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Acknowledgements

Colleagues

Clancy Blair
Keith Crnic
Tracy Dennis
Sarah Martin
Laura Armstrong
Sarah Hall
Caroline Pemberton
Patricia Tan

Funding

National Institute of Mental Health
National Science Foundation
Penn State Children, Youth, & Families Consortium

The families who shared their experiences for the sake of advancing knowledge about healthy child development
Importance of Emotion Regulation

Emotions influence children’s

- **Physical health** (Olds et al., 2004; Raine et al., 2001)
- **Mental health** (Cole & Hall, 2008; Keenan, 2000)
- **Social competence** (Halberstadt et al., 2002; Denham, 1998)
- **School readiness** (Blair, 2002; Raver & Zigler, 2004)
Science reveals why emotions are so central. Emotions provide our means to:

1. Appraise our situations
2. Prepare to act
3. Act on our own behalf
4. Communicate our internal states

Emotions are functional & adaptive

(Bowlby, 1973; Campos et al., 1994; Frijda, 1986; Izard, 2001)
## Emotion Theories

<table>
<thead>
<tr>
<th>Popular View</th>
<th>Scientific View</th>
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<tbody>
<tr>
<td>Emotions arise</td>
<td>We are <em>always</em> emotional</td>
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<tr>
<td>Emotions are irrational</td>
<td>Emotions process information</td>
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<tr>
<td>Emotions disrupt behavior</td>
<td>Emotions facilitate behavior</td>
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Emotions 'fuel irrational acts'

Gary Coleman, star of the late '70s/early-mid '80s sitcom "Different Strokes" battled health problems all his life, and as an adult, fought emotional demons, as well.
So...are emotions adaptive or maladaptive?

They ARE adaptive BUT you gotta regulate them!
Children who...

have an answer for everything...
have a short fuse...
are headstrong...
are constantly falling out...
are hard-headed...

worry us.
In class they...

are hard-to-manage...
pitch fits...

 disrupt the class...

are difficult to control...

are mean to others...

disobey!
Child anger often signals misbehavior

Anger fuels aggression, noncompliance & other problem behaviors
But anger also fuels **desirable** behavior! Low level (regulated) anger motivates...

Sticking with it....

Trying harder...

Overcoming obstacles
Anger helps us...

defend ourselves
defend others
battle unfairness
stand up for
what’s right
Well-regulated anger helps children persist, explore, tackle social & learning problems.

(Blair, 2002; Raver & Zigler, 2009)
The Development of Emotion Regulation

What we know

Infants have limited ER ability
gaze aversion, vocalizing

(Rothbart et al., 1991; Stifter, 2002)
What we know

Toddlers have more strategies than infants, but effectiveness is still limited

(Rothbart et al., 1991; Buss & Goldsmith, 1998)
What we know

Between age 2 and 5 years, self-regulation of emotion develops significantly

(Calkins, 2007; Kopp, 1989)
What we know

By age 4–5 yrs, typically developing children
• Tolerate ordinary, brief frustrations
• Handle minor disappointments

(Cole, 1986; Cole et al., 2003; Gilliom et al., 2002)
We also know

4- & 5-year-olds who are “hard-to-manage” do not regulate emotion well

(Cole et al. 2003; Giliom et al., 2002)

3- & 4-year-olds who are hard-to-manage are one main cause of preschool expulsion

(Bryant & White, 2009; Gilliam, 2005)

Head Start programs can reduce problem behaviors but such problems remain concern of Head Start staff

(Bulotsky et al., 2010; HHS, 2010)
Furthermore, we know

ER problems at preschool age predict current & continued behavior problems

(Cole et al. 2003; Gilliom et al., 2002)

Children exposed to maltreatment, parental psychopathology, unresolved marital conflict, & other stresses do not learn to regulate emotion well

(Blandon et al., 2008; Cicchetti & Shields, 2001; Cummings, 2010; Pollak, 2009)
We also know

**Prevention Works**
- Emotions Course (Izard et al., 2008)
- Incredible Years (Webster-Stratton, 2004)
- Preschool PATHs (Domitrovich et al., 2004)
- ParentCorps (Brotman et al., 2008)

**Resources Exist**
- CASEL
- MDRC
- CSEFEL
- Center for ECMH Consultation
- TACSEI
So what’s next for ER research?

Build capacity to foster child ER in all children

1. Specify how & why ER improves in early childhood
2. Apply knowledge to target interventions to meet specific needs of each child
3. Address characteristics of teaching staff that aid promotion of healthy emotion regulation
How & why ER improves in early childhood
Normative Changes in ER

Development of Toddlers Study (D.O.T.S.)

- Followed 120 children
- From economically strained households in rural PA
- From 18 to 48 months of age
- Focus on how ER changes over time
Observing Behavior over Time

Observed children at home & at Child Study Center

**Home:** observed child in spontaneous situations at 4 time points (18, 30, 36, 42 months)

**CSC:** observed child in standardized situations
  - **Frustrating** situations
  - Non-frustrating situations
  - **Hypothetical** situations at 4 time points (18, 24, 36 & 48 months old)
Standardized Frustrations

Situations in which child goals were blocked (eliciting anger):

- being restrained briefly (18 mos)
- toy removed (18 & 24 mos)
- waiting to get gift (every age)
- mother’s attention taken away (18 & 24 mos)
- lock that wouldn’t work (24, 36 & 48 mos)
- not getting work done correctly (36 & 48 mos)

School readiness includes being able to persist at learning hard tasks, to accept limits you don’t like, to tolerate having things taken away & waiting for things you want.
We recorded & looked at:

1. What was each child’s dominant emotion in each task at each age—angry or calm?
2. What was effect of emotion on child behavior? Did child:
   - Stay on task
   - Stay off task
   - Get disruptive?

The school ready child should be able to stay on task even when frustrated & be able to recover when frustrated and regain being calm.
Developmental change in early childhood

![Graph showing developmental change]

- **CALM ON**
- **DIS DIS**

# Tasks

Age in Months
What exactly changed between 24 & 36 and 36 & 48 months of age?

Did 3- or 4-year-olds stop caring if their goals were blocked, stop wanting toys & gifts?

OR

Did children get more skilled at ER over time... better able to forestall anger, to manage anger better?
Waiting for What you Want

We:
• Gave child’s mother work to do (on clipboard)
• Gave child 1 boring toy
• Put shiny wrapped gift on table

Then mother said to her child:
“This is a gift for you but you have to wait until I am done my work before you can open it.”

Mother worked for 8 minutes
Waiting to Get the Gift

We assessed:

1. **Anger** in children’s faces & voices
   - How quickly did they express anger?
   - How long did anger expressions last?

2. **Focus** of children’s attention
   - How quickly & for how long did they –
     - distract themselves from source of frustration?
     - focus on frustration?
     - bid to mother about frustration?
Developmental Changes Over Time

Time during Wait

- 18m
  - Focus Gift
  - Bid
  - Distract
- 24m
  - Focus Gift
  - Bid
  - Distract
- 36m
  - Focus Gift
  - Bid
  - Distract
- 48m
  - Focus Gift
  - Bid
  - Distract

18m: Focus Gift
24m: Bid
36m: Focus Gift
48m: Bid
Changes in Bids to Mother Over Time

AGE in MONTHS

# Bids

<table>
<thead>
<tr>
<th></th>
<th>CALM</th>
<th>ANGRY</th>
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<tbody>
<tr>
<td>18</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>24</td>
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<td>4</td>
</tr>
<tr>
<td>36</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>48</td>
<td>10</td>
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CALM

ANGRY
As toddlers (18 & 24 months), children:
• were quick to express anger
• slow to distract themselves
• might try to distract themselves but only briefly
• bid to mother but angrily

By 36 months, they:
• quickly bid to mother (but thru words not anger)
• were somewhat quicker to distract
• anger was briefer, distractions longer

At 48 months, they:
• quickly & briefly bid to mother (thru words not anger)
• then quickly distracted themselves
• but eventually focused on gift & then got angry
The evidence suggests we should emphasize equally

Skills that help children to:
• forestall anger
• distract themselves

Skills that help children to:
• deal with anger they feel (use words)
• shift attention away from source of frustration
Child Understanding of ER Strategies

We use puppets to tap children’s understanding of emotion regulation strategies at 36 & 48 months.
Does knowing an ER strategy — in hypothetical situation — predict 3- & 4-year-olds’ behavior when frustrated?

The more anger strategies 3- & 4-year-olds recognized,
- the more they persisted at problem-solving,

The more sadness strategies they recognized,
- the more they tried alternate solutions,
- & the less they sought adult help
So, for 3- & 4-year-olds, is anger adaptive or maladaptive?

Mild anger was followed by persisting at problem solving

(Dennis et al., 2009; Perri et al., 2010)

But more intense anger was followed by disruptive behavior

(Perri et al., 2010)
Targeting Interventions

Each child is different

- Age
- **Language skills**
- Planning skill
- Temperament
- Cultural values
- Stress

Plus, the greater child’s risk, the more they need our help
Next Steps— Role of Language Skills

(Cole, Armstrong, & Pemberton, 2010)

Research suggests links between socio-emotional competence & language skills:

- Children with behavior problems more likely to have language delays (and vice versa)
- Parent & child internal state language $\rightarrow$ social competence
- Prevention programs emphasize using words to express emotion
How do early language abilities help children become quicker at using strategies & slower to anger?

Language should provide:

- a way to objectify experience (e.g. emotion)
- an alternative means of communicating needs
- a self-regulatory strategy (e.g. self-instruction)
Next Steps— Role of Language

(Cole, Armstrong, & Pemberton, 2010)

How do adults harness children’s language skills into the service of regulating emotions?

- Structuring self-regulatory attempts
- Discourse about emotional experiences—re-telling emotional experiences, reading stories
- Use of internal state language—e.g., desire, emotion terms
IMPLICATIONS

Children struggling to regulate emotion need adult help.

Adults must provide:
• language of emotions
• discourse about emotional experiences
• advance plan for child self-regulation
• scaffold for child self-regulation
• praise successful child self-regulation

This is demanding work, especially when a child is angry or anger-prone!
Scaffolding

Like a wood structure provides support to a vulnerable new building, adult supports child efforts at self-regulation
Can this Person Promote Child Self-Regulation?
Role of Adult Emotion in Caregiving

1. When children are angry as toddlers, and stay high in anger, their mothers tend to feel more angry with them (LeDonne et al., 2010)

2. If mothers communicate anger when their children with behavior problems get angry, the behavior problems get worse over time (Cole et al., 2003)

3. Mothers who generally feel positive are better at problem-solving when the going gets rough (Hajal et al., 2010)
Evidence of the Role of Emotion in Caregiving

1. Mothers who have erratic moods, and use inappropriate behaviors to reduce tension, are less emotionally available to their young children (Kim et al., 2010)

2. Mothers who are depressed or anxious are more irritable with their young children (Goodman & Gotlib, 2005)

3. Children of depressed mothers have poorer skill at emotion regulation (Blandon et al., 2008; Silk et al., 2007)
Helping children plan for & cope with anger is emotionally demanding, especially if child has difficulty regulating emotion.

Adults must:
- provide a language of emotions
- talk about emotional experiences
- anticipate and plan for self-regulation
- scaffold of self-regulation
- praise successful self-regulation

We must support our caregivers’ mental health.
RESOURCES RELATED TO
PROMOTING EMOTION REGULATION IN EARLY CHILDHOOD

Evidence-based Social Emotional Curricula and Intervention Packages for Children 0-5 and their Families

Collaborative for Academic, Social, and Emotional Learning
http://www.casel.org/

Center on the Social Emotional Foundations for Early Learning
http://www.vanderbilt.edu/csefel/

Preschool PATHS® (Promoting Alternative THinking Strategies)
http://www.channing-bete.com/prevention-programs/paths-preschool/

ParentCorps
http://www.aboutourkids.org/research/institutes_programs/institute_prevention_science/programs

Center for Early Childhood Mental Health Consultation
http://www.ecmhc.org/
Thanks for Promoting Emotionally Healthy Children!