Positive Parenting in the Face of Early Adversity: Does it *Really* Matter?

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The Data Is Confounded???
The More I Think
The More Confused I Get
myopia
POVERTY ➔ SCHIZOPHRENIA
POVERTY → SCHIZOPHRENIA

SOCIAL & VOCATIONAL COMPETENCE
Ingredients for Confounding

FACTOR A  ↔  FACTOR B
Ingredients for Confounding

FACTOR A

FACTOR B

FACTOR C
Ingredients for Confounding

FACTOR A  FACTOR B

FACTOR C
Ingredients for Confounding

FACTOR A

FACTOR C

FACTOR B

The Third Variable Problem
Positive Parenting in the Face of Early Adversity: Does it Really Matter?
Ingredients for Confounding

PARENTING  

ADVERSITY  

DEVELOPMENT  

CHILD

The Third Variable Problem
Ingredients for Confounding

ADVERSITY  ↔  DEVELOPMENT

PARENTING

The Third Variable Problem
Background

“Children’s exposure to Adverse Childhood Experiences is the greatest unaddressed public health threat of our nation today.”

Robert W. Block, MD, FAAP, a former president of the American Academy of Pediatrics

ACEs → Early death
Adult health
Adolescent health
Background

“Children’s exposure to Adverse Childhood Experiences is the greatest unaddressed public health threat of our nation today.”

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ACEs → Early death
Adult health
Adolescent health

ACEs → Young children?
Balancing positive and negative outcomes

- Accumulated adversities lead to toxic stress.
- “the essence of toxic stress is the absence of buffers [i.e., protective factors] needed to return the physiologic stress response to baseline.” (Garner & Shonkoff, Pediatrics. 2012; 129: e224-231.)

Promoting protective factors (examples)
- Safe, Stable, and Nurturing relationships and environments (CDC),
- Strengthening Families™

(Source: Center on the Developing Child, Harvard University)
Importance of **Parenting** as a protective factor

- **Parenting practices** can protect a child from adversity, stimulate positive developments, and **enhance child’s resiliency**.

- “**High-quality ‘serve and return’ parenting skills do not always develop spontaneously,**” especially among families living with adversities. (Parenting Matters: Supporting Parents of Children Ages 0-8)
Aims of study

1. to examine the relationship between ACEs and both wellbeing and development during early childhood

2. to examine effects of parenting practices, in the presence and absence of adverse experiences, on these same outcomes.
Methods

• Data: National Survey of Children’s Health (NSCH) 2011/12
• Cross-sectional survey by telephone
• Children aged 0-5 years old (n=29,997, 31.4% of the total NSCH sample)
Social-emotional wellbeing
(6 months – 5 years old)

• Parents/guardians reported the frequency for the following behaviors in past month

1. [He/She] is affectionate and tender with you
2. [He/She] bounces back quickly when things don’t go one’s way
3. [He/She] shows interest and curiosity in learning new thing
4. [He/She] smiles and laughs a lot

Response: 1 = “always/usually”, 0 = “sometimes/rarely/never”

High social-emotional wellbeing (Score: 4)
Low social-emotional wellbeing (Score: 0-3)
Developmental risks
(4 months – 5 years old)

- Parents’ Evaluation of Developmental Status (PEDS)
- Parents/guardians reported concerns

**Having developmental risk** (Any concerns)

**No developmental risk** (No concerns)

<table>
<thead>
<tr>
<th>Child’s Age: 4 mos -- 17mos</th>
<th>Child’s Age: 18mos to 2 yrs</th>
<th>Child’s Age: 3 to 4yrs</th>
<th>Child’s Age: 5 yrs</th>
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</thead>
<tbody>
<tr>
<td><strong>PREDICTIVE CONCERNS:</strong></td>
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<tr>
<td>Socio-emotional (K6Q07)</td>
<td>Receptive language (K6Q03)</td>
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<tr>
<td>Non-PREDICTIVE CONCERNS:</td>
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<td>Non-PREDICTIVE CONCERNS:</td>
<td>Non-PREDICTIVE CONCERNS:</td>
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<td>Global concerns (K6Q01)</td>
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<td>Fine motor (K6Q04)</td>
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<td>Behavior (K6Q06)</td>
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<td>Behavior (K6Q06)</td>
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<tr>
<td>Behavior (K6Q06)</td>
<td>Self-help (K6Q08)</td>
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<td>Self-help (K6Q08)</td>
</tr>
<tr>
<td>Socio-emotional (K6Q07)</td>
<td>Preschool/schl skills (K6Q09)</td>
<td>Socio-emotional (K6Q07)</td>
<td>Preschool/schl skills</td>
</tr>
<tr>
<td>IF 10-18mos:</td>
<td></td>
<td></td>
<td>(K6Q09)</td>
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<tr>
<td>Self-help (K6Q08)</td>
<td></td>
<td></td>
<td>Socio-emotional (K6Q07)</td>
</tr>
</tbody>
</table>
Adverse Childhood Experiences

Source: Centers for Disease Control and Prevention, Credit: Robert Wood Johnson Foundation
ACEs in National Survey of Children’s Health

**Original items from Household Dysfunction**
- Mental illness
- Parental Incarceration
- Mother treated violently
- Substance/Alcohol Abuse
- Divorce/Separation

**Deprivation in household**
- Low income

**Threats in community**
- Community violence
- Parent Death
- Racial discrimination

(Nine ACEs answered by parents in NSCH)
Positive parenting practices

Six parenting practices

- Reading books
- Telling story, singing
- Playing with peers
- Going out (4+ days / week)
- Family meal
- Less TV watching (≤2 hour / day)
Analysis

• Descriptions of demographics, parenting practices, adverse experience counts

• Regressed risk indicators on ACE scores, demographic controls, and the parenting count variable

• Analyses adjusted for complex survey design.
Result 1.
Proportion of Adverse Childhood Experiences

- Low income: 24.5% (0-2 years old), 26.1% (3-5 years old)
- Divorce/separation: 5.4% (0-2 years old), 14.0% (3-5 years old)
- Drug/alcohol abuse: 14.0% (0-2 years old), 4.0% (3-5 years old)
- Community violence: 7.4% (0-2 years old), 7.1% (3-5 years old)
- Family mental illness: 3.5% (0-2 years old), 1.4% (3-5 years old)
- Intimate partner violence: 4.0% (0-2 years old), 3.9% (3-5 years old)
- Parent incarceration: 5.8% (0-2 years old), 5.9% (3-5 years old)
- Racial discrimination: 0.6% (0-2 years old), 0.6% (3-5 years old)
- Parent died: 1.2% (0-2 years old), 1.1% (3-5 years old)
Result 2.
Proportion of Positive Parenting Practices

<table>
<thead>
<tr>
<th>Activity</th>
<th>0 - 2 years old</th>
<th>3 - 5 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading a book</td>
<td>65.7%</td>
<td>77.5%</td>
</tr>
<tr>
<td>Storytelling/Singing</td>
<td>74.9%</td>
<td>83.9%</td>
</tr>
<tr>
<td>Playing with peer</td>
<td>39.4%</td>
<td>75.1%</td>
</tr>
<tr>
<td>Going out</td>
<td>52.9%</td>
<td>51.7%</td>
</tr>
<tr>
<td>Family meal</td>
<td>84.4%</td>
<td>83.8%</td>
</tr>
<tr>
<td>TV watching</td>
<td>76.9%</td>
<td>87.9%</td>
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</table>
Ingredients for Confounding

PARENTING  ↔  DEVELOPMENT

CHILD

ADVERSITY
Ingredients for Confounding

PARENTING  ↔  CHILD DEVELOPMENT

ADVERSITY

The Third Variable Problem
Proportions for each combination of ACE and Parenting counts

0 – 2 years old

3 – 5 years old
Result 3. Effects of the numbers of ACEs on wellbeing and general development

<table>
<thead>
<tr>
<th>Low social-emotional wellbeing</th>
<th>Developmental risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEs (ref: 0)</td>
<td>Model 1</td>
</tr>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>1</td>
<td>1.52</td>
</tr>
<tr>
<td>2-3</td>
<td>1.60</td>
</tr>
<tr>
<td>4+</td>
<td>1.82</td>
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<tr>
<td></td>
<td>1.71</td>
</tr>
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<td></td>
<td>2.30</td>
</tr>
</tbody>
</table>

Model 1: ACEs
Model 2: ACEs + covariates (age, race, parental education)
Model 3: ACEs + covariates + parenting practices

The ORs in all models were significant (p<0.05).
Result 4. Effects of the numbers of parenting practices on wellbeing and general development

<table>
<thead>
<tr>
<th>Low social-emotional wellbeing</th>
<th>Developmental risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parenting practices (ref: 0 - 2)</td>
<td>Model 3: ACEs + covariates + parenting practices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(OR)</th>
<th>Model 3</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.65*</td>
<td>0.62*</td>
<td>0.44*</td>
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<tr>
<td>0.40*</td>
<td></td>
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</tr>
</tbody>
</table>

* p<0.05
Result 5. Predicted probability of the numbers of ACEs and parenting practices

Low social-emotional wellbeing

General developmental risks
Low social-emotional wellbeing

Predicted Probability

Positive Parenting Practices
Positive Parenting Practices

Predicted Probability

Low social-emotional wellbeing

No ACEs (0)
Low Parenting (0-2)
30.4% Risk

High ACEs (4+)
High Parenting (6)
22.3% Risk
General developmental risks

**Predicted Probability**

### ACE Score

- □ 0
- ◦ 1
- ▲ 2–3
- △ 4+
- ▼ Model 2b
- □ ACEs Excluded

**Positive Parenting Practices**
General developmental risks

Predicted Probability

ACE Score
- 0
- 1
- 2-3
- 4+
- Model 2b
- ACEs Excluded

No ACEs (0)
Low Parenting (0-2)
44.2% Risk

High ACEs (2 - 3)
High Parenting (6)
43.5% Risk
Marginal effects of ACEs

Low Social-Emotional Well-being

General Developmental Risk

Interaction: ACE 0 (ref), ACE 1-3 (p = 0.919), ACE 4+ (p = 0.666)

Interaction: ACE 0 (ref), ACE 1-3 (p = 0.725), ACE 4+ (p = 0.717)
Summary of findings

• ACEs negatively affected social-emotional wellbeing and general development among young children.

• Positive parenting practices have protective effects on young children after controlling the effects of ACEs.

• Risks associated with an absence of positive parenting were often greater than those of 2+ ACEs, even among no/low adversity families.
Discussion

• Parenting practices can be affected negatively by social disadvantages. (i.e., “30 million word gap”)

- Social disadvantages
- Low language exposure
  - Less family meal, going out, Longer TV watching
- Low cognitive, social stimuli

• Encouraging and facilitating adoption of positive parenting techniques are the primary, front-line intervention for promoting healthy development among young children for families with adversities
• The absence of positive parenting demonstrated independent negative effects on social-emotional wellbeing and general development.

• No effect modification with ACEs

• Practitioners and policy makers would be wise to pay equitable attention to both ACEs and to the absence of positive parenting during early childhood.
Limitations

• A cross-sectional study
  -> Longitudinal study is needed
• Dichotomized items and constructed simple summed scores
  -> Robust results with continuous items
• NSCH ACE items
Discussions related with Adverse Childhood Experiences (ACEs)

- Finkelhor et al. proposed a revised inventory of ACEs including peer victimization, peer isolation/rejection, community violence, and low socioeconomic status (SES).
- McLaughlin et al. proposed a conceptual framework of “deprivation” and “threat” to understand differential impact of childhood adversities on neural development.
- Further research should evaluate these differential effects of deprivation and threats along with broader adversities.
Deprivation and Threat associated with commonly occurring Adverse Childhood Experiences

ACEs in NSCH

Original ACEs
Conclusion

• Adverse childhood experiences have negative effects on wellbeing and development in early childhood

• Parenting practices exhibited independent protective effects in some outcomes.

• These data support sustaining and furthering interventions that promote positive parenting practices at home for all children, but especially for those within families experiencing high levels of adversity.