Father Involvement and Children’s Well Being: A Focus on Language Development

Catherine S. Tamis-LeMonda, NYU
Natasha E. Cabrera, UMD
Karen E. McFadden, NYU
Jacqueline E. Shannon, CUNY
Today’s Talk

- Multiple aspects of father involvement in children’s first years of life in relation to children’s language and cognitive skills
Today’s Talk

• Multiple aspects of father involvement in children’s first years of life in relation to children’s language and cognitive skills
Why Father Involvement?

• Why focus on fathers?
  – Critics: Mothers are primary caregivers to children. What’s the added value to studying fathers?
Fathers & Family Systems

Father-Mother

Mother-Child

Father-Child
Why Language Development?

• Language is a tool that enables children to:
  – share experiences with others
  – participate in cultural routines
  – regulate emotions and behaviors
  – and meet the learning requirements of school
Why Language Development?

• Language is a tool that enables children to:
  – share experiences with others
  – participate in cultural routines
  – regulate emotions and behaviors
  – and meet the learning requirements of school

• Language and cognitive skills develop through social interactions (Vygotsky, Bruner), and fathers are a key source of the language children hear
Why the First Years of Life?

- Why focus on infancy and early childhood?
  - Critics: Policy and educational concerns revolve around school performance and disparities
  - Critics: Skills from infancy to childhood are unstable or unreliable? Children will catch up
Attachment Theory & Developmental Cascades

• Infancy is a time when parents establish close relationships with the baby that form the foundation for child well being
Why the First Years of Life?

- Infancy is a time when language and cognitive skills rapidly develop as the building blocks to school success
  - Children with strong language skills early on show an advantage in later reading, grammatical development, phonological awareness and cognitive skills years later.
Today’s Talk: Research Foci

• RQ1: Which aspects of father involvement are important to children’s language and cognitive development?
• RQ2: How and why?
Data Sources
Early Head Start

• 3001 families in randomized experimental-control design
• Mother interviews and videorecorded with children ages 14, 24, 36 mos & Pre-K
• Father interviews and videorecorded with children ages at 24, 36 mos & Pre-K
• Nested study of fathers and mothers of newborns at 1, 3, 6, 14, 24, 36 mos & Pre-K
MetroBaby Project

• 380 families recruited from 3 public hospitals (Mexicans, Dominicans, African American & Chinese)
  – Large immigrant and minority groups in the U.S.; growing populations in NYC and other urban communities
  – Urban poor neighborhoods with high crime rates, language barriers

• Data collection at birth, 1, 6, 14, 24, 36, 52 months, Kindergarten & 1st grade
RQ1: Which aspects of father involvement are important to children’s language and cognitive development?
Direct Pathways

• Two clear influences:
  – The quality of father-child interactions (verbal responsiveness, support, use of rich language)
  – Fathers’ engagement of children in learning activities
Influence #1: The Quality of the Father-Child Relationship
Father-Toddler Interactions
The Quality of Father-Child Interactions

• Global coding (1-7) of fathers’ supportiveness (sensitivity, responsiveness, positive regard), intrusiveness, negativity

• Micro-coding of fathers’ language use (different word types, different language functions) from transcriptions of f-c interactions
  – “See the ball” (3 word types)
  – “Look there” (directive); “What is that?” (open ended question); “That’s a blue ball” (descriptive) (3 functions)
The Quality of Father-Child Interactions

• How does the quality of fathers’ interactions compare to those of mothers on global measures and micro measures of language?
Fathers’ and Mothers’ Supportiveness and Negativity with 2- and 3-Year olds

Tamis-LeMonda et al. (2004), *Child Development*
Fathers and Mothers at Play with 2-Year olds: # Word Types

Tamis-LeMonda, Baumwell, Cristofaro (in press), First Language
Fathers and Mothers at Play with 2-Year olds: Communicative Diversity

Tamis-LeMonda, Baumwell, Cristofaro (in press), *First Language*
Fathers and Mothers at Play with 2-Year olds: Mean Length Utterances

Tamis-LeMonda, Baumwell, Cristofaro (in press), First Language
How do Fathers and Mothers of the Same Child Compare in Language?

- Children experience uniform language environments
  - Inter-parent correlations from .40 to .60 on all measures
- The “rich get richer”
  - Assortive mating
  - Or living together makes parents similar
    - Residency moderates mother-father correlation in word types (relation there for resident, not non-resident)
Language Heard by Two Children: Parents’ Communicative Diversity

Tamis-LeMonda, Baumwell, Cristofaro (in press), *First Language*
The Language Expressed by Two Children with Mother and with Father

Tamis-LeMonda, Baumwell, Cristofaro (in press), First Language
Father Involvement Matters above Mothers’ Involvement
## Fathers and Mothers at Play with 2- and 3-Year olds

<table>
<thead>
<tr>
<th></th>
<th>36 MDI</th>
<th></th>
<th>36 PPVT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>$R^2$ change</td>
<td>Beta</td>
<td>$R^2$ change</td>
</tr>
<tr>
<td>Mother’s Supportive Parenting</td>
<td>.20*</td>
<td>.13***</td>
<td>.14+</td>
<td>.10***</td>
</tr>
<tr>
<td>Father’s Supportive Parenting</td>
<td>.25**</td>
<td>.07***</td>
<td>.25**</td>
<td>.08***</td>
</tr>
<tr>
<td>Significant Demographics</td>
<td>.08**</td>
<td></td>
<td>.10***</td>
<td></td>
</tr>
<tr>
<td>(Parental Education, Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$+ p < .10. * p \leq .05. ** p \leq .01. *** p \leq .001$

Tamis-LeMonda et al. (2004), *Child Development*
Fathers and Mothers Language: Associations with Children’s Language at 2 Years

Bivariate Correlations

Types
Utt Diversity
MLU

Mother
Father

Tamis-LeMonda, Baumwell, Cristofaro (2012), *First Language*
Father Involvement Matters for School Readiness
Father Involvement and Children’s School Readiness

- Participants & Procedures
  - Approximately 1200 resident low-income fathers of young children from a nationally representative sample (ECLS-B)
  - Fathers reported on parenting behaviors when children were 9 months and 2 years of age
  - Children’s school readiness at preschool age

McFadden, K. E., 2012
Father Involvement and Children’s School Readiness

• Which set of fathering behaviors predict children’s school readiness skills?
  – Childcare ($\alpha = .86$)
  – Learning Activities ($\alpha = .78$)
  – Outings ($\alpha = .77$)
  – Time with Child ($\alpha = .77$)
  – Financial Provisioning ($\alpha = .79$)
**Fathers’ Learning Activities and Children’s PreKindergarten Skills**

<table>
<thead>
<tr>
<th></th>
<th>PPVT</th>
<th>Reading</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial provisioning</strong></td>
<td>.09**</td>
<td>.12**</td>
<td>.15**</td>
</tr>
<tr>
<td>Engagement in childcare</td>
<td>.05</td>
<td>-.05</td>
<td>-.07*</td>
</tr>
<tr>
<td>Engagement in play activities</td>
<td>-.06*</td>
<td>.00</td>
<td>-.02</td>
</tr>
<tr>
<td><strong>Engagement in learning activities</strong></td>
<td>.11**</td>
<td>.14***</td>
<td>.08*</td>
</tr>
</tbody>
</table>

* *p < .05, ** p < .01, *** p < .001, controlling for father race/ethnicity and time spent with child

McFadden, K. E., 2012
Father Involvement Matters for Academic Skills in Early Adolescence
Fathers’ Learning Activities and Children’s 5th Grade Academic Skills

- Participants & Procedures
  - Approximately 602 low-income fathers of young children participating in the Early Head Start National Evaluation Study
  - Fathers’ participation in learning activities when children 2, 3 years and in pre-school
  - Children assessed on receptive language (PPVT), literacy and math skills in 5th grade

McFadden, Tamis-LeMonda, Cabrera (2012), Family Science
### Fathers’ Learning Activities and Children’s 5th Grade Academic Skills

<table>
<thead>
<tr>
<th></th>
<th>PPVT</th>
<th>Reading</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father Engagement in Early Learning Activities</td>
<td>.14***</td>
<td>.15**</td>
<td>.09*</td>
</tr>
<tr>
<td>Child Positive Relationship with Biological Father</td>
<td>.16**</td>
<td>.17**</td>
<td>.10</td>
</tr>
<tr>
<td>Child Positive Relationship with Father-Figure</td>
<td>.09*</td>
<td>.15***</td>
<td>.14**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.04***</td>
<td>.05***</td>
<td>.03**</td>
</tr>
</tbody>
</table>

*p < .05, ** p < .01, *** p < .001, controlling for father race/ethnicity and time spent with child

McFadden, K. E., 2012
RQ2: Why do these aspects of father involvement matter?
Pathways of Influence

• Skill promotion:
  – Support of early skills in infants and young children, which snowball to later skills (language examples)
Pathways of Influence

• Family systems:
  – Fathering affects the mother-child relationship, which feeds into children’s skills
Father Pathways of Influence

Emergent Skills

Father Involvement

Mother-Child Relationship

Children’s School Performance
Fathers’ Influence on Mothers’ Sensitivity

• Father supportiveness 2 years to mom 3 years (N=330)

All Influences Significant at p < .05, .01 or .001 levels.
Pathways of Influence

• Cycle of involvement:
  – Early father involvement feeds into continued involvement, which then directly affects children
Father Pathways of Influence

- Father Involvement
- Emergent Skills
- Father-Child Relationship
- Children’s School Performance
- Mother-Child Relationship
Example of Pathways: Fathers’ Prenatal Involvement
Fathers’ Prenatal Involvement

- Family system
- Cycles of involvement
Fathers’ Prenatal Involvement and Involvement across 5 years of Life

• Does father see child at least a few times per month or more, modeled at successive ages:
  – Birth
  – 1 mo.
  – 14 mos.
  – 24 mos.
  – 36 mos.
  – Pre-K

Shannon, Cabrera, Tamis-LeMonda, & Lamb (2009), *Parenting: Science & Practice*
Closer Look at Prenatal Involvement
Fathers’ Prenatal Involvement and Involvement with 14-Month Olds

Tamis-LeMonda, Yoshikawa, Kahana-Kalman, Niwa, (2008), *Sex Roles*
Fathers’ Prenatal Involvement and Involvement with 14-Month Olds

• 380 immigrant and low-income families
• Interviews on father prenatal involvement at birth of baby

- Visiting the hospital
- Visiting the doctor
- Seeing an ultrasound
- Speaking to mother about the pregnancy

- Giving money to buy things for the baby
- Feeling the baby move
- Attending Lamaze or other birth classes
- Listening to baby’s heartbeat

Tamis-LeMonda, Yoshikawa, Kahana-Kalman, Niwa, . (2008), Sex Roles
Fathers’ Prenatal Involvement and Involvement with 14-Month Olds

- Father involvement in infancy (mediator)
  - Daily diaries of 24-hour period in the life of the baby at 1 month & 6 months
  - Offered data on fathers’ time with infant and activities he engaged in with baby the prior day
  - Survey items asked about fathers’ engagement in childcare and play with infants

Tamis-LeMonda, Yoshikawa, Kahana-Kalman, Niwa, . (2008), *Sex Roles*
Fathers’ Prenatal Involvement and Involvement with 14-Month Olds

• Father involvement at 14 months (outcomes) = time spent engaged in activities with toddler
  - Sing songs
  - Watch TV
  - Watch videos
  - Read books
  - Tell stories
  - Listen to music
  - Play games without toys
  - Play rough-tumble games
  - Build things with child
  - Play with ball

Tamis-LeMonda, Yoshikawa, Kahana-Kalman, Niwa, . (2008), *Sex Roles*
Fathers’ Prenatal Involvement and Involvement in Infancy

N=278, n=200 high involvement; n=78 low involvement based on distribution cut < 6
Father Prenatal Involvement and the M-F Relationship at 1 Month

Tamis-LeMonda, C. S., Yoshikawa, H., Kahana-Kalman, Niwa, E. (2008), Sex Roles
Fathers’ Prenatal Involvement and Involvement with 14-Month Olds

Tamis-LeMonda, Yoshikawa, Kahana-Kalman, Niwa, (2008), *Sex Roles*
### Prediction to 14-Month Involvement

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$SE\ B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father Education</td>
<td>.079</td>
<td>.116</td>
<td>.051</td>
</tr>
<tr>
<td>Father Employment</td>
<td>.227</td>
<td>.158</td>
<td>.113</td>
</tr>
<tr>
<td>Father Marital Status</td>
<td>.008</td>
<td>.126</td>
<td>.005</td>
</tr>
<tr>
<td>Father Residency</td>
<td>.058</td>
<td>.143</td>
<td>.035</td>
</tr>
<tr>
<td>Mexican Contrast</td>
<td>-.165</td>
<td>.155</td>
<td>.105</td>
</tr>
<tr>
<td>Dominican Contrast</td>
<td>-.038</td>
<td>.150</td>
<td>-.024</td>
</tr>
<tr>
<td>Prenatal Involvement</td>
<td>.771</td>
<td>.342</td>
<td>.178**</td>
</tr>
<tr>
<td>Involvement 1 &amp; 6 Months</td>
<td>.532</td>
<td>.241</td>
<td>.184***</td>
</tr>
<tr>
<td>Mother-Father Relationship</td>
<td>.228</td>
<td>.062</td>
<td>.303**</td>
</tr>
</tbody>
</table>

$R^2$ Total $=.27$

$F\ (9,\ 143) = 5.93,$

$p = .000$

**$p < .01$, ***$p < .001$, two-tailed.

Tamis-LeMonda, C. S., Yoshikawa, H., Kahana-Kalman, Niwa, E. (2008), Sex Roles
Conclusions

- Early father-child interactions and engagement in learning activities predict children’s emerging language skills and later academic skills.
- Effect sizes for father-to-child associations are as strong as those seen for mother-to-child associations.
- Pathways of influence include promotion of early child skills, effects on mother-child interactions, and snowball effects of involvement over time.
Special Thanks to:

- Administration for Children and Families
- NICHD
- Ford Foundation
- National Science Foundation
- And the fathers and families in our studies
Fathers’ Income and Work Continue to Matter for father engagement at 2 and 3 Years and at PreK (Ns = 290; 500)


• Cabrera, N., Shannon, J. D., & Tamis-LeMonda, C. S. (under review).
Fathers’ Time and Financial Investments

- 799 Fathers of 24-month-old children
- Face-to-face interviews with Fathers
- Fathers reported on their child-related behaviors on 31 items
  - included accessibility, financial responsibility, and direct engagement

McFadden, Tamis-LeMonda, Cabrera, & Howard (in progress).
Fathers’ Time and Financial Investments

- Factor analysis of 31 father behaviors resulted in 5 factors:
  - Childcare ($\alpha = .86$)
  - Learning Activities ($\alpha = .78$)
  - Outings ($\alpha = .77$)
  - Time with Child ($\alpha = .77$)
  - Financial ($\alpha = .79$)
Fathers’ Time and Financial Investments
Survivor Function: Father Accessibility

Survivor Function: Father Accessibility


Percent of parental involvement

- Both Prenatal Activities
- One Prenatal Activity
- None

Time periods:
- Accessible at Birth
- Birth to 3 mos.
- 12 to 15 mos.
- 22 to 25 mos.
- 34 to 37 mos.
- 60 to 63 mos.