Preparing for Poverty's Pain: Comprehending its Leverage Guides to Successful Intervention!

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THE ILLINOIS EI TRAINING PROGRAM
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Why Study Poverty?

It’s a no brainer as some might say!
This is your brain
This is poverty
This is your brain on poverty...any questions?
It’s because......
OF THE 24 MILLION CHILDREN YOUNGER THAN 6 YEARS OLD, IN THE UNITED STATES,

11.5 MILLION – LOW INCOME
6 MILLION – POOR

Poverty’s greatest impact is during Early Childhood

(Duncan, Ziol and Kalil, 2010; Duncan and Magnuson, 2011)
“85% of brain development occurs before age 5” (Oliver, 2007).

“Poverty is toxic to the brain” (National Scientific Council on the Developing Child, 2009).
Poverty definitions

COMMON DEFINITIONS FOR THE CAUSE
What is poverty? (Poverty is like...)

Definitions; we must have a common understanding!
Poverty is....

“A CHRONIC AND DEBILITATING CONDITION THAT RESULTS FROM MULTIPLE ADVERSE SYNERGISTIC RISK FACTORS AND AFFECTS THE MIND, BODY, AND SOUL” (JENSEN, 2009).
Federal Poverty Level (FPL) 2012

- $23,050 for family of four
- $19,090 for a family of three
- $15,130 for a family of two
Poverty Types

- Situational Poverty
- Generational Poverty
- Absolute Poverty

- Relative Poverty
- Urban Poverty
- Rural Poverty

(Jensen, 2009)
Poverty statistics

NUMBING NUMBERS
Numbing Numbers

- Nearly half of the world’s population — more than 3 billion people — live on less than $2.50 a day. More than 1.3 billion live in *extreme* poverty (less than $1.25 a day).

- 1 billion children worldwide are living in poverty. According to UNICEF, 22,000 children die each day due to poverty.

- More than 1 billion people lack adequate access to clean drinking water and an estimated 400 million of these are children. Because unclean water yields illness, roughly 443 million school days are missed every year.

- In 2011, 165 million children under the age 5 were stunted (reduced rate of growth and development) due to chronic malnutrition.
870 million people worldwide do not have enough food to eat.

Preventable diseases like diarrhea and pneumonia take the lives of 2 million children a year who are too poor to afford proper treatment.

As of 2011, 19 million children worldwide remain unvaccinated.

A quarter of all humans live without electricity — approximately 1.6 billion people.

80 percent of the world population lives on less than $10 a day.

It would cost approximately $40 billion to offer basic education, clean water and sanitation, reproductive health for women, and basic health and nutrition to every person in every developing country.

The World Food Programme says, “The poor are hungry and their hunger traps them in poverty.” Hunger is the number one cause of death in the world, killing more than HIV/AIDS, malaria, and tuberculosis combined.
Rates of official child poverty vary tremendously across the states.

- Across the states, child poverty rates range from seven percent in New Hampshire to 28 percent in Mississippi.
Risk Factors - IMPACTS

- HOUSEHOLDS WITHOUT ENGLISH SPEAKERS
  - LARGE FAMILY
  - LOW PARENTAL EDUCATION
  - RESIDENTIAL MOBILITY
  - SINGLE PARENT
  - TEEN MOTHER
  - UNEMPLOYED PARENTS
EACH ADDITIONAL RISK FACTOR DOES NOT JUST ADD UP, IT ACTUALLY MULTIPLIES THE INTENSITY AND SEVERITY OF POVERTY’S PAIN. (ONE SERIOUS EVENT CAN CASCADE....)

(Jensen, 2009)
This is NOT CHILD ABUSE + DV = 2 IMPACTS

But, this is more like CHILD ABUSE x DV = 16 IMPACTS
Figure 3
Schematic Model Demonstrating How Individual Components of a Stressful Environment Might Cumulate to Reduce Performance on IQ and Other Tests

Layered Risk Model/Design
Cascaded Multidimensional Stressors

Pesticide Exposure
Other Neurotoxic Agents
Poverty Income
Inadequate Schools
Poor Nutrition
Teen Pregnancy
Poor Prenatal Care
Maternal Tobacco, Drugs
Low Maternal Education
Unsupportive Home Life

Cumulative Decline (%) in Test Performance

Note. The individual stressors are shown as overlapping to suggest a lack of independence, and their length is meant to indicate that no single component is overwhelming in isolation. From "Vulnerability of Children and the Developing Brain to Neurotoxic Hazards," by B. Weiss, 2000, Environmental Health Perspectives, 108(Suppl. 3), p. 379. Reproduced with permission from Environmental Health Perspectives.
Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study

Vincent J Felitti, Robert F Anda, Dale Nordenberg, David F Williamson, Alison M Spitz, Valerie Edwards, Mary P Koss and James S Marks

American Journal of Preventive Medicine
Death

Early Death

Disease, Disability, and Social Problems

Adoption of Health-risk Behaviors

Social, Emotional, & Cognitive Impairment

Adverse Childhood Experiences

Birth

Source: American Journal of Preventive Medicine 1998; 14:245-258
Families in Poverty often experience:

- HOMELESSNESS
- SUBSTANCE ABUSE
- DOMESTIC VIOLENCE
  - CHILD ABUSE
  - MENTAL ILLNESS
  - POOR NUTRITION
- NEIGHBORHOOD SAFETY
- ENVIRONMENTAL STRESSES
- INCARCERATED PARENTS
- CONDEMNED HOUSING
IMPACT OF POVERTY – LONG TERM

AUTUMN’S EYES
Autumn’s Eyes Debrief

- What are this family's strengths?
- Identify the risk factors you noticed and write them down in your group.
Depression
Maternal Depression

- “Nearly half of all infants living in poverty have a mother suffering from depression” (Golden, 2011).
- “11% of infants have mothers that are suffering from severe depression” (Vericker, Macomber & Golden, 2010).
- Depression interferes with parenting and causes poor child outcomes (Vericker, Macomber & Golden, 2010).
- Shorter breastfeeding times (Vericker, Macomber & Golden, 2010).
- Depressed mothers rarely get care (Vericker, Macomber & Golden, 2010).
Paternal Depression

"It came on when my children hit their teens."
Paternal Depression

- Maybe linked to a crying, colicky baby (University of Oxford, 2012).
- Higher levels of challenging infant temperament (Ramchandani, Psychogiou, Vlachos, Lles, Sethna & Lodder, 2011).
- Troublemakers and tantrum throwing in schools – previous research
- Needs more research!!!!!!!!
The interaction between lack of food and lack of stimulation

Nutritional deficiencies limit the intellectual and physical development and growth of the child
  » growth can be stunted
  » child does poorly at school

Deficiencies in affection and psychosocial stimulation stunt emotional, physical and intellectual development with long term effects
  » limits potential in school
  » poor employment chances
  » lifelong disability
  » mental problems

Nutritional and psychosocial deficiencies interact

(WHO, 2006)
“Children deprived of proper nutrition during the brain’s most formative years score much lower on tests of vocabulary, reading comprehension, arithmetic, and general knowledge”

(NCCP, 1999)
National School Lunch Program Participation
By Meal Type Provided, 2012

- 59% Free Lunch
- 32% Paid
- 9% Reduced Price
Food Insecurity Consequences

- 30% more likely to have had a past hospitalization.
- 90% more likely to be in fair or poor health.
- Nearly twice as likely to have iron-deficiency anemia.
- Speech, Motor, Social Emotional, Adaptive, Cognitive

http://www.childrenshealthwatch.org/page/ResearchFAQs
USDA defines Food Deserts

No Car and No Supermarket Store Within a Mile

SOURCE: Department of Agriculture, Centers for Disease Control
Environmental Toxins
Child Development & Environmental Toxins (NIEHS, 2011)

- Air pollution
- Arsenic
- Dioxins
- Endocrine Disruptors
- Bisphenol A (BPA)

- Pesticides
- Phthalates
- Flame Retardants
- Lead
- Maternal Smoking
- Mercury

Exposure to Environmental Toxins

- Brain damage
- Stunted brain growth
- 1/6 children in America have toxic levels of lead in their blood
- 55% of African Americans living in poverty have toxic levels of lead in their blood
- Every year 400,000 children are born with toxic levels of lead in their blood
(Guillette, Meza & Aquilar, 1998)

**Drawings of a Person**

4 year olds

**FOOTHILLS**

54 mos female

55 mos female

**VALLEY**

54 mos female

53 mos female

5 year olds

**FOOTHILLS**

60 mos female

71 mos male

**VALLEY**

71 mos female

71 mos male
Child Abuse
Poverty & Child Abuse

- “Abuse is three times more common in poor families” (National Coalition for Child Protection Reform, 2011).
- “’Neglect’ is seven times more common in poor families” (National Coalition for Child Protection Reform, 2011).
- Links are more with physical abuse and neglect than with sexual and emotional abuse (NSPCC, 2008).
trauma
Quality of Care
# Sizing up Childcare

(Vandell & Wolfe, 2000)

## Process Quality
- Children’s interactions with caregiver’s and other children in activities:
  - Language Stimulation
  - Health Measures
  - Safety Measures

## Structural Quality
- Child:Adult Ratio
- Size of each group of children
- Formal education/training of caregivers
Quality of Childcare

- Inadequate childcare impairs brain activity in the child
- Limits environmental stimulation
- Discourages interaction
- High quality childcare has been shown to increase cognitive development in children living in poor families
Both correlational and quasi-experimental research has found relations between structural quality and child performance.

For example, children in classrooms with lower child:adult ratios were:
- better able to understand,
- initiate, and participate in conversations,
- had better general knowledge,
- were more cooperative,
- and in their interactions with each other showed much less hostility
- And showed less conflict than in settings where there were more children to each adult.

On average, preschoolers perform better on standardized cognitive tests when their caregivers are better educated and trained.
- For example, if they have at least an associate arts degree in a child-related field.
  - The children also have better language skills,
  - are more persistent in completing tasks,
  - and in general are more ready for school.
SECURE ATTACHMENT
Developmental Impact
LACK OF ACCESS TO APPROPRIATE HEALTHCARE IS LINKED TO POOR OUTCOMES FOR DEVELOPMENTAL HEALTH.
Physical Health/Motor

**POVERTY HAS A DIRECT IMPACT ON THE PHYSICAL HEALTH OF THE CHILD** *(JENSIA, 2012)*
IN THE FIRST 3 YEARS OF LIFE, THE EXPERIENCE OF POVERTY IS RELATED TO POOR MOTOR SKILLS (MOORE, REDD, BURKHAUSER, MBAWANA, & COLLINS, 2009)
Poor motor skills

- Age normed growth stunting (low height-for-age)
- Wasting (low weight-for-age)
- Obesity

- Asthma prevalence
- Anemia prevalence
- Physical impairment prevalence
Poverty is connected to social emotional development
### Behavioral Challenges

<table>
<thead>
<tr>
<th>Greater risk of</th>
<th>Long term poverty/chronic-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disobedience</td>
<td>Long term</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Challenges with compliance to task</td>
<td>Unhappiness</td>
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<tr>
<td>Decreased positive peer relationships</td>
<td>Dependence</td>
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<tr>
<td></td>
<td>Current poverty</td>
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<tr>
<td></td>
<td>Acting out</td>
</tr>
<tr>
<td></td>
<td>Disobedience</td>
</tr>
<tr>
<td></td>
<td>Aggression</td>
</tr>
</tbody>
</table>
Socialization

- Older children may act as the parent
- Total family may not be together due to parents working opposite shifts
- Tired parent may not be able to show enough affection due to exhaustion from work
Speech/Language Development

“LOW-INCOME CHILDREN LAG BEHIND THEIR PEERS IN LANGUAGE SKILLS FROM EARLY ON”
(HOFF, 2003)
Family Structure

- SINGLE PARENTED FAMILIES ARE AT RISK FOR LOWER LANGUAGE DEVELOPMENT THAN OTHERS. SINGLE MOTHERS FREQUENTLY REPORT DEPRESSION.
- FATHER AVAILABILITY ALSO PREDICTS LANGUAGE DEVELOPMENT. FATHER INVOLVEMENT RESEARCH HAS INDICATED THAT THEIR PRESENCE INCREASES THE LIKELIHOOD OF GREATER LANGUAGE OUTCOMES.
Facts on poverty

- Children living in poverty develop language up to 4x slower than higher-income families
- Low SES is associated with lower language promoting experience during the preschool years
- This predicts lower receptive language in kindergarten and beyond, lower reading & spelling competencies as well (Walker et al., 1994)

Parental Education

- More years of education = greater material, social and resources to children
- Educated parents are normally transitionally impoverished while the less educated parents are more chronically impoverished
- More educated provide more literary rich activities than their less educated peers.

(Lucchese & Tamis-LeMonda, 2007)
## How does poverty decrease language development?

<table>
<thead>
<tr>
<th>Reason-</th>
<th>Childcare centers serving lower SES families-</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Limited access to reading resources (books/toys)</td>
<td>• Higher child-caregiver ratios</td>
</tr>
<tr>
<td>• Lower SES read to their children less</td>
<td>• Low caregiver warmth</td>
</tr>
<tr>
<td>• Children in lower SES have a decreased change of accessing high-quality center-based care (NICHD ECCRN, 1997).</td>
<td>• Low caregiver sensitivity</td>
</tr>
<tr>
<td></td>
<td>• Low responsiveness to children</td>
</tr>
<tr>
<td></td>
<td>• Use of more authoritative commands &amp; less open-ended questioning by caregivers</td>
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<tr>
<td></td>
<td>Phillips et al., 1994</td>
</tr>
</tbody>
</table>
Impact on Cognitive Development
THE IMPACT OF POVERTY ON BRAIN DEVELOPMENT: MULTIPLE PATHWAYS

(National Center for Children in Poverty, 1999)
Self Help/Adaptive

- You decide......
NEXT STEPS

APPROPRIATE GOALS FOR INTERVENTIONS TARGETED TO THE MORE VULNERABLE YOUNG CHILDREN AND THEIR FAMILIES. (KNZITZER & LEFKOWITZ, 2006)

WHAT CAN WE DO?
Building Adult Capabilities to Improve Child Outcomes
<table>
<thead>
<tr>
<th>Type of stimulation</th>
<th>What to do</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional stimulation:</td>
<td>Express warmth and affection to the child in a manner consistent with cultural norms</td>
<td>Encourage caregivers to look into the child's eyes, smile at him or her, especially during breastfeeding. Express physical affection to the child (e.g., hold and cuddle the child).</td>
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<tr>
<td>Interventions to improve child-caregiver interactions are important in order to facilitate children's emotional, social, and language development. This can be accomplished through educating caregivers on the importance of emotional communication.</td>
<td>Encourage verbal and non-verbal communication between the child and caregiver</td>
<td>Communicate with the child much as possible. Ask the child simple questions and respond to his or her attempts to talk. Try to get a conversation going with sounds and gestures (smiles, glances). Get the child to laugh and vocalize. Teach the child words with activities. For example, say “bye” when waving goodbye.</td>
</tr>
<tr>
<td>Respond to the needs of the child</td>
<td>Respond to the child’s sounds and interests. Be attentive to his or her needs as indicated by his or her behaviour (e.g., crying, smiling).</td>
<td></td>
</tr>
<tr>
<td>Show appreciation for what the child manages to do</td>
<td>Provide verbal praise for the child’s accomplishments. Also, show non-verbal signs of appreciation and approval (e.g., clapping, smiling).</td>
<td></td>
</tr>
<tr>
<td>Physical stimulation:</td>
<td>Ensure that the environment provides adequate sensory experiences for the child</td>
<td>Provide opportunities for the child to see, hear, and move. For example, place colourful objects around the child and encourage the child to reach or crawl to them. Sing local songs and play games involving fingers and toes.</td>
</tr>
<tr>
<td>Children need a physically stimulating environment in order to develop their psychomotor and language skills and to enhance cognitive development.</td>
<td>Provide play materials</td>
<td>Inexpensive and fun toys such as a puzzle and a rattle can be made out of cardboard boxes and plastic bottles. See reference section for examples.</td>
</tr>
<tr>
<td>Provide meaning to the child’s physical world</td>
<td>Help the child to name, count, and compare objects. For example, give the child plastic bottle caps and teach him/her to stack them. Older children can sort bottle tops by colour and learn concepts such as “high” and “low”. Describe to the child what is happening around him or her.</td>
<td></td>
</tr>
<tr>
<td>Provide opportunities to practice skills</td>
<td>It is important to play with each child individually at least 15-30 minutes per day, as well as to provide opportunities for play with other children.</td>
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</table>
Poverty Interventions

- Deepen Staff Understanding
- Change Your Perspective from Pity to Empathy
- Embody Respect
- Embed Social Skills
- Be Inclusive
- Signs and Symptoms of Chronic Stress
- Alter the Environment
- Empower Students
- Provide Hope and Support
- Reflective Consultation
Insure access early childhood development & family support programs

DEVELOP REFERRAL SOURCES
BE ATTENTIVE TO THE SYMPTOMS OF POVERTY
IDENTIFY CHILDREN EARLY (0-6 YEARS OF AGE)
Embed evidenced-based intensive interventions to Early Childhood programs.
Embed intensive interventions for young children & their families in settings for high-risk families

LOCATE, LOCATE, LOCATE
HOME VISITING
HOME PROGRAMS
HOPE
Organize services by level of risk

MASLOW’S HIERARCHY OF NEEDS
Use basic support programs for families to provide more intensive services
Screen for & address maternal depression and other risks in health care centers serving women and young children
Implement parenting curricula and informal support groups designed for higher-risk families.
Build a community approach to prevention and proactive intervention for young children and families facing special risks
ADVOCATE!!!
Go get busy!