

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

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## Thanks to

Many Collaborators:

Ted Robles

Bridget Reynolds

Meredith Sears

Sunny Bai

Shu-wen Wang

Darby Saxbe

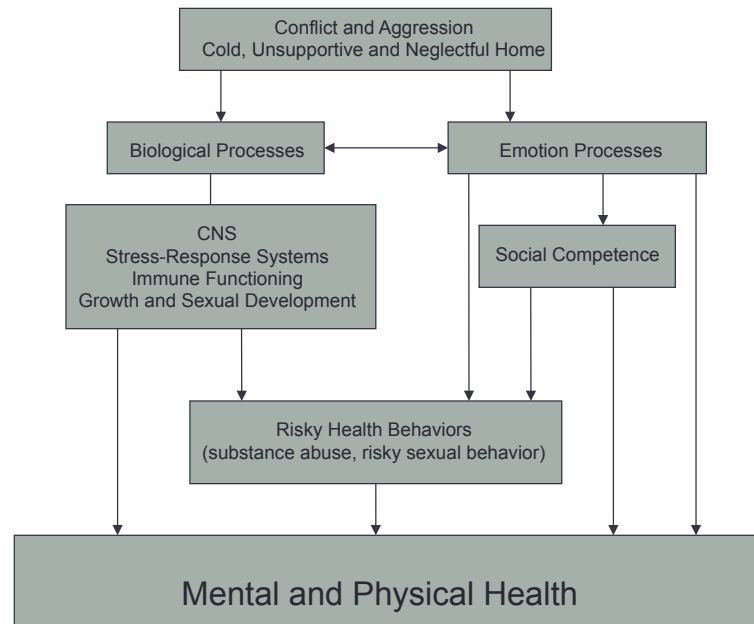
Shelley Taylor

Teresa Seeman

Countless research assistants

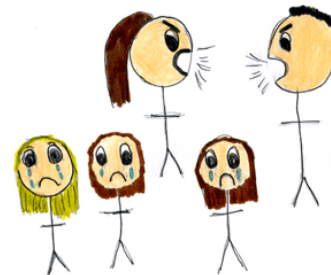
Alfred P. Sloan Foundation & WT Grant Foundation

## Risky Families Model



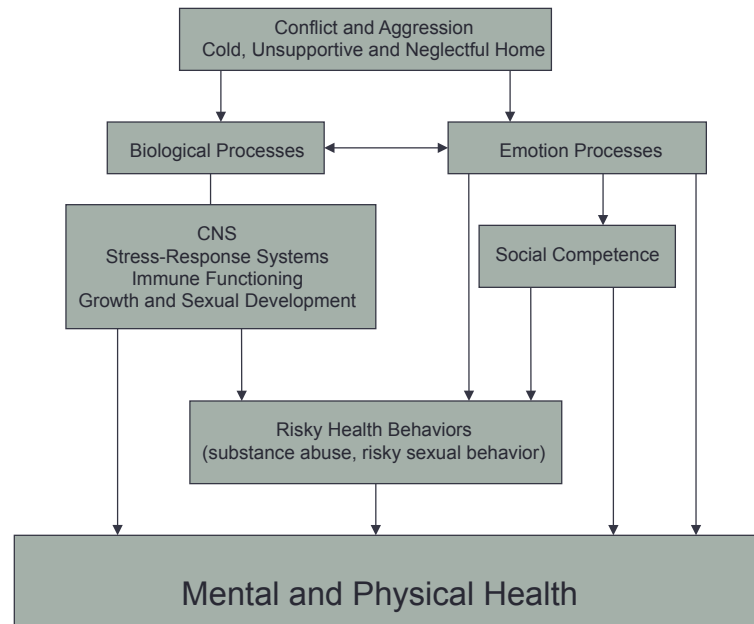
Repetti, Taylor, & Seeman, 2002

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



Mental and Physical Health Problems  
in Adulthood

## Risky Families Model



Repetti, Taylor, & Seeman, 2002

Conflict and Aggression  
Cold, Unsupportive and Neglectful Home



Biological Processes

CNS

Stress-Response Systems

Immune Functioning

Growth and Sexual Development



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

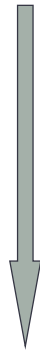


Conflict and Aggression  
Cold, Unsupportive and Neglectful

Biological Processes



Emotion Processes

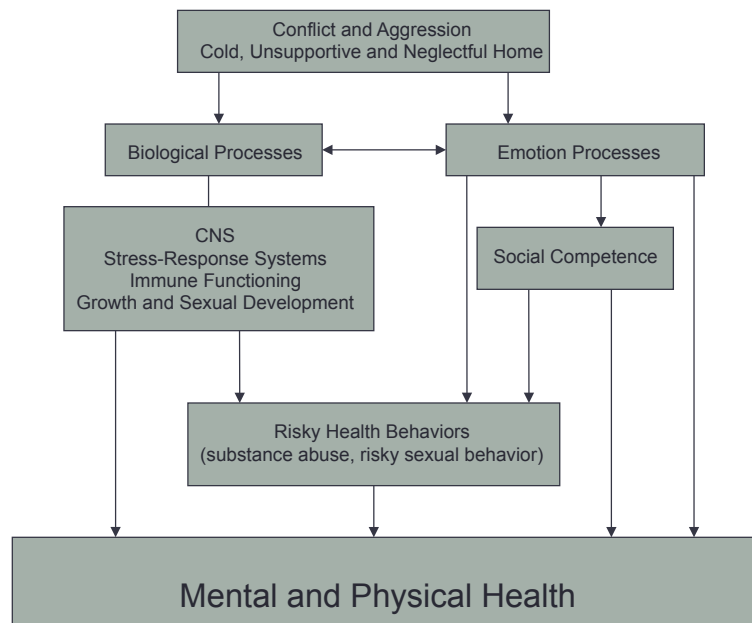


Social Competence



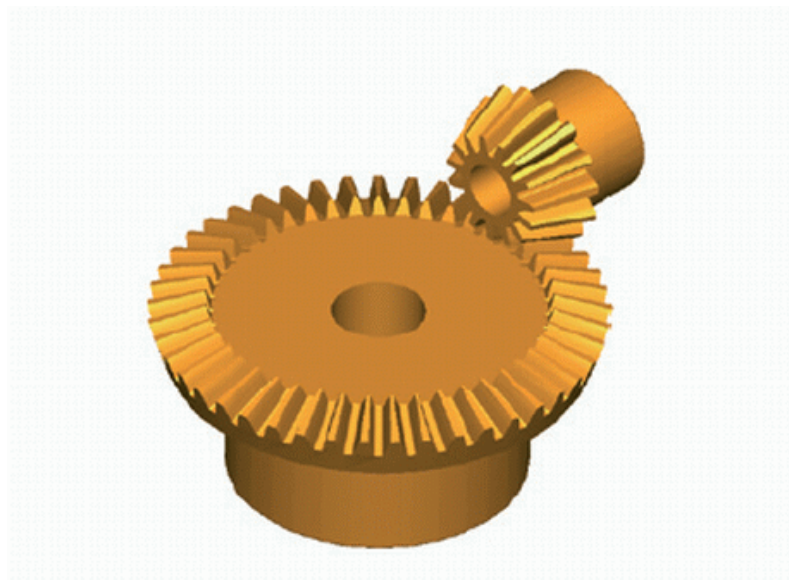
Risky Health Behaviors  
(substance abuse, risky sexual behavior)

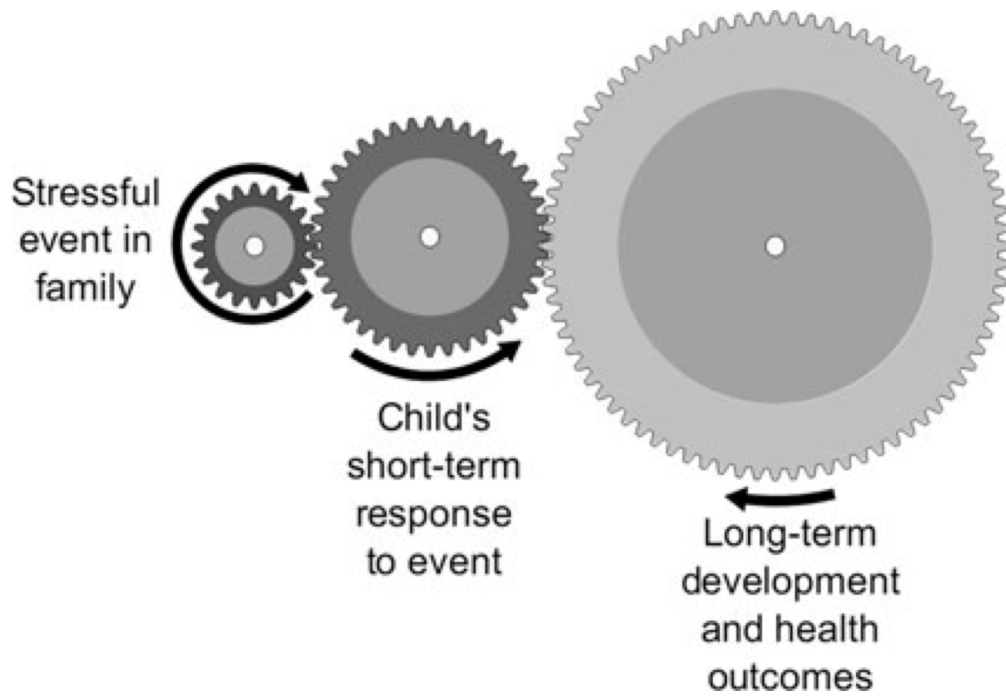
## Risky Families Model



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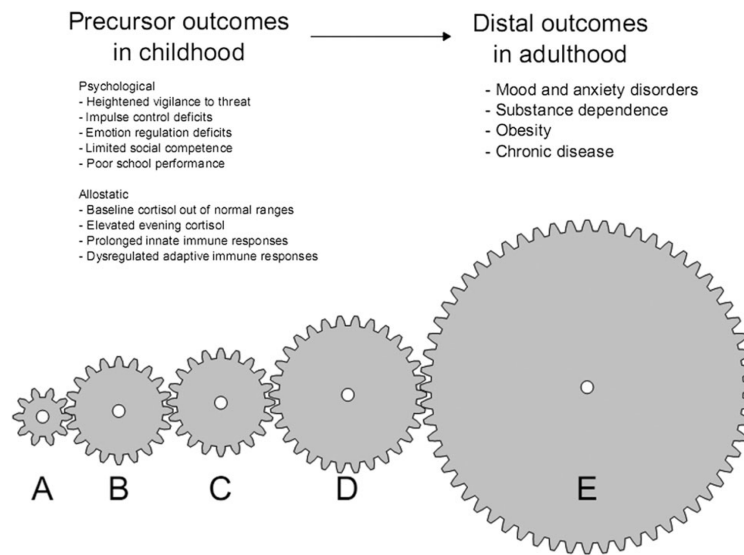
# Getting from short-term processes to outcomes that last





Repetti, Robles & Reynolds (2011)

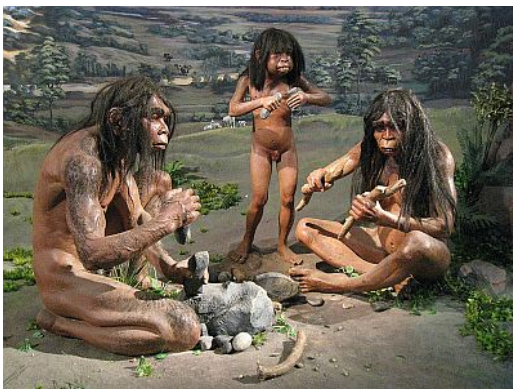




Repetti, Robles & Reynolds (2011)

## Methods to study short-term processes

Assessment of Family Life *as it is lived*



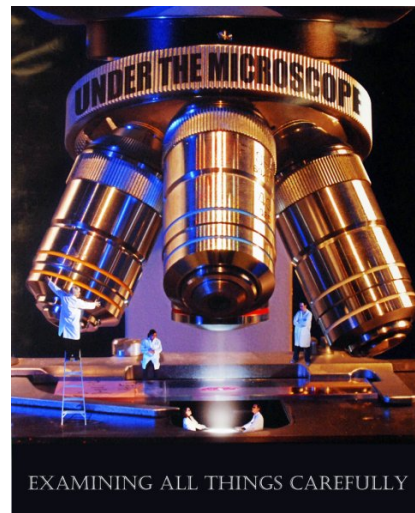


## Family Portraits



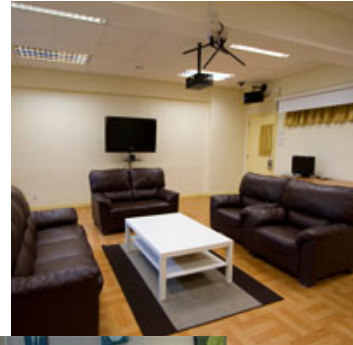
## Methods to study Short-Term Processes in Families

Observations

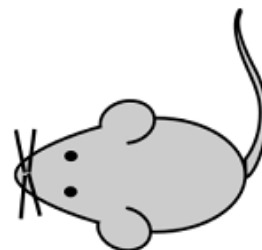


# Methods to study Short-Term Processes in Families: Observations

“Artificial” laboratory settings



In Vitro



In Vivo

# 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)



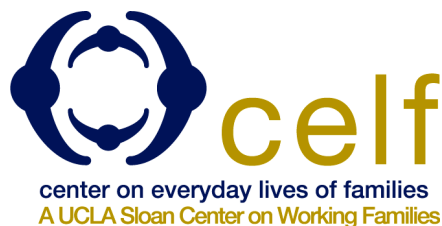
# The Electronically Activated Recorder (EAR) for young children



24

## 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



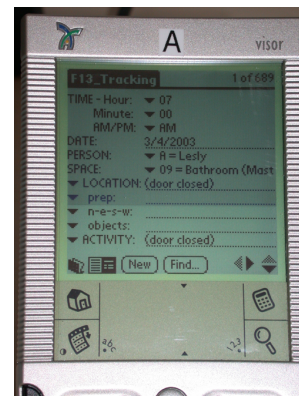


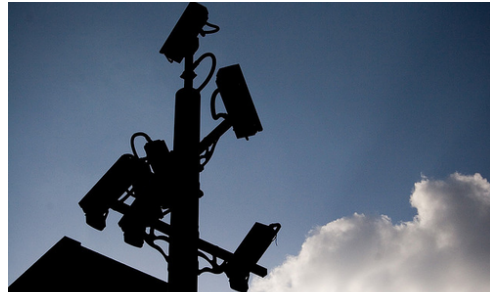
## CELF Study: Multiple Methods

- 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



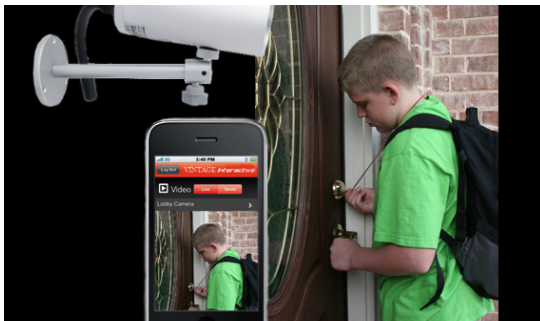


## Home Security Cameras

Limited Time Offer!

\$500  
Instant Savings

Digital Recorder  
4 HD Night Vision  
Cameras  
Complete In Home  
Professional Installation



## CELF video recordings



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

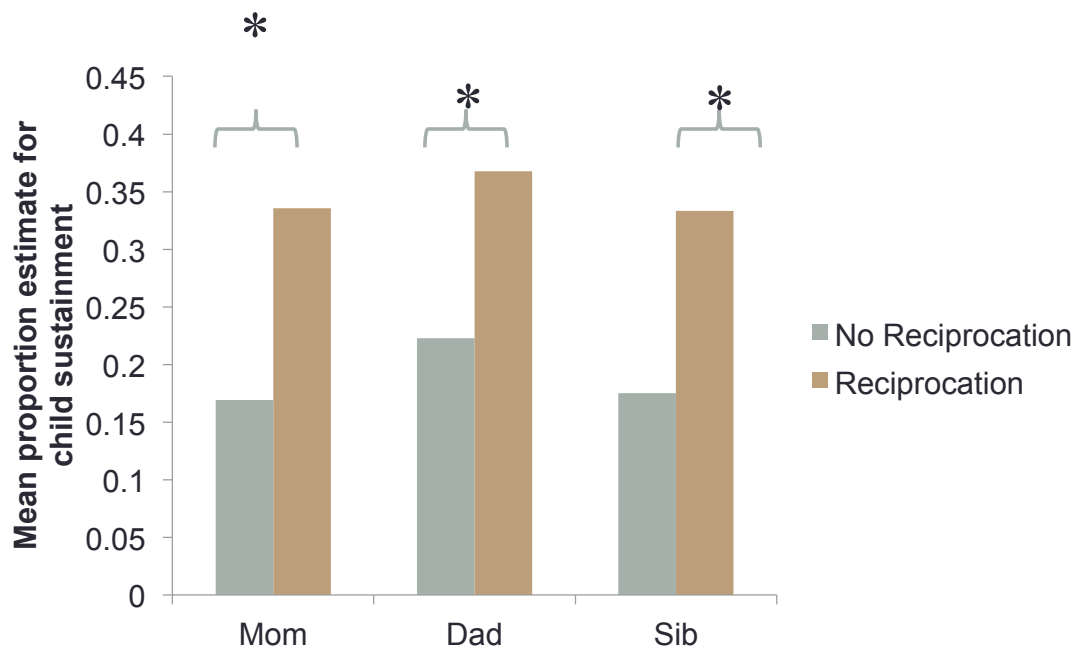
Bai, Repetti, & Sperling (2014, under review)

## Sustainment and shared positive affect

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

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

## Proportion of child PE sustainment, by family member shared affect



## 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)



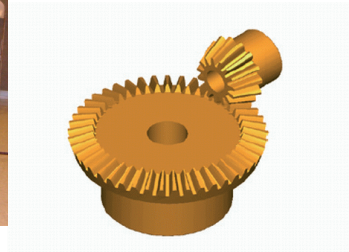
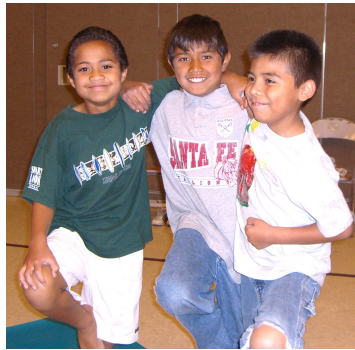
# Sustaining Children's Positive Emotions in Everyday Family Life

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

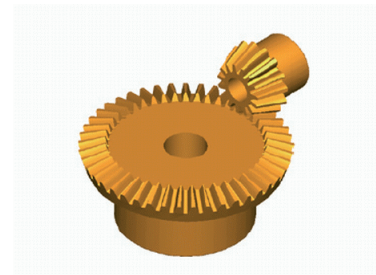
Sears, Repetti, Reynolds, & Sperling (*Emotion*, 2014)

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## Meredith Sears, UCLA

### Children's Negative Emotion Expressions

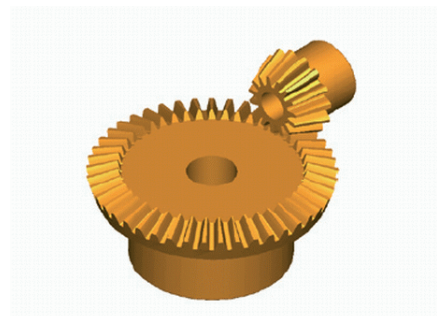
Daily practice managing mild negative emotions may be critical to the development of emotion regulation.



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## Naturalistic Observations: Opportunities

- New insights
- Fresh approaches to old issues
- Unexplored questions
- Novel directions for analysis



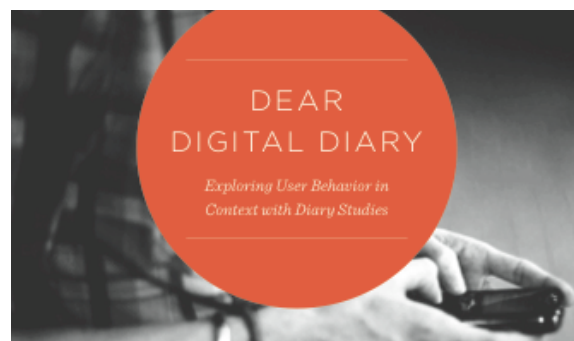


## Naturalistic Observations: Challenges

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

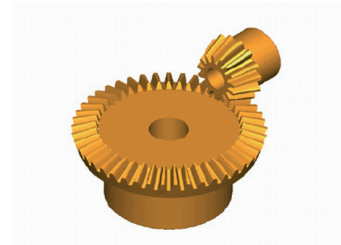
## Methods to study Short-Term Processes in Families: Self-monitoring

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*



44

## 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

46

### 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.) ( $B = +.36$ ,  $p < .05$ )

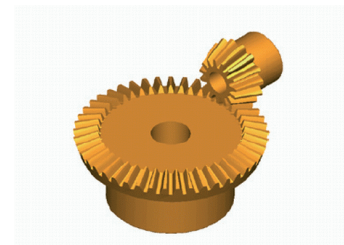
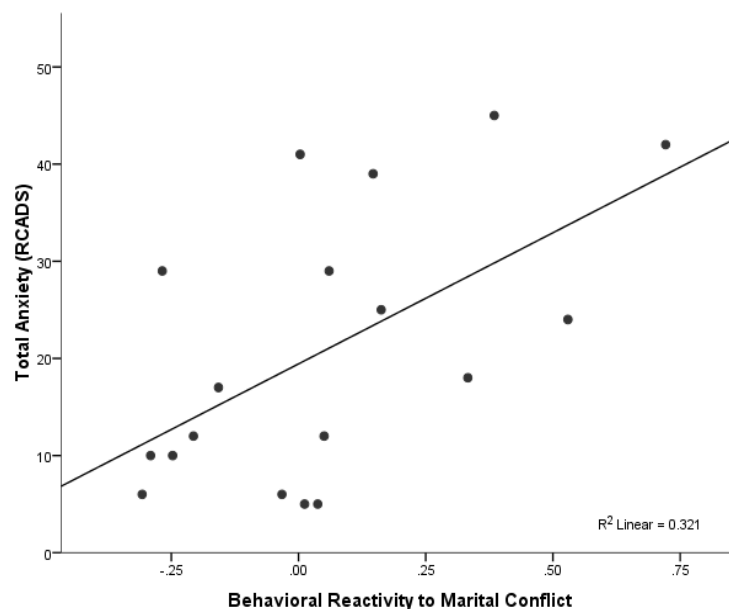
## Bridget Reynolds: Emotional and Behavioral Reactivity to Marital Conflict as Individual Difference Variables

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 dyad<sup>1</sup>



<sup>1</sup>For reviews, see:  
Erel & Burman, 1995, and  
Krishnakumar & Buehler, 2000

## The UCLA Families and Health Study Meredith Sears

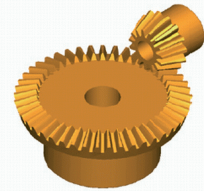
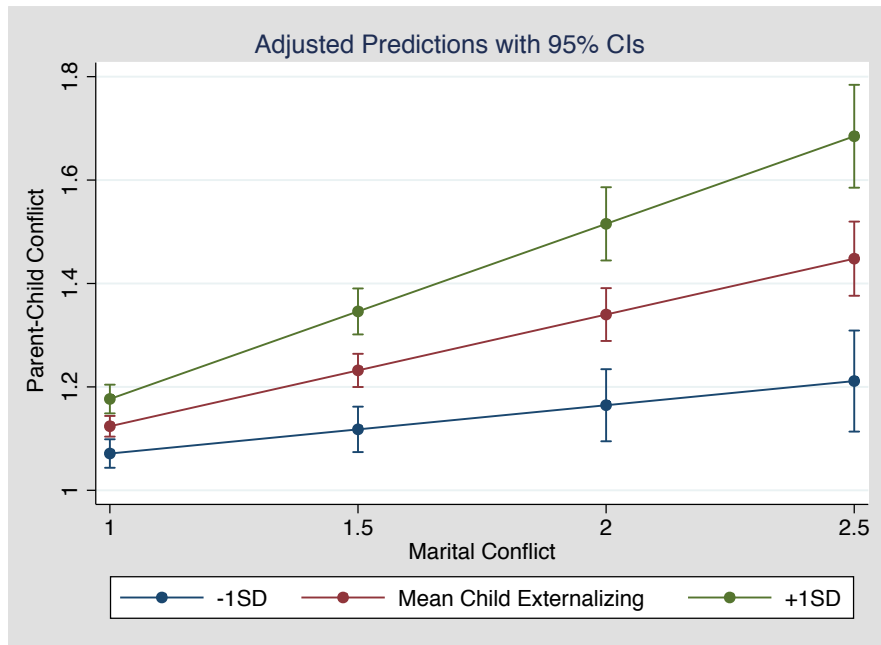
Same-day within-family  
conflict spillover

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?

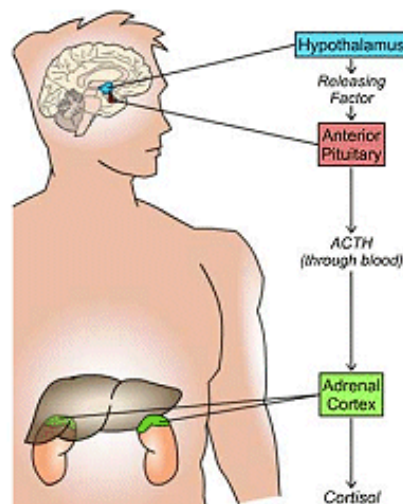
- Emotional Synchrony
- Emotional Transmission
- Physiological Synchrony



## Unfolding of Biological Stress Responses in Everyday Family Life

Hypothalamic Pituitary  
Adrenal Axis

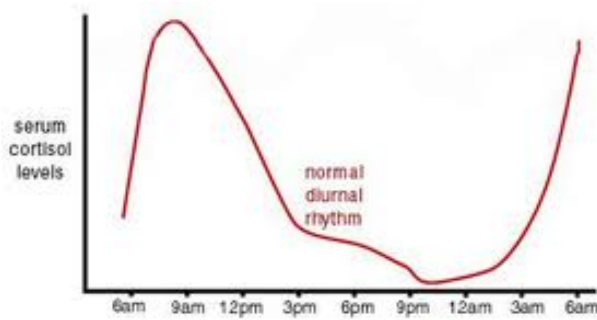
Cortisol





# Unfolding of Biological Stress Responses in Everyday Family Life

## Salivary cortisol



## Physical Affection and Cortisol Secretion



Ditzen, Hoppmann, & Klumb (2008)





## CELF Couples

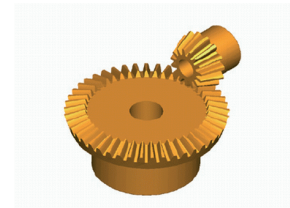
“co-regulation” / synching-up

*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

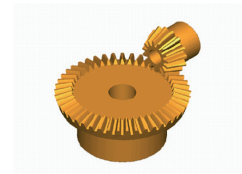
For instance, effects of work worries on spouse's cortisol



Slatcher, Robles, Repetti, & Fellows, 2010

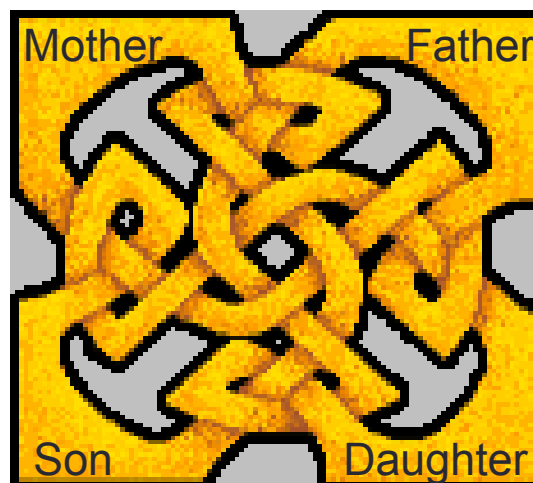
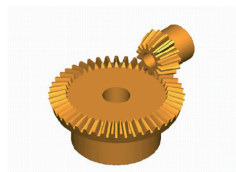
Spillover, Cross-over, Carryover,  
Synchrony, Contagion, Emotion  
Transmission, etc.





## Interlacing of Family Members' Daily Experiences, Behavior, Psychology, and Biology

- Daily stressors
- Mood
- Thoughts
- Physiology
- Social behavior
- Activities



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*Thank you!*

*University of Utah  
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Research*

*Many wonderful collaborators*

*Generous funding from Alfred P. Sloan  
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