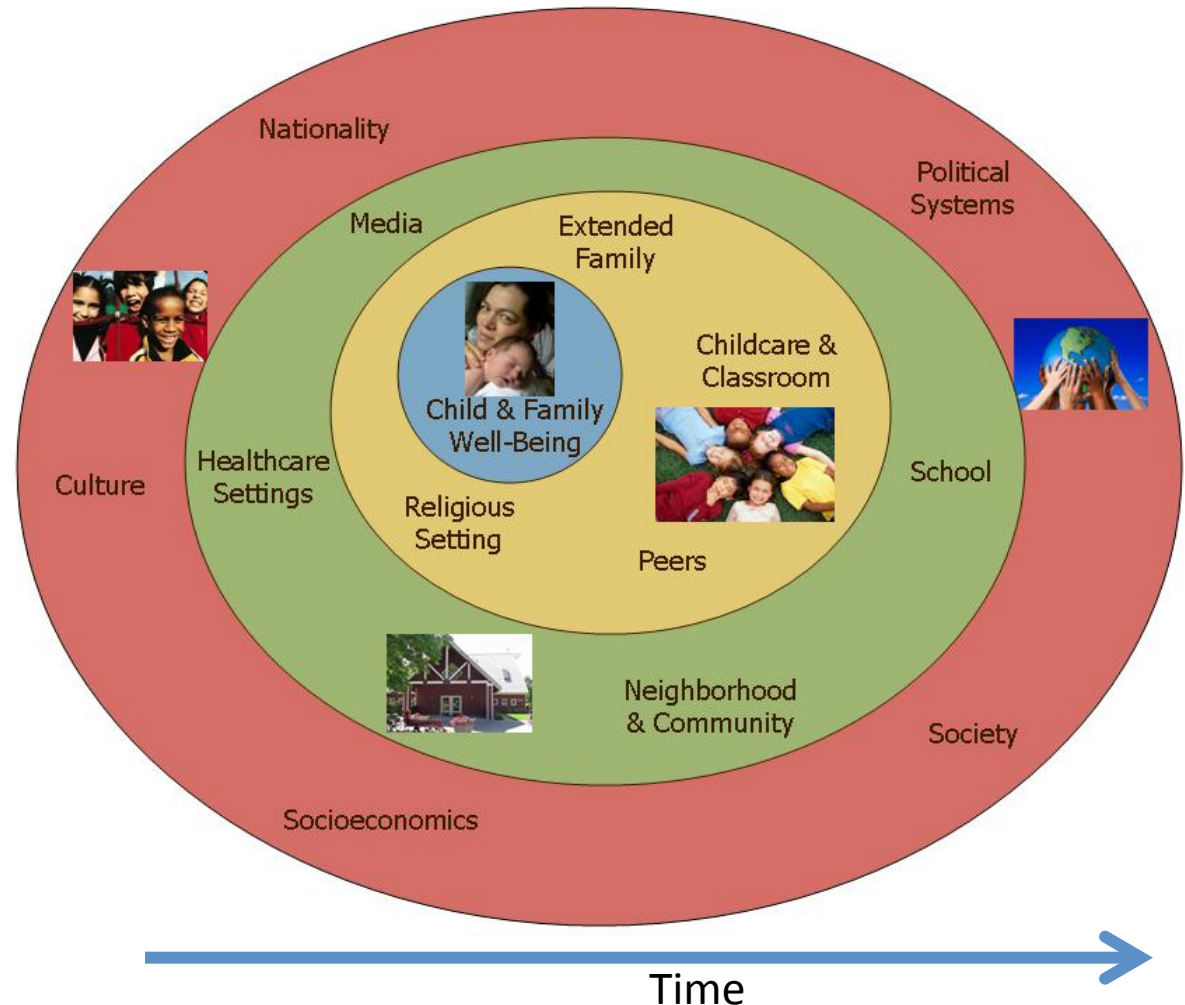# Bioecological Model of Risk and Adversity: Children's Developmental Outcomes

Liliana J. Lengua, Ph.D
University of Washington
Department of Psychology

Center for CCFW
Child and Family Well-Being
UNIVERSITY of WASHINGTON | Department of Psychology

Bioecological Model

To improve the lives of children, we need to address the complex context in which they are developing.

Nationality

Political Systems

Media

Extended Family

Childcare & Classroom

Culture

Healthcare Settings

Child & Family Well-Being

School

Religious Setting

Peers

Neighborhood & Community

Society

Socioeconomics

Time

Child Well-being

Child

- Physical Health/ Nutrition

- Physiological Stress Responses

- Mental Health

- Social/Emotional Adjustment

- Academic Achievement

Wide spread and long term impact on children's developmental outcomes

Physical Health:
- Low Birth Weight
- Poor health
- Death from Infectious disease
- Asthma
- Obesity

Cognitive:
1.3x more likely to have developmental delay or learning disability

Social/Emotional:
- Higher rate of problems with aggressive, oppositional, anxious, depressed Sx

Academic:
- School Readiness – 1/3 enter kindergarten already behind
- 50% of these will not meet 4th grade reading standards
- 2x rate of grade retention and expulsion
- 6x more likely to drop out in HS

Adolescent/Early Adult:
- 3x rate of Teen Birth
- Teen parents have high school drop out rate
- Children of teens have more mental health problems and drop out
- Economic Inactivity
- Higher rates of depression and substance use
- Increased likelihood of living in poverty as adults

Brooks-Gunn & Duncan, 1997; Evans, 2004; McLoyd, 1998

Co-occurring Risks

47.6 percent
The nation's poorest kids primarily live in households headed by a single female. Children of single mothers experience poverty at more than 4 times the rate that of kids in married-couple families.

45 percent
The longer a child lives in poverty, the tougher it can be for them to climb out. 45% percent of people who spent at least half of their childhood in poverty were poor at age 35, compared to 8% for those who spent less than half of their childhood in poverty

Between 13.4 and 16.5 million
1 in 5 children are living in poverty. That is higher than any other age group (14% for 18-to 64-year-olds, and 9% for seniors).

80 percent of unmarried teen mothers are on public assistance; only 1/3 complete high school. Children born to teen moms are at greater risk for being abused. A child born to a teenage, unwed, high school dropout is 9x more likely to live in poverty.

38.2 percent
The poverty rate among black children is twice as high as the rate among whites. The poverty rate for Latino children is 32.3 percent.
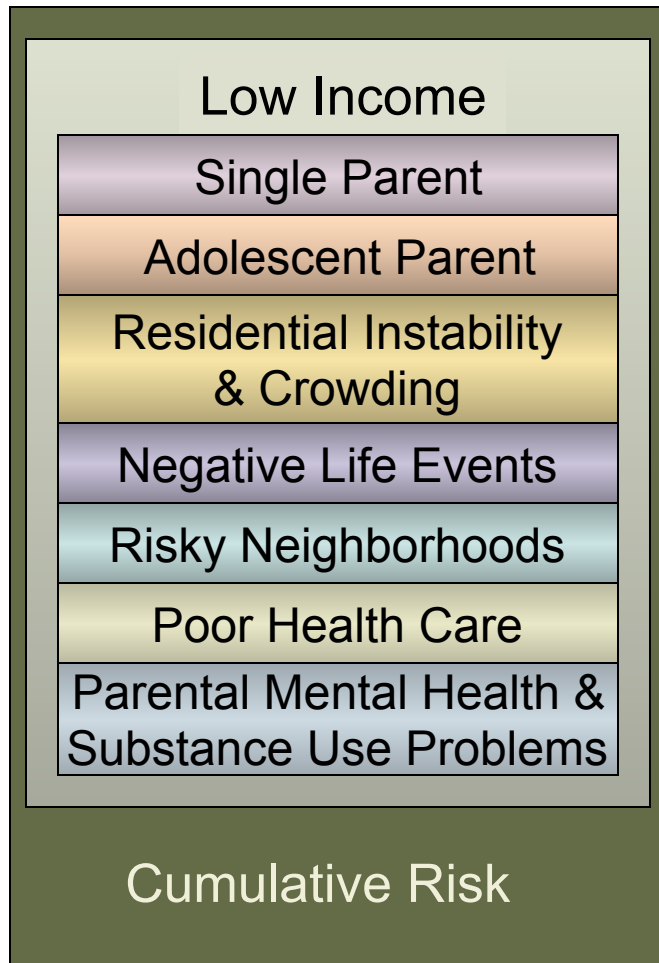
Cumulative Risk

Low Income

Single Parent

Adolescent Parent

Residential Instability & Crowding

Negative Life Events

Risky Neighborhoods

Poor Health Care

Parental Mental Health & Substance Use Problems

Cumulative Risk

Children under age 6 whose parents exhibit depression, substance use or domestic violence are at 2x to 5x the risk for homelessness, use of food banks, medical neglect, unsafe child care, and placement in foster care.
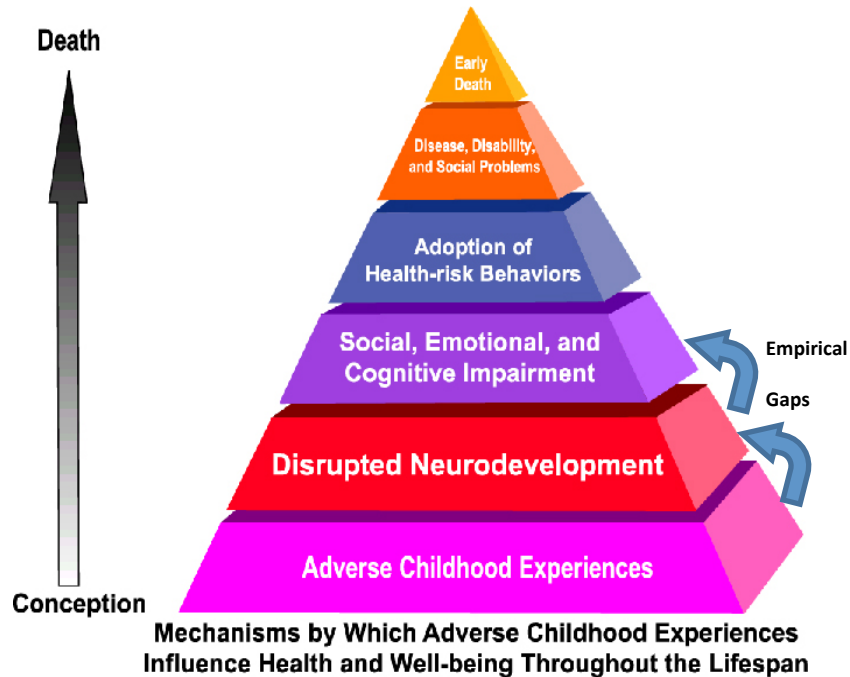
Cumulative risk is a more robust predictor of risk for abuse and child well-being than other single factors.
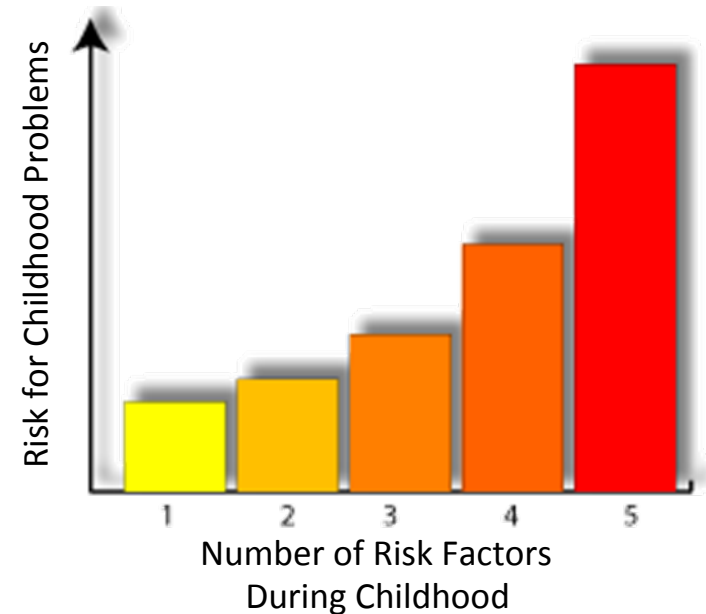
Economic Disadvantage and Cumulative Risk

Low Income

- Single Parent
- Adolescent Parent
- Residential Instability & Crowding
- Negative Life Events
- Risky Neighborhoods
- Poor Health Care
- Parental Mental Health & Substance Use Problems

Cumulative Risk

8 Risk Factors	Income and CR correlated .61 Percent of:			
# Risk factors	Whole Sample	Poverty	Low Income	Mid- to Upper
0	56	17	55	80
1	27	36	29	19
2	10	21	11	0
3	4	13	4	1
4+	3	13	1	0

ACES in Adults = Cumulative Risk in Childhood

Cascade effects of Cumulative Risk on child well-being

Cumulative Risk

Low Income & Poverty

- Single Parent
- Adolescent Parent
- Residential Instability & Crowding
- Negative Life Events
- Risky Neighborhoods
- Poor Health Care
- Parental Mental Health & Substance Use Problems

Parenting

Risk for Abuse and Neglect

Family Conflict Violence Exp.

Chaos/Dis-organization

Quality Childcare/ Education

Child Neurobiological Development

Low Academic Achievement

Social-Emotional Problems

Mental Health Problems

Low Self-esteem

Economically Inactive

Adolescent Parent

Unlawful Affiliations and Activities

Mental Health & Substance Use Problems

Low Life Satisfaction and Self-esteem

Take away points...

Bioecological model - to improve children's lives, must address the proximal influences as well as the distal influences that impact the proximal ones

Low income, single and adolescent parents are demographics that flag a higher likelihood of cumulative risk (ACEs).

Cumulative risk has cascading adverse affects on the family and parenting, which in turn disrupt children's neurobiological systems that lead to more developmental, academic, behavioral and mental health problems.

Preventive approach – identify children at elevated risk for ACES/cumulative risk before the risk happens: e.g., moms who are low income, single or adolescent

Assess families for cumulative risk and parenting risk – different needs and intensity of intervention needed