



Income and Beyond: Taking the Measure of Child Deprivation in the United States

Curtis Skinner, PhD

Director of Family Economic Security

NCCP

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National Center for Children in Poverty
Mailman School of Public Health
Columbia University



Does income alone tell us enough about the experience of poverty and deprivation?

- ◆ Income as a *means* to desired *outcomes*, e.g., good physical and mental health, good schooling, decent housing, safe neighborhood
- ◆ New interest in tracking multiple outcomes
- ◆ Human Development Index, Laeken Indicators, new measures in Mexico and Colombia
- ◆ Little research in the United States



Research questions

- ◆ Is low-income a good proxy for important deprivations associated with poor child development outcomes?
- ◆ Are specific deprivations associated with one another?
- ◆ How does the incidence of deprivation vary by income and child sex, race, and ethnicity?
- ◆ Relevance to our workshop: understanding the combined impact of safety net programs on child well-being



A new look at child deprivation in the U.S.

- ◆ Examine associations between income and 16 additional indicators of deprivation
- ◆ 2007 PSID/CDS cross-sectional data
- ◆ Older children and adolescents, 10-19 years old
- ◆ N=5,353, parents and children
- ◆ Ciula & Skinner, *Child Indicators Research*, 2014



Deprivation variable definitions

Deprivation	Definition
Poor child health	Primary caregiver reports child's health as fair or poor
Culturally isolated	Primary caregiver reports family member seldom or never taking child to a library, theater, or museum within the past year
Unsafe neighborhood	Primary caregiver reports child's play environment and neighborhood are unsafe
Uninsured	Primary caregiver reports child has no health insurance coverage
Poor housing conditions	Interviewer reports observing one or more conditions: overcrowding, unclean rooms, obvious signs of recent alcohol or illegal drug consumption in the home
Polluted neighborhood	Interviewer reports noisy neighborhood or trash on street/sidewalk
Threatened	Child reports having ever been threatened with a knife or gun
Bullied	Child reports being bullied by other children about once a week or more frequently within the past month



Deprivation variable definitions, continued

Deprivation	Definition
Low parental education	Primary caregiver reports average educational attainment of self and spouse is 10 th grade or less
Poor parental health	Primary caregiver reports health of self and spouse averages to fair or poor on the PSID scale
Parental unemployment	Primary caregiver reports: (1) both self and spouse are unemployed, or (2) one of the two is unemployed and the family is low income
Low social/emotional well-being	Composite index of child's response to 4 questions assessing psychological well-being and 5 questions assessing social well-being
Family financial stress	Primary caregiver reports not enough money is left over at the end of the month to make ends meet
Few family activities	Primary caregiver reports child is included in family activities less often than once a week within the past month
Poor basic learning skills	Child reports being less than "OK" at math and/or reading
Low parental warmth	Composite index composed of primary caregiver's response to 7 questions assessing engagement with and emotional support of the child
Low family income	Family income is less than 50% of U.S. net disposable median income



Correlations: Income and other deprivations

Deprivation	Correlation Coefficient	Deprivation	Correlation Coefficient
Parental unemployment	-0.82	Threatened	-0.34
Family financial stress	-0.75	Few family activities	-0.34
Low parental education	-0.71	Poor child health	-0.31
Poor housing conditions	-0.60	Low social/emotional well-being	-0.25
Poor parental health	-0.56	Low parental warmth	-0.14
Polluted neighborhood	-0.51	Bullied	-0.12
Unsafe neighborhood	-0.48	Poor basic learning skills	-0.07
Uninsured	-0.44	Culturally isolated	-0.06



Highly correlated non-income deprivations

Deprivations	Correlation coefficient
Poor housing conditions – Polluted neighborhood	0.66
Low parental warmth – Few family activities	0.62
Unsafe neighborhood – Polluted neighborhood	0.58
Low parental education – Parental unemployment	0.56
Family financial stress – Parental unemployment	0.50
Low parental education – Poor child health	0.49
Low parental education - Family financial stress	0.47
Poor parental health - Parental unemployment	0.46
Low parental education - Few family activities	0.45
Poor housing conditions – Poor child health	0.44
Low parental education – Uninsured	0.43
Polluted neighborhood – Parental unemployment	0.42
Poor housing conditions – Unsafe neighborhood	0.42
Polluted neighborhood - Poor parental health	0.41



Deprivation experience by income

Number of Deprivations	All Children		Low-Income Children	
	Percentage	Cumulative percentage	Percentage	Cumulative percentage
None	15.9	15.9	2.5	2.5
One	20.7	36.6	6.6	9.1
Two	18.0	54.6	14.4	23.5
Three	13.2	67.8	18.8	42.3
Four	11.8	79.6	13.8	56.1
Five	6.9	86.5	13.1	69.2
Six	4.7	91.2	14.7	83.9
Seven	4.3	95.5	7.4	91.3



Incidence of specific deprivations by income

Deprivation	All children percentage	Low-income children percentage	P value, difference of proportions, two-tailed test
Low social/emotional well-being	26.2	35.1	0.00
Low family income	26.1	--	0.00
Culturally isolated	25.9	29.2	0.00
Family financial stress	25.9	55.7	0.00
Bullied	25.4	28.4	0.00
Poor basic learning skills	24.6	30.1	0.00
Unsafe neighborhood	23.7	41.6	0.00
Few family activities	17.4	29.5	0.00



Incidence of specific deprivations by income

Deprivation	All children percentage	Low-income children percentage	P value, difference of proportions, two-tailed test
Low parental warmth	14.0	18.7	0.00
Parental unemployment	13.9	47.5	0.00
Poor parental health	13.8	27.6	0.00
Low parental education	12.3	31.3	0.00
Poor housing conditions	8.8	20.6	0.00
Threatened	6.3	10.2	0.00
Uninsured	5.5	9.4	0.00
Polluted neighborhood	4.6	11.9	0.00
Poor child health	2.5	5.0	0.00



Deprivation experience by race/ethnicity

Number of Deprivations	White Children	Black Children	Hispanic Children
None	18.5	4.4	7.7
One	24.0	12.0	11.9
Two	19.0	17.0	9.5
Three	12.7	15.8	11.4
Four	10.7	16.4	18.4
Five	5.7	8.3	15.9
Six	3.6	10.8	8.4
Seven	3.0	7.3	7.1
Eight	1.7	5.3	5.1



Incidence of specific deprivations by race/ethn.

Deprivation	White children	Black children	Hispanic children	P value, white/black diff. proportion	P Value, white/Hispanic diff. proportion
Poor child health	1.5	2.8	5.9	0.00	0.00
Culturally isolated	24.1	26.6	26.7	0.00	0.00
Unsafe neighborhood	21.1	29.6	35.5	0.00	0.00
Uninsured	3.8	8.7	12.2	0.00	0.00
Poor housing conditions	7.5	15.1	13.8	0.00	0.00
Polluted neighborhood	3.1	9.2	3.7	0.00	0.03
Threatened	5.2	14.1	6.3	0.00	0.00
Bullied	27.3	22.4	24.3	0.00	0.00
Low parental education	9.9	10.2	42.9	0.57	0.00



Incidence of specific deprivations by race/ethn.

Deprivation	White children	Black children	Hispanic children	P value, white/black diff. proportion	P Value, white/Hispanic diff. proportion
Poor parental health	10.9	23.2	13.9	0.00	0.00
Parental unemployment	9.9	24.8	23.4	0.00	0.00
Low social/emotional well-being	24.3	31.9	28.4	0.00	0.00
Family financial stress	22.4	42.6	42.5	0.00	0.00
Few family activities	12.8	26.6	34.9	0.00	0.00
Poor basic learning skills	24.5	22.8	33.8	0.03	0.00
Low parental warmth	11.6	19.0	19.3	0.00	0.00
Low family income	19.2	56.4	39.4	0.00	0.00



Deprivation experience by sex

Number of Deprivations	Boys	Girls
None	12.8	19.1
One	20.4	21.0
Two	18.3	17.7
Three	14.9	11.5
Four	11.9	11.7
Five	7.8	5.9
Six	4.2	5.2
Seven	4.7	3.7
Eight	2.4	2.0



Incidence of specific deprivations by sex

Deprivation	Boys	Girls	P value, diff. proportion
Poor child health	2.5	2.5	1.00
Culturally isolated	28.1	23.7	0.00
Unsafe neighborhood	22.0	25.5	0.00
Uninsured	6.4	4.6	0.00
Poor housing conditions	9.4	8.1	0.00
Polluted neighborhood	4.5	4.6	0.69
Threatened	9.2	3.3	0.00
Bullied	28.6	22.0	0.00
Low parental education	13.0	11.5	0.00



Incidence of specific deprivations by sex

Deprivation	Boys	Girls	P value, diff. proportion
Poor parental health	13.7	13.8	0.81
Parental unemployment	14.2	13.6	0.15
Low social/emotional well-being	28.5	23.8	0.00
Family financial stress	25.7	26.2	0.34
Few family activities	17.6	17.2	0.38
Poor basic learning skills	25.1	24.0	0.03
Low parental warmth	16.1	11.7	0.00
Low family income	26.5	25.7	0.13



Logistic Regression Models for Outcomes

Poor Child Health

Independent Variable	Odds Ratio	P Value
Poor housing conditions	4.72	0.003
Low parental education	4.06	0.005
Poor parental health	2.97	0.007



Logistic Regression Models for Outcomes

Low Social/Emotional Well-Being

Independent Variable	Odds Ratio	P Value
Polluted neighborhood	2.13	0.029
Bullied	1.80	0.002
Low family income	1.69	0.050
Age	1.23	0.000



Logistic Regression Models for Outcomes

Poor Basic Learning Skills

Independent Variable	Odds Ratio	P Value
Parental unemployment	2.06	0.007
Bullied	1.45	0.049



Some conclusions

- ◆ Multidimensional measures are useful
- ◆ Low income is a good proxy for many, but not all, important deprivations associated with poor child development outcomes
- ◆ It is valuable for policymakers to know the incidence of specific deprivations among low-income kids
- ◆ Research should explore the effectiveness of policies that jointly address income and specific deprivations



Concluding thought

“Programs that offer greatest promise may be those that consider ways to remedy both the material and the psychosocial conditions faced by families in poverty. Building integrated platforms of service delivery that target poverty reduction and health and human capital promotion is not a small task. That said, such integrated models of family behavioral change and material support may yield benefits in unanticipated ways.” Aber, Morris and Raver, *Social Policy Report* 26(3), 2012.