LONGSCAN: The Consortium of Longitudinal Studies in Child Abuse and Neglect - Some Highlights

2011 National Child Welfare Evaluation Summit

Howard Dubowitz, MD, MS

Laura Proctor, PhD

Jonathan Kotch, MD, MPH
Presentation Outline

• LONGSCAN Overview
• Outcomes of Child Welfare Involvement (Proctor)
• Health, Risk Behaviors, and the Brain (Kotch)
• Research on Fathers (Dubowitz)
Overview of LONGSCAN

• Limitations of short-term, poorly funded studies

• NCCAN decision: 20-year longitudinal study

• Planning grant – 1989

• Aim: to study antecedents and consequences of CM, risk and protective factors

• Sampling: high risk for CM ---- children in foster care

• 5 distinct studies
  – East, South, Midwest, Northwest, & Southwest
Governance

UNC coordinating center
Consortium governance agreement
Common measures, coding, training, data entry
Bimonthly PI calls
Biannual PI meetings

LONGSCAN’S Ecological – Developmental Conceptual Model

MALITREMENT RISK OR HISTORY
- Neglect
- Physical Abuse
- Sexual Abuse
- Emotional Neglect
- Emotional Abuse
- Exposure to Violence

CHILD CHARACTERISTICS
- Age
- Gender
- Race/Ethnicity
- Intelligence
- Temperament
- Physical Health
- Health/Development

FAMILY / PARENT CHARACTERISTICS
- Age
- Gender
- Race/Ethnicity
- Social Class
- Physical Health
- Marital Status
- History of Maltreatment

PARENTAL & FAMILY FUNCTIONING
- Mental Health
- Substance Abuse
- Physical Health
- Parenting Styles
- Coping Styles
- Spousal Relationship
- Household Composition
- Family Functioning
- Family Bonds

EXTRAFAMILIAL RELATIONSHIPS
- Social Networks
- Social Supports

EXTRAFAMILIAL ENVIRONMENT
- Child
- Age
- Developmental Lifespan

CHILD OUTCOMES
- (Acute / Chronic)
- Mental Health
- Physical Health
- Adaptive Functioning
- Cognitive Functioning
- Social Functioning

SYSTEMS OF CARE FACTORS
- Child Welfare
- Education
- Juvenile Justice Probation
- Mental Health
- Health Care

COMMUNITY ECOLOGY
- Social Class
- Race / Ethnicity
- Neighborhood Characteristics
- Other Resources
- Other Stressors
- Cultural Norms / Beliefs
Baseline Sample by Site

- East: 282 'at risk' children from urban pediatric clinics (e.g., FTT, drug exposed)
- South: 243 children from 'at risk' study - 1/3 reported
- Northwest: 254 children with CPS reports (moderate risk) before age 4
- Midwest: 245 children, 2/3 maltreated, 1/3 from same neighborhoods
- Southwest: 330 children in foster care prior to age 4

Total N = 1354
## Baseline Characteristics*

<table>
<thead>
<tr>
<th>Child</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>48%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>26%</td>
</tr>
<tr>
<td>African American</td>
<td>53%</td>
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</table>

<table>
<thead>
<tr>
<th>Caregiver</th>
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<tbody>
<tr>
<td>Married</td>
<td>33%</td>
</tr>
<tr>
<td>Single</td>
<td>45%</td>
</tr>
<tr>
<td>Separated</td>
<td>8%</td>
</tr>
<tr>
<td>Divorced</td>
<td>13%</td>
</tr>
</tbody>
</table>

| Mean family income | $10-15K |
| Mean educational level | High school |

* Baseline refers to data at age 4 or 6
## Data Collected (baseline to age 18)

<table>
<thead>
<tr>
<th>Interviews</th>
<th>Baseline</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>12</th>
<th>14</th>
<th>16+</th>
<th>18+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child</td>
<td>--</td>
<td>1166</td>
<td>1176</td>
<td>1074</td>
<td>895</td>
<td>884</td>
<td>803</td>
<td>854</td>
</tr>
<tr>
<td>Caregiver</td>
<td>--</td>
<td>1247</td>
<td>1225</td>
<td>1130</td>
<td>956</td>
<td>938</td>
<td>830</td>
<td>556</td>
</tr>
<tr>
<td>Child or Caregiver</td>
<td>1354</td>
<td>1250</td>
<td>1236</td>
<td>1140</td>
<td>976</td>
<td>960</td>
<td>869</td>
<td>889</td>
</tr>
</tbody>
</table>

+ Data collection ongoing at age 16 and 18
Outcomes of Child Welfare Involvement: Findings from LONGSCAN

Laura Proctor, PhD
Judge Baker Children’s Center
Harvard Medical School
Outcomes of CW Involvement

• Children who entered out-of-home care prior to 3.5 years of age (more than half before 1 year)
  – Remained in care for at least 5 months
  – In addition to quantitative data we are constructing life narratives
Outcomes of CW Involvement: Importance

• Importance of following infants and toddlers
  • Birth to 1 year olds entering CW system at a higher rate
  • One third of all victims of maltreatment in 2009 under 4 years of age
• Early experiences impact health (social, emotional, behavioral, and physical) throughout life
  • Some evidence they are more important than later specific risk factors (Halfon & Newacheck, 2010)
CW Involvement: Context

- Legislation
  - Adoption and Safe Families Act (1997)
  - Promoting Safe and Stable Families (2001)
  - Foster Connections to success and Increasing Adoptions Act (2008)
- Emphasize Protection, Family Maintenance, Permanence, and Child Well-Being
  - Promote adoptions, kinship care, and expedite permanency for children
  - Increasing flexibility
CW Involvement and Policy: Importance of Methods

- Need more than a sample of what happens
  - Cross-sectional look
  - Short term follow-up (e.g., 18 months, 3 years)
- Move beyond administrative data (i.e., utilize multiple sources)
- And, move beyond quantitative

“Reunification research using longitudinal data and qualitative methods is recommended to clarify risks and outcomes across time.”

(p. 216, Bellamy, 2008)
1. Qualitative Narratives: Instability & Multiple Adversities

- Early lives marked by adversity
  - Disadvantage & Dysfunction
- Early CW involvement
  - Lots of attention (moves, services)
  - Kids with multiple problems
- Grow up in chaotic, unstable environments
  - Household
  - Multiple caregiver problems
    - Not unique to particular type of caregiver (e.g., biological, adoptive, kinship, nonkin)
- Difficult to follow
80% had substance abusing biological parent
1 in 3 drug exposed in utero
More than half had a reported disability at age 4
By 18 youth are reporting
  Having lived in in more than 6 homes
  With at least 6 different caregivers
  And attended at least 5 different schools
Maltreatment
  67% have a subsequent CPS report (4-12)
Quantitative Outcomes & Predictors

- Outcomes reported at age 18
  - Age of first sex (and pregnancy for females)
  - Abuse of substances
  - Assaults & Arrests
- Risk factors
  - # homes
  - # schools
  - # caregivers
- Protective factor
  - Time in current home (at age 18)
2. Stability as Protection: Behavioral Resilience

• National Survey of Child and Adolescent Well-Being (NSCAW)
  – >45% in clinical range on CBCL
• Longitudinal patterns of behavioral resilience?
Behavioral Resilience by Age

![Bar chart showing behavioral resilience across different ages for internalizing and externalizing behaviors.](chart_image)
8-Year Trajectories: Resilience to Externalizing Problems

- **Stable resilience (46.6%)**
- **Stable, moderate resilience (28.7%)**
- **Early disorder, increasing resilience (23%)**
- **Stable disorder (16.5%)**
Predictors of Resilient Outcomes

• Protective factors
  – Caregiver stability
  – Early cognitive ability
  – Early social competence

• Risk factors:
  – Late physical abuse
  – Early sexual abuse
3. Beyond Placement Type: Patterns of Re-reports

- 67% of children were re-reported 4-12
  - comparable to previous reports (Drake et al., 2006; Thompson & Wiley, 2009)
- But not tell the entire story
- Need a longitudinal look
  - Examine Patterns of re-reporting
  - Identify predictors of these patterns
Overall Rates of Re-reports 4-12
Trajectories of Re-reports
4 to 12

Proportion of class members with maltreatment report:
- Low Risk, 33%
- High Risk, 10%
- Moderate Risk, 37%
- High-to-Low Risk, 20%

Age:
- 4-6
- 6-8
- 8-10
- 10-12

Proportion of class members with maltreatment report

- 0
- 0.2
- 0.4
- 0.6
- 0.8
- 1

Graph shows the proportion of class members with maltreatment report across different age groups.
Trajectories by Age 4 Reunification Status

- Low Risk
- High Risk
- Moderate Risk
- High to Low Risk

Risk Levels:
- Low Risk
- High Risk
- Moderate Risk

Reunification Status:
- Reunified
- Not Reunified
Patterns of Reports: Risk Factors

• Reunified children faced higher risk of persistent re-reporting
• However, children in other placements also at risk
• Other risk factors: caregiver alcohol abuse, depression, and lack of social support; poverty; and number of children in the home
4. Reunification: A Closer Look

• Reunified children at age 4 had more internalizing problems at age 6 than those not reunified
  • Greater exposure to instability, family dysfunction, and harm

• Reunified children were exposed to:
  – More violence
  – More caregiver mental health problems
  – Worse family functioning
  – Lower levels of parental support
  – More stressful live events

• And were less likely to receive mental health services
• At the same time, reunified children reported that they were more connected to their social environment (e.g., peers, adults) than those who were not reunified
5. Promoting Caregiver Stability

• We examined
  – Neighborhood/Community
  – Home Environment
  – Caregiver Characteristics
  – Child Characteristics

• To see what predicted living with the same caregiver from age 6 to age 8
Predictors of Stability

• Adopted (*no* difference between reunified, kin, and nonkin)
• A father figure in the home who supported the child (i.e., emotionally, instrumentally)
• Higher Child Intellectual Functioning
• Lower Child Externalizing Behavior Problems
Overall Practice & Policy Implications

• There is no simple answer (reunify or not, relative or non-relative, adopt)
  – *Quality* of the caregiving environment/caregiver more important than *type* of caregiver
  – Permanence or stability is an appropriate target
    • Need to move away from limited view of permanence/stability
    • Stop thinking of a “positive exit” as reunification, adoption, or placement with a relative
    • Stability involves having a constant caregiver, AND family living situation

• Continue monitoring, assessing needs, and providing support regardless of placement
  – These are high-risk youth/caregivers/families struggling with multiple, chronic adversities
Overall Practice & Policy Implications

• Recognize each case is unique
  – Requires full assessment (i.e., risk, functioning)
  – Recognize potential problems and intervene
    • Alcohol and drug treatment
    • Provide resources and relevant parent training/support
    • Preparation (anticipatory guidance, stress inoculation)
  – Recognize strengths and build on those (e.g., cognitive, social)

• Utilize interventions with empirical support to promote stability and well-being
  – Multidimensional Therapeutic Foster Care (Chamberlain, Leve, et al., 2007)
  – Project KEEP (Keeping Foster Parents Trained and Supported) (Price, Chamberlain, et al., 2008, 2009)
  – Incredible Years (Linares, Montalto, et al., 2006)
  – Enhanced Foster Care (Kessler, Pecora, et al., 2008)
ACEd: The Enduring Effects of Child Abuse and Neglect

Jonathan Kotch
With Michael J. MacKenzie

Child Welfare Evaluation Summit
August 30, 2011
Objectives

• To discuss maltreatment’s impact on depression/anxiety
• To discuss maltreatment’s impact on externalizing behaviors related to health
• To consider whether adverse childhood experiences affects child and adolescent health status
• To speculate about maltreatment and brain function
Internalizing Behavior Problems: Overview

• We have examined
  ▪ Internalizing behavior problems generally (depression, anxiety, social withdrawal, somatic complaints)
  ▪ Depression/anxiety in particular

• Question:
  – What is the effect of maltreatment on depression/anxiety in childhood and early adolescence?
Depression/anxiety and Maltreatment

• Early maltreatment strongly predicts the course of depression/anxiety symptoms through age 12.

• Differences begin to appear between the maltreated and non-maltreated groups by age 6.

• Maltreated children get worse relative to their non-maltreated peers over time.
Internalizing Behavior Problems: Other Predictors

- Life events
  - Family stress
  - Intimate partner conflict
  - Child exposure to violence
  - Family legal/justice involvement
- Caregiver depressive symptoms
- Caregiver alcohol use
- Caregiver’s own history of childhood victimization
Internalizing Behavior Problems: Implications

• Effects of early maltreatment persist throughout childhood and early adolescence.
• Other adverse experiences strongly predict internalizing.
• There is a need to be proactive and not rely on caregivers to identify depressed or anxious children who need help.
Externalizing Behaviors: Aggression

• The size of the sample makes it possible to ask the question,

“Do different types of maltreatment have different effects on risk of aggressive behavior depending upon the age at which the maltreatment is experienced?”
Early Maltreatment’s Effects

• Caregiver reports at ages 4, 6, and 8
• No significant effect of early (0-2) or recent (2-4) reported physical abuse on the child’s risk of aggressive behavior through age 8.
• But there was a significant effect of early reported neglect on the child’s risk of aggressive behavior through age 8 years.
Early maltreatment by type and aggressive behavior at ages 4, 6, and 8 years.

<table>
<thead>
<tr>
<th>PREDICTOR</th>
<th>Estimate (SE)</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td>Early Neglect</td>
<td>1.29 (0.46)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Early Abuse</td>
<td>0.66 (0.68)</td>
<td>.33</td>
</tr>
<tr>
<td>Recent Neglect</td>
<td>0.14 (0.34)</td>
<td>.68</td>
</tr>
<tr>
<td>Recent Abuse</td>
<td>0.53 (0.39)</td>
<td>.18</td>
</tr>
</tbody>
</table>
Aggression in teens maltreated in early years

• Youth self-reports at ages 12 & 14
• Gender matters
  • For boys, there was a strong effect of physical abuse prior to age 12 on risk of aggressive behavior at 12 and 14, but no effect of neglect.
  • For girls, however, it was neglect that had a stronger effect; there was no effect of physical abuse.
• Early maltreatment predicts teenage aggressive and delinquent behavior, but
• Early services may reduce risk of aggressive behavior.
Implications

• Pay more attention to neglect
• The relative impacts of neglect vs. abuse may differ at different ages
Risky Sexual Behavior

• We asked,
  
  “Is early maltreatment associated with risky sexual behavior?”
  
  “Is there a difference according to type of maltreatment?”
  
  “Is there a difference according to gender?”
Maltreatment’s effect on risky sexual behavior

• Maltreatment before age 12 is significantly associated with early initiation of sexual intercourse at ages 14 and 16.
  ▪ Same results for sexual abuse alone, and for all maltreatment other than sexual abuse combined

• Gender differences
  ▪ These relationships are the same for males and females for sexual abuse, psychological abuse and neglect.
  ▪ The relationship between physical abuse before age 12 and sexual intercourse at ages 14 and 16 is less strong for boys.
Maltreatment’s effect on risky sexual behavior

• History of CSA associated with the development of risky sexual behavior.
• Physical and emotional abuse, but not neglect or witnessed violence, each contributed to risky sexual behavior over and above the role of CSA.
• Child gender moderated the findings for physical abuse.
Implications

• Any maltreatment, not just sexual abuse, can lead to risky sexual behaviors in both boys and girls.

• Some of these behaviors may make young people more at risk of HIV/AIDS.
## Maltreatment and risky behaviors, NC (age)

<table>
<thead>
<tr>
<th>Category</th>
<th>Maltreated (%)</th>
<th>Not maltreated (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression (18)</td>
<td>7.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Delinquency (18)</td>
<td>5.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Substance use (14)</td>
<td>8.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Any criminal behavior (16)</td>
<td>46.9</td>
<td>37.1</td>
</tr>
<tr>
<td>Weapon (18)</td>
<td>25.5</td>
<td>16.9</td>
</tr>
<tr>
<td>Serious health problem (16)</td>
<td>34.8</td>
<td>27.1</td>
</tr>
</tbody>
</table>
Adverse Childhood Experiences (ACEs) and Child’s Self-reported Health Status at Age 12

• Question:

“Is it a particular exposure or risk, or the combined effect of many risks, that predict later health and behavioral disorders?”
Indicators of Adverse Childhood Experiences (ACEs)

1. psychological maltreatment
2. physical abuse
3. sexual abuse
4. child neglect
5. caregiver’s substance/alcohol use
6. caregiver’s depressive symptoms
7. caregiver’s being treated violently
8. criminal behavior in the household
Adversity’s effects

• A greater number of adversities during the child’s first 6 years of life associated with the caregiver’s and child’s age 12 report of
  ▪ somatic complaints
  ▪ any poor health outcome
• Childhood adverse exposures during the second 6 years of life associated with
  ▪ any health complaint
  ▪ child reports of poor health
  ▪ child and caregiver reports of child somatic complaints
  ▪ illness requiring medical attention
Implications

• All at-risk kids are vulnerable.
• The risks add up.
• There are differences between the maltreated and non-maltreated, but the differences are not great.
• Adverse outcomes include potentially serious health problems, not just risky behaviors.
Cumulative risk

1. Maternal education
2. Family size
3. Family structure
4. Maternal age
5. Maternal abuse history
6. Social assistance
7. Low household income
8. Maternal depression
9. Low self-esteem
10. Unsafe neighborhood
Relation of cumulative risk level to percentage of families reported for maltreatment over the first year of life
Relation of cumulative risk level to percentage of families reported for maltreatment over the first 16 years of life

Mean Reported for Maltreatment by age 16 (%)

Cumulative Risk Group

Low (0-2)  Medium (3-5)  High (6+)

10  20  30  40  50  60
Child Maltreatment and Cumulative Risk Predicting Clinical Range CBCL sub-scales at Age 14.

<table>
<thead>
<tr>
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<th>% in Clinical Range</th>
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<tbody>
<tr>
<td></td>
<td>Externalizing</td>
</tr>
<tr>
<td>Maltreated by Age 1</td>
<td>30%</td>
</tr>
<tr>
<td>Cumulative Risk Groups</td>
<td></td>
</tr>
<tr>
<td>high (6+)</td>
<td>36.1%</td>
</tr>
<tr>
<td>medium (3-5)</td>
<td>16.3%</td>
</tr>
<tr>
<td>low (0-2)</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Implications

• It’s not just life events, it is “life course”
• The number of adverse experiences may be more important than the nature of the experiences.
Maltreatment and brain function in young adults exposed to violence in childhood

• 3 victims, 3 witnesses, 6 controls

• Exposed to about 100 images
  • Squares
  • Neutral photos
  • Circles
  • Aversive photos

• Press one button for a circle and another button for any other image

• Repeat 8-10 times
Results

• Significant differences in brain function according to experimental group
  • Aversive images compared with standard images
  • Aversive images compared with neutral images
• Differences in brain function localized to specific anatomical regions
Regional differences in brain activity in the prefrontal cortex between cases and controls for the aversive vs. neutral contrasts (n=12)
Implications

• Adverse childhood experiences, including (but not limited to) maltreatment, are cumulative
• Adverse childhood experiences leads both to later health and mental health consequences
• Adverse childhood experiences may also lead to neurological changes (mediated by chronic stress?)
• Underlines the importance of early intervention
Thank you!

www.iprc.unc.edu/longscan

Before

After
References


LONGSCAN Research on Fathers: Implications for Practice and Policy

Howard Dubowitz, MD, MS
The University of Maryland School of Medicine
Fathers & Child Neglect
Research on Fathers - Background

- Very little pertaining to child maltreatment (CM)
  - Absent fathers
  - Sexual abuse

- Considerable research on child development
  - In general, nurturing fathers enhance child dev.
  - Less on high risk & minority children
Does positive involvement of fathers protect children from neglect?
Defining “father”
Findings

• Neglect was NOT related to fathers’
  • Presence
  • Living in the home
  • Marital status
  • Biological relationship
  • Financial contribution
  • Nurturing behavior

• Neglect more likely when father felt less effective in parenting
Policy & Practice Implications

• Need broad view of “father” beyond biological status, residence, $$ support
• Need to help fathers feel competent re. parenting
  • Encourage fathers’ involvement in children’s lives
  • Impart parenting knowledge, skills
• Need interventions for fathers, especially in high risk families
Father Involvement and Children’s Functioning at Age 6

• Is presence of a father associated with better child functioning?

• Are children’s perceptions of fathers’ support associated with better functioning?

• Are the above associations influenced by the father’s relationship to the child and the child’s race and gender?
Findings

• Father presence associated with better cognitive development and perceived competence by the children

• Children reporting more Father support
  • Less depression
  • Greater social competence, acceptance

• The associations did NOT differ by child’s gender, race, or relationship to father figure
Policy & Practice Implications

• Need to convey to fathers how children – boys and girls - can benefit from their involvement.

• Need broad view of “father” beyond biological status.

• Value in asking children about their relationship with their father.

• When addressing children’s emotional and behavioral problems, consider role father may be playing.
The Effect of Fathers or Father Figures on Child Behavioral Problems in Families Referred to CPS
Findings

• Father presence did NOT effect behavioral problems at age 4.

• Father presence associated with less aggression and depression at age 6, reported by teachers.

• African American children without a father more aggressive and depressed.
Policy & Practice Implications

• Recognize the many influences on children’s behavior

• Particularly, in African American families involved with CPS, father presence appears important to children.

• Need ways to help fathers be positively involved in their children’s lives.
What are the barriers facing low-income, African American fathers to being involved in their 8 year old children’s lives?
Fathers & Father Figures

• 48% biological father
• 20% mother’s partner
• 9% stepfather
• 12% uncle
**Financial Limitations (N=29)**

*What do you like least about being a father to your child?*

“...material things are so important, and I want to be able to give him everything. I do provide for him the necessities, but the accessories, that the other kids have, it’s hard, and I don’t like not being able to do that, and it’s hard to explain to a kid why.”

*What makes it hard to be the father that you want to be?*

“I guess that one certain time a year when I get laid off and I’m not able to do as much as I would like to. That’s when it gets difficult. And I just hope that it’s not around Christmas time or birthdays, then it get depressing.”
**Work/Career (N = 27)**

*What would you change in your relationship with your child?*

“What working the job that I do, a lot of times I have to leave out late and I will be gone late. That only leaves the weekend for me and him. I would like to spend some time with him during the week, not just stopping by his school to check on him.”

*What do you like least about being a father to your child?*

“Cause of my job, I work midnight hours. Cause I don’t see her like everybody else does. I’m usually in bed sleeping when she gets there.”
What would you change in your relationship with your child?

“Spending more time. Not to go through what I have to go through with her mother. Being in her (child’s) life more.”

What makes it hard to be the father you want to be?

“Right now, it is the wife, her mother. We don’t get along as good as we could. It is mainly because of her in my opinion. I do not want to go into details. It is kind of personal. If things were not the way they are, things would be a whole lot better for me.”
No Barriers (N=25)

What makes it hard to be the father you want to be?

“I guess I am the father I want to be. I really don’t have a problem. No one’s perfect, you know, but right now I don’t think I am doing a bad job.”
Policy & Practice Implications

• Reduce poverty to help address barriers facing low income fathers
• Flexible work policies
• Help fathers and mothers recognize what’s in their child’s best interests
• Better access to health care and substance abuse treatment
Examples of Important Remaining Questions for LONGSCAN

• What role do fathers play in helping children be resilient?

• What explains why some fathers are more involved in their children’s lives?

• How do teenagers perceive their fathers?

• What role do fathers play in teenagers’ development and behavior?
LONGSCAN Website Address

- http://WWW.IPRC.UNC.EDU/LONGSCAN