A Meta-Analysis on Father Involvement and Early Childhood Social-Emotional Development

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Acknowledgements

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Development in Early Childhood and Social-Emotional Abilities

- Transition to formal school environment
  - Leave home for extended time, possibly for the first time
  - Much less individual attention
  - Extensive peer interaction

- School readiness is a measure of a child’s likelihood to succeed in this new setting
  - Cognitive ability
  - Reading skills
  - Math skills
  - Language development
  - Motor/physical development
  - Social-emotional abilities

- Importance of developing social-emotional abilities to be successful in the transition (Raver & Zigler, 1997)
Importance of Parent Involvement

- Parent involvement facilitates this transition
  - Academic achievement (Flouri & Buchanan, 2004)
  - Social-emotional competence (Overbeek et al., 2007)

- Who is included in this research?
  - Mothers are included, fathers are not.
  - What about the dads?
  - Mothers are more likely to be the child’s primary caregiver.

Fathers are important.
Father Involvement in Early Childhood

- Fathers help their preschool children develop:
  - self-esteem
  - social competence
  - empathetic skills
  - emotion regulation
  - positive self-concept

- Unique contributions, as distinct from mothers

- Discrepancies in the literature on how father involvement helps children develop these abilities
Influences on Father Involvement and Social-Emotional Development

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SES</strong></td>
<td>☑ Yes</td>
<td>☑ No</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td>☑ Yes</td>
<td>☑ No</td>
</tr>
<tr>
<td><strong>Residential Status</strong></td>
<td>☑ Yes</td>
<td>☑ No</td>
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</tbody>
</table>

The influence of father involvement, regardless of SES, helps children to develop social-emotional abilities in children. Social-emotional development differs according to the SES of the father.
Addressing Conflicting Findings

- Conducting a meta-analysis helps us to make sense of the literature.
  - A meta-analysis examines every study that has been conducted on a particular topic to assess the relationship between variables.
  - An index of the strength of the relationship, called an effect size, is calculated for each study.
  - Data are integrated to obtain a general estimate of the strength of the relationship between variables (Leary, 2008).

- A meta-analysis is a study of studies.

- Inclusion of moderating variables:
  - SES
  - Race/Ethnicity
  - Father Residential Status
Research Questions

- What is the relationship between father involvement and children’s social-emotional abilities in early childhood?
- Does the relationship vary as a function of SES, race/ethnicity, or father residential status?
Methods

- Data collection
  - Keywords
  - e.g., father, early childhood, father involvement, preschool
- Sample size for this project
  - 13 articles
  - Databases
    - e.g., PsychINFO, ERIC, IBBS
  - Sample size for this project
    - 73 effect sizes
    - 817 total participants
- Inclusion criteria
  - Relevance (FI or SR)
    - Early childhood (ages 3-8)
    - Published in years 1998-2008
    - Empirical (data collection)
    - Quantitative
    - Outcomes of FI, not determinants

3,775 titles collected.

Articles of basic relevance to father involvement or school readiness, 2,750 articles remain.

Articles fit into specific inclusion criteria, 125 articles remain.

Relevance to early childhood school readiness outcomes, 30 articles remain.

Relevance to social-emotional development, 13 articles remain.
Sample Characteristics

- Dimensions of Father Involvement
  - Active Father Involvement
    - Engagement/activity
    - Communication
    - Attachment
    - Caregiving
  - Passive Father Involvement
    - Presence
    - Financial assistance

- Dimensions of Social-Emotional Outcomes
  - Positive: social skills, emotion regulation
  - Negative: behavior problems
# Example of Included Study

<table>
<thead>
<tr>
<th>Father Involvement Measures</th>
<th>Social-Emotional Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities with Your Child</td>
<td>Temperament Assessment Battery</td>
</tr>
<tr>
<td>Family Involvement Questionnaire</td>
<td>Penn Interactive Peer Play Scale</td>
</tr>
<tr>
<td>Demographic Questionnaire</td>
<td>Emotion Regulation Checklist</td>
</tr>
</tbody>
</table>

73 total effect sizes from this study

(Downer & Mendez, 2005)
Data Analysis

■ Calculated effect sizes within each study

■ Calculated mean effect sizes across each dimension of FI and S/E outcomes
  ■ Random-effects model: we assume that included studies do not embody “identical” true effect sizes (Borenstein, 2009).
  ■ More weight was given to studies that included more variance and larger sample sizes

■ Tests for heterogeneity and publication bias

■ Effects of moderating variables
## Summary of Effect Size Results

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Summary Measures</th>
<th>Father Involvement</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Active Involvement</td>
<td>Passive Involvement</td>
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</tr>
<tr>
<td></td>
<td></td>
<td># of effect sizes</td>
<td>p-value</td>
<td># of effect sizes</td>
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<tr>
<td>Positive</td>
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<tr>
<td></td>
<td>p-value</td>
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<td>N/A</td>
<td>0.069</td>
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<td>Summary Effect Size</td>
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<td>-.14</td>
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<td># of effect sizes</td>
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</tr>
<tr>
<td></td>
<td>p-value</td>
<td>0.069</td>
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</table>

There was a significant effect between active father involvement and positive social-emotional outcomes.
Active Father Involvement and Positive Outcomes

Significant summary effect size of .22

Mean effect size for each study included

Summary effect size for all studies

Correlation and 95% CI

-1.00 -0.50 0.00 0.50 1.00

Indicative of no effect
Tests for Heterogeneity & Publication Bias

- Heterogeneity: how much of the variation is real?
  - Q statistic = 32.55, p-value = 0.002
    - Because the Q statistic was significant, that means there was heterogeneity in the observed effects.
    - $I^2 = 60\%$ (of the observed variation was real)
    - There was enough variation to warrant moderation analyses.

- Publication Bias: are the studies included in this analysis representative of all of the studies executed on this topic or merely of those being published?
  - There was no evidence of publication bias.
## Moderating Variables

<table>
<thead>
<tr>
<th>Moderators</th>
<th>Outcome</th>
<th>Is the moderator significant in explaining any variability?</th>
</tr>
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<tbody>
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<td>Mid/High</td>
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<td>Non-minority</td>
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<td>Residential Status</td>
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<tr>
<td>Residential</td>
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</table>
Findings & Discussion

There was a significant positive effect between active father involvement and the development of young children’s positive social-emotional abilities.

- There were significant trends between father involvement and children’s social-emotional problems.

Neither SES, race/ethnicity, or residential status served as significant moderators of this relationship.

- The relationship between father involvement and children’s social-emotional outcomes may be the same across all levels of the moderators.

- However, caution should be used in interpreting these results because of the great deal of data missing from the moderator variable analyses.
Future Directions

- Directionality of results
  - Does father involvement affect child outcomes, does child behavior affect father involvement, or is it transactional?
  - Longitudinal data on father involvement and child outcomes will help to address these questions.

- Missing data from moderator variable analyses
  - It is necessary to study context more purposefully in relation to father involvement and child outcomes.

- Measurements of father involvement
  - Need for a more explicit conception of father involvement
  - More measures that directly sample fathers

- School readiness meta-analysis
Dads Make A Difference

Thank You!