischer, et al., 2007; Booth, Granger, & Shirtcliff, 2008; Pendry & Adam, 2007; Slatcher & Robles, 2012)

Coregulation in mother-child dyads

(Papp, Pendry, & Adam, 2009; Williams et al., 2013)
Cross-over Effects

For instance, effects of work worries on spouse’s cortisol

Slatcher, Robles, Repetti, & Fellows, 2010

Spillover, Cross-over, Carryover, Synchrony, Contagion, Emotion Transmission, etc.
Interlacing of Family Members’ Daily Experiences, Behavior, Psychology, and Biology

• Daily stressors
• Mood
• Thoughts
• Physiology
• Social behavior
• Activities
Thank you!

University of Utah
Consortium for Families and Health Research

Many wonderful collaborators

Generous funding from Alfred P. Sloan Foundation and the WT Grant Foundation