Paths to Children’s Development and Well-Being

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BEES Developmental Studies
Building Early Emotion Skills
www.beeslab.org
Contexts for Development and Well-Being

Emotional Socialization Practices

Early Intervention to Support Development and Well-Being

Parental Psychosocial and Family Functioning Characteristics
Heuristic Models of Interest

• Family Context
  – Eisenberg, Cumberland, and Spinrad, 1998
  – Morris, Silk, Steinberg, Myers, & Robinson, 2007
  – Thompson & Meyer, 2007
  – Including family systems theory (Minuchin, 1985; 2002; White & Klein, 2002)

• Mind-Mindedness
  – E.g. Meins, 2013; Meins, Centifanti, Fernyhough & Fishburn, 2013
  – Doan & Wang, 2010
  – Lok & McMahon, 2006

• Cultural Context
  – Cole & Tan, 2007; Freidlmeier, Corapci & Cole, 2011
  – Dunsmore & Halberstadt, 2009; Halberstadt & Lozada, 2011
  – Feldman & Masalha, 2010
  – Keller & Otto, 2009
  – Raver, 2004

• Biopsychosocial Models
  – E.g. Hastings & De, 2008

• Gene X Environment Models Suggesting Differential Susceptibility
  – E.g. Belskey et al, 2007; Belsky & Pleuss, 2009
  – Bakerman-Kranenburg & van Ijzendoorn
Emotion Socialization Practices as Related to Children’s Competencies

• Modeling an Emotion-Related Parenting Construct
• Fathers’ and Toddlers’ Mental State Language
Emotion Socialization Practices as Related to Children’s Competencies

Emotion Socialization practices include emotion-related parenting behaviors (ERSBs) such as,

- Emotional supportiveness and emotional expressivity\(^1\);
- Support of children’s self regulatory attempts\(^2\)
- Mental state talk\(^3\)
- Emotion coaching\(^4\)
- And, they reflect a cohesive construct\(^5\)

Emotion socialization practices are related to children’s:

- Regulation of emotion\(^6\) in preschools; most research focuses on emotion understanding.

Impact outcomes likely because emotion-related socialization practices allow for or provide:

- Shared control in play, turn taking, and mastery opportunities that allow the child to “practice” emerging self-regulatory skills\(^7\).
- Emotionally supportive contexts in which toddlers gradually attain self-regulation tools, such as learning to recognize, understand, and talk about emotions, goals and desires, both their own and others’ emotions\(^8\).
- Emotional expressivity in the home that provides an ongoing model of regulatory behavior and expectations\(^9\).

\(^1\) e.g. Bocknek, Brophy-Herb, & Banerjee, 2009; Valiente, Eisenberg, Spinrad, & Reiser, 2006; \(^2\) e.g. Cole, Dennis, Smith-Simon, & Cohen, 2009; \(^3\) e.g. Garner, Dunsmore, & Southam-Gerrow, 2008; Warren & Stifter, 2008; Gottman, Katz, & Hooven, 1997; Lunkenheimer, Shields, & Cortina, 2007; \(^4\) Baker, Fenning, and Crnic, 2011 and reflect a cohesive construct Baker, Fenning, and Crnic, 2011; \(^5\) Baker, Fenning, and Crnic, 2011; Brophy-Herb, Stansbury, Bocknek & Horodynski, 2012; \(^6\) Garner, 2006; \(^7\) Morris et al., 2007; \(^8\) Taumoepeau & Ruffman, 2006; \(^9\) Boyum & Parke, 1995; Denham, Mitchell- Copeland, Strandberg, Auerbach, & Blaire, 1997; Halberstadt & Eaton, 2002; Morris et al., 2007; Valiente, Fabes, et al., 2004.
Modeling an Emotion-Related Parenting Construct in Low-Income Mothers

- ERSBs
  - Maternal warmth, emotional supportiveness, emotional responsivity, maternal use of mental state language and emotion talk, and positive self-expressivity in the home

- Represent multiple aspects of parenting across a variety of salient contexts (teaching tasks in play, mealtime, book sharing) salient to toddlers’ daily experiences

- As related to toddlers’ coping with environmental stimuli and delay of gratification

- N = 123 toddlers (58 boys Mage = 28.39 months, SD = 6.71) and their low-income, primarily Caucasian mothers
Modeling an Emotion-Related Parenting Construct in Low-Income Mothers

Modeling an Emotion-Related Parenting Construct in Low-Income Mothers

• Cumulative ERSBs are particularly important to early self-regulation as compared to individual parenting behaviors, further underscoring the strength of testing a latent factor for this purpose.

• Identifying parenting strengths in vulnerable families gives us insights in parental and family functioning, and adds to our understanding of the processes underlying resilience in at-risk families (Orthner et al., 2004).

• Results suggest that ERSBs function similarly in their influences on young children’ self-regulation as is evident in middle-income and upper-income populations.
Fathers’ and Toddlers’ Mental State Language

• Robust literature on mental state language (MSL) and children’s emotional competencies (e.g. Meins et al, 2012; Taumoepeau & Ruffman, 2008)
• Research on fathers’ MSL and children’s outcomes is emerging (LaBounty, Wellman, Olson, Lagattuta, & Liu, 2008).

• Little work has examined relations between fathers’ beliefs about emotions and their responses to toddler emotions to their own use and their toddlers’ use of MSL.

• Initial work on paternal emotion socialization in the family context (e.g. relations between family climate and paternal emotion socialization practices (including paternal MSL use) and between maternal and paternal emotion socialization practices and toddlers’ use of MSL.

• Pilot study; N = 64 fathers (Mage 33.98 years, SD = 5.29 years) and toddlers (Mage =29.37 mos, SD = 3.94); primarily Caucasian sample, middle income
Mental State Language

- Categories (Bartsch & Wellman 1995; Ruffman, Slade & Crowe, 2002; Taumoepeau & Ruffman, 2006)
  - Emotions (e.g. angry, happy, sad, afraid)
  - Cognitive State Words (e.g. think, know)
  - Modulations (e.g. perhaps, maybe, might)
  - Desire- Goals and Preferences (e.g. wish, want, prefer, like)

- Coded from a wordless book task (*Fly Little Bird*; T. Burke)
<table>
<thead>
<tr>
<th>Mental State Language with Explanations of Emotions in Context</th>
<th>Mental State Language with Attributes of Mentalization</th>
<th>Mental State Language that Links Content with Child’s Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>“She’s sad because the bird flew away.”; “They were so happy that the bird grew up and learned how to fly. And she kept the painting of the bird on her wall to always remember him by.”</td>
<td>“I think the girl thinks the bird might be in the bush.”</td>
<td>“We saw some yellow flowers yesterday too, remember? Just like the little girl.”</td>
</tr>
<tr>
<td>“Why are you sad birdie? So she takes the birdie and says, ‘What’s going on birdie? Did you lose your home? Well I tell you what, we will take you home.’ “</td>
<td>“And so she’s (the girl in the story) wondering to herself, “Hey this is the bush where we found Peety the bird. Should we look in the bush to see? Maybe he’s in there.”</td>
<td>“She’s drawing with crayons just like you draw with crayons. You both like crayons.”</td>
</tr>
<tr>
<td>“Look how happy she is because she thinks she might have found the bird. She hears the bird song from way up high in the tree ‘tweet tweet’. She says, fly little bird. There's her friend the birdie singing and he’s flying around and she’s so happy that she found him and she sees that the bird is happy too, right? What do you think?”</td>
<td>“Birdie’s looking outside the window. The birdie’s thinking, “Maybe I should go out there.”</td>
<td>“The bird likes to sing like you do.”</td>
</tr>
</tbody>
</table>
Father and Toddler MSL Use

Model 1- Fathers’ MSL
- Focus on aspects of the family climate
  - Conflict in the coparenting relationship
  - Couple conflict
  - Negative Expressivity in the home
  - Emotion Beliefs

Model 2 Toddlers’ MSL
- Focus on maternal and paternal reported responses to toddlers’ negative emotions
  - Supportive responses (expressive encouragement; emotion focused; problem focused)
  - Unsupportive responses (minimizing emotions; punitive responses)

Family Characteristics Associated with Paternal MSL Use

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child gender</td>
<td>.983</td>
<td>.043</td>
<td>.362</td>
<td>.719</td>
</tr>
<tr>
<td>Child age</td>
<td>.149</td>
<td>.052</td>
<td>.436</td>
<td>.665</td>
</tr>
<tr>
<td>Paternal education</td>
<td>-2.173</td>
<td>-.17</td>
<td>-1.399</td>
<td>.168</td>
</tr>
<tr>
<td>Paternal perception of behavior problems</td>
<td>-7.40</td>
<td>-.162</td>
<td>-1.328</td>
<td>.190</td>
</tr>
<tr>
<td>Maternal report of destructive conflict strategies</td>
<td>-8.729</td>
<td>-.269</td>
<td>-2.133</td>
<td>.038</td>
</tr>
<tr>
<td>(verbal aggression, stonewalling, avoidance, child involvement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal emotion coaching beliefs</td>
<td>4.028</td>
<td>.199</td>
<td>1.693</td>
<td>.096†</td>
</tr>
<tr>
<td>Paternal emotion dismissing beliefs</td>
<td>-9.288</td>
<td>-.435</td>
<td>-3.392</td>
<td>.001</td>
</tr>
</tbody>
</table>

Model fit
F(7, 51) = 3.864, Adjusted $R^2 = .26$, $p = .002$; Cohen’s $f = .35$

Expressivity in the family and coparenting quality were not related to MSL in the current model.
Responses to Toddlers’ Negative Emotions and Toddler MSL Use

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child gender</td>
<td>1.64</td>
<td>.24</td>
<td>2.45</td>
<td>.017</td>
</tr>
<tr>
<td>Child age</td>
<td>.002</td>
<td>.003</td>
<td>.027</td>
<td>.979</td>
</tr>
<tr>
<td>Paternal education</td>
<td>-.699</td>
<td>-.19</td>
<td>-1.73</td>
<td>.089</td>
</tr>
<tr>
<td>Paternal perception of behavior problems</td>
<td>-.372</td>
<td>-.027</td>
<td>-.263</td>
<td>.794</td>
</tr>
<tr>
<td><strong>Paternal MSL use</strong></td>
<td><strong>.149</strong></td>
<td><strong>.487</strong></td>
<td><strong>4.64</strong></td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Maternal supportive responses to toddler neg emo</td>
<td>1.22</td>
<td>.205</td>
<td>1.876</td>
<td>.066</td>
</tr>
<tr>
<td>Paternal unsupportive responses to toddler neg emo</td>
<td>-.087</td>
<td>-.02</td>
<td>-.199</td>
<td>.843</td>
</tr>
<tr>
<td><strong>Maternal supportiveness X paternal unsupportiveness</strong></td>
<td><strong>-2.108</strong></td>
<td><strong>-.279</strong></td>
<td><strong>-2.738</strong></td>
<td><strong>.008</strong></td>
</tr>
<tr>
<td>Model fit</td>
<td>F(7, 56) = 3.415, Adjusted $R^2 = .21$, $p = .004$; Cohen’s $f = .27$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Interaction between paternal and maternal supportiveness in response to children’s expression of negative emotion related to children’s use of internal state language.
Fathers’ and Toddlers’ Mental State Language

• Overarching emotion beliefs impact fathers’ but not toddlers’ MSL
• Characteristics more proximal to the toddler, namely parental responses to toddlers’ emotion expression, are more salient to toddlers’ use of MSL.
Parental Psychosocial Functioning as Related to Competencies

- Parental psychosocial and family functioning impacts on the development of young children’s regulatory skills\(^1\)
- Yet children’s regulatory skills play a key role in buffering the effects of parental and family stressors on children’s development\(^2\)
  - E.g. Promotes adaptive functioning across domains\(^3\)
  - E.g. Moderates the effects of maternal psychopathology and harsh parenting\(^4\)

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\(^1\) Bocknek, Brophy, Fitzgerald, Schiffman, & Vogel, in press; Brophy-Herb et al., 2012; Grolnick & Kurowski, 2009; Morris et al., 2007
\(^2\) Lengua, 2002; Masten, 2007
\(^3\) Ayduk et al., 2000; Buckner, Mezzacappa, & Beardslee, 2009
\(^4\) Chloe, Olson, & Sameroff, 2014; Kim, Cicchett, 2010
Early Self Regulation Moderates the Effects of Maternal Substance Use on Behavioral Outcomes

• Substance use impacts outcomes via its effects on family functioning, including conflict, and harsh parenting\(^1\).
• Self regulatory skills may allow the child to better tolerate and manage parental and family stressors.
• Examined the role of early and concurrent self regulation in moderating the effects of maternal substance use and family conflict on behavioral outcomes in 5\(^{th}\) grade.
• N = 2987; Early Head Start Research and Evaluation Study
• Low income families; data collected at children’s 14, 24, 36 month birthday and at the transition to kindergarten and completion of 5\(^{th}\) grade.

\(^1\)Kim, Pears, Connelly, & Landsverk, 2010; Maly, Oshri, Lynch, Herzog, & Wortel, 2013

Maternal Substance Use at Grade 5

Family Conflict at Grade 5

Harsh Discipline at Grade 5

Self Regulatory Skills at G5

Child Behavioral Outcomes (teacher and parent rated)

Self Regulatory Skills at 36 Months

For simplicity, only main paths are indicated.
Maternal Substance Use at Grade 5
Family Conflict at Grade 5
Harsh Discipline at Grade 5
Self Regulatory Skills at G5
Child Behavioral Outcomes (teacher and parent rated)
Self Regulatory Skills at 36 Months

For simplicity, only main paths are indicated.
Gender Differences in Paths between Maternal Depression, Parenting, and Children's Internal Representations

- N = 575 mother-toddler dyads from the National Early Head Start Research and Evaluation Study
- Examined relations between early maternal depressive symptoms, harsh parenting from 14 to 36 months, and children’s internalized representations of family at 60 months.
  - Harsh parenting
    - Discipline severity
    - Maternal negative regard of child during play
  - McArthur story stem narratives
    - Dysregulated internal representations reflected children’s
      - Dysregulated aggression, negative affect, and withdrawal from emotional themes in story stems administered by the data collector in the home

Martoccio, Brophy-Herb, Maupin, & Robinson. Gender differences in relations between early maternal depression, harsh parenting and children’s later internal representations. (under review)
Interventions

• Efforts to promote optimal development and well being
  – The Growing Healthy Study
The Growing Healthy Study

• 572 (over year 1-2) low-income children enrolled in Head Start and their parents (45% < HS education; 55% Caucasian; 31% African American; 10% Hispanic/Latina); 24% of mothers overweight & 36% obese

• Children ages 3 and 4 years; 19% of children overweight & 14% obese

• Rural and urban communities; 63% of families with marginal to very low food security

• 3 Head Start programs in Michigan (Jackson, Grand Rapids, and tri-county rural region)

This project was supported by Agriculture and Food Research Initiative Grant No. 2011-68001-30089 from the USDA National Institute of Food and Agriculture, Integrated Res. Ed. & Extension to Prevent Childhood Obesity-A2101. Julie Lumeng, PI/PD.

Study Design

- Parent-child dyads randomized by classroom to one of 3 study arms
  - Parents of Preschoolers-POPS
  - Parents of Preschoolers-POPS + Incredible Years Series-IYS
  - Usual Head Start exposure

- Target enrollment: 50 parent-child dyads per year per study arm x 4 years; (2 classrooms per Head Start agency per study arm per year)
Growing Healthy Conceptual Model

**FIGURE 1. Conceptual model**

- **POPS**
- **POPS + IYS**

**Child self-regulation**
- Ability to delay gratification
- Emotional eating
- Food-related tantrums

**Child obesity-related health behaviors**
- Intake of fruits and vegetables
- Sugar sweetened beverages
- Dietary variety
- TV viewing

**Child adiposity indices**
- BMI z-score
- Skinfold thickness
Measures

• Measures obtained pre- and post-intervention
• Child adiposity (BMI, skinfolds, waist circumference)
• 24 hour dietary recall (x 3)
• Reported TV viewing and physical activity
• Child self-regulatory capacity (parent & teacher report & observed behavior)
• Maternal BMI, eating behaviors
• Sociodemographics

• Currently in final year of data collection.
Final Thoughts

- Emotional Socialization Practices
- Early Intervention to Support Development and Well-Being
- Parental Psychosocial and Family Functioning Characteristics