

# Diverging Destinies in Rural America: Work, Family, and Early Child Development

Lynne Vernon-Feagans

Early Childhood Research Summit  
University of Nebraska  
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# Economic Restructuring over the last 40 years in Urban and Rural America

- Diverging destinies for the less educated vs the college educated (McClanahan, 2004)
- These Diverging destinies have created less opportunities for less educated parents to spend time with their children and reduce their parenting effectiveness



# Economic Restructuring

- 1. College vs. non-college graduates
  - 2. Work hours
  - 3. Income gap
  - 4. The 24 hour economy
- 
- Parenting time/quality and children's development (The opportunity gap)

# Diverging Destinies 1

## College Degree Matters

- The convergence of adults with less than high school education and those with a high school education with respect to income, jobs, work hours, family time
- The divergence of these less educated adults from the college educated adults who have more income, better jobs, work hours, and family time



# Diverging Destinies 2

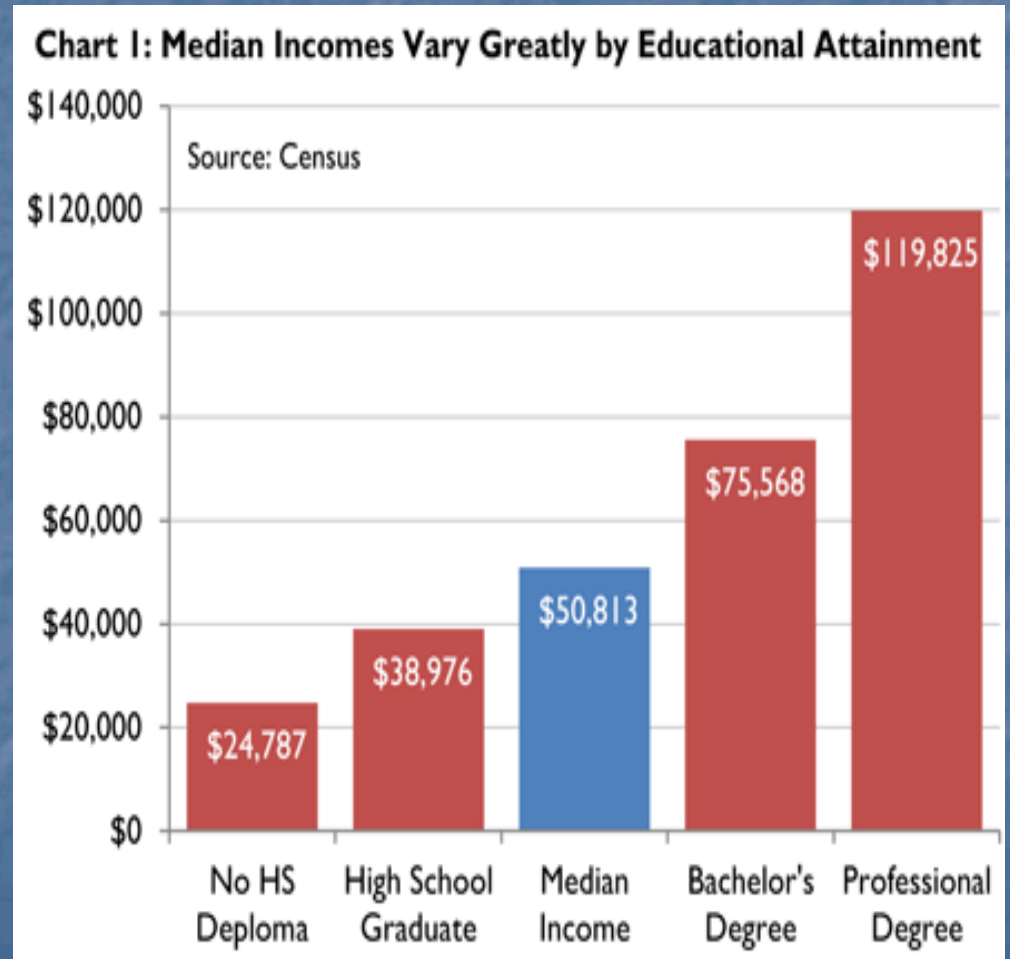
## Work Hours for Parents

- Adults in the US are working 20% more hours than in 1979.
- **But**....the lower the wages, the greater increase in work hours (Pew Research Center, 2013).
- Since 1979, low wage workers have increased their hours worked by 22% while top wage earners have increased their hours by 7.6%.

# Diverging Destinies 3

## Income Gap by education

- A growing income gap between college educated and non-college educated
- Even though the poor are working more hours





# Diverging Destinies 4

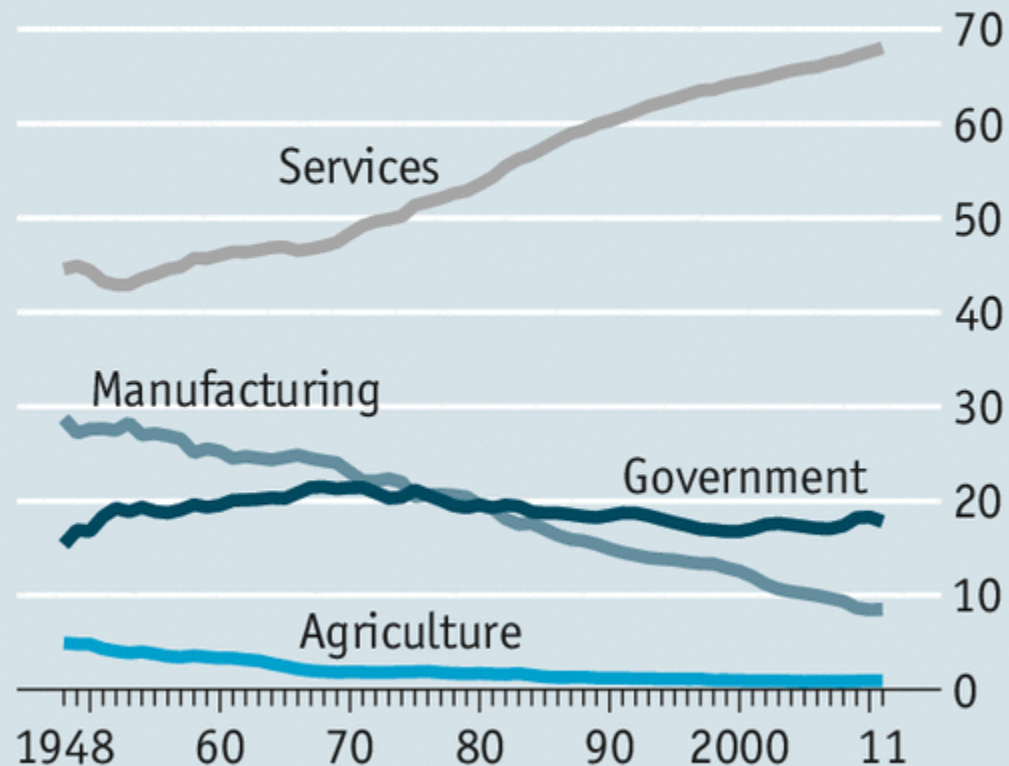
## The 24 hour Economy

- Rise in the “24 Economy” where work is 24 hours a day (Presser, 2000).
- An increase in nonstandard work hours, especially for the less educated.
- A decrease in good manufacturing jobs and an increase in service sector jobs for the less educated

## Not what it was

2

US employment by sector, % of total employment



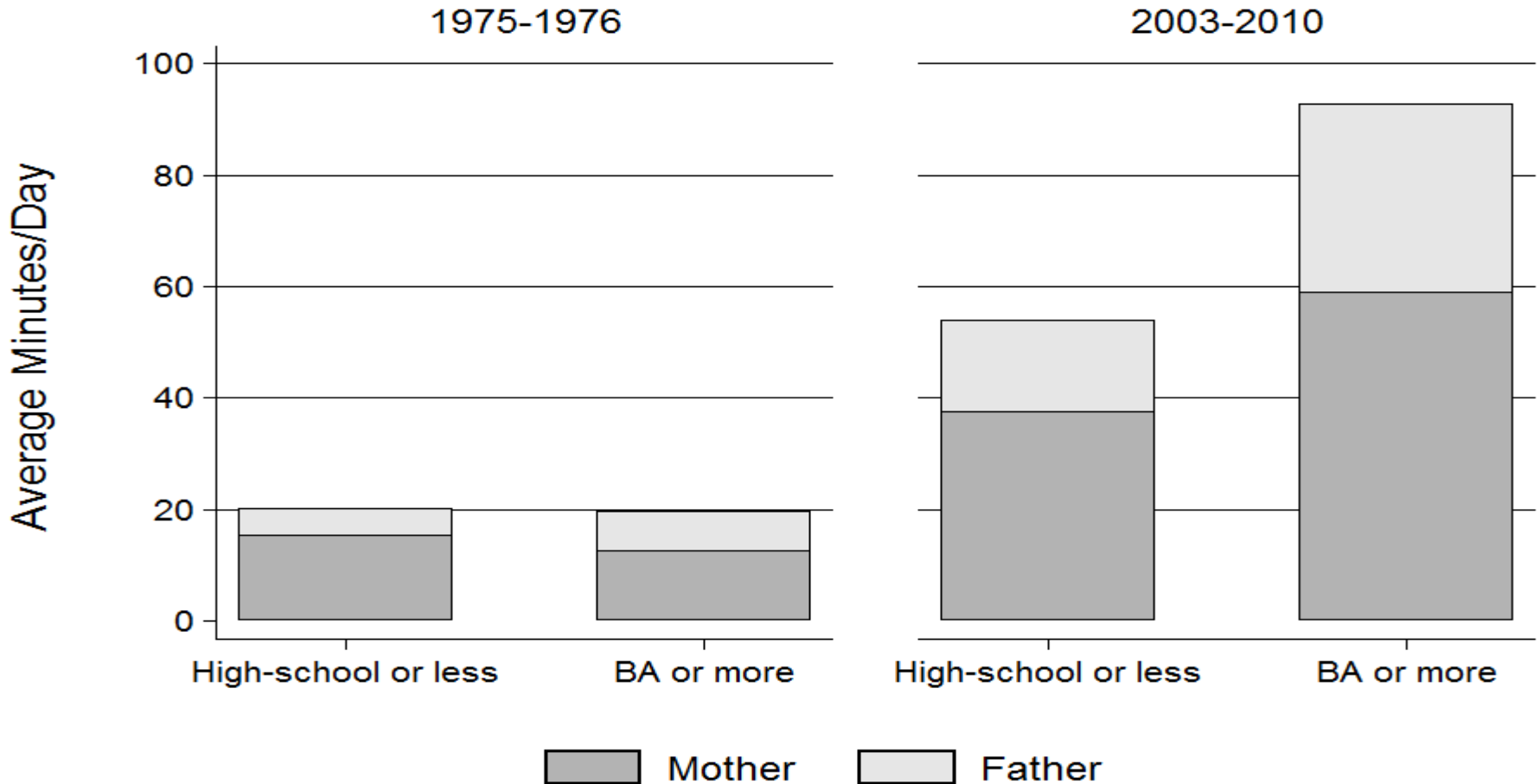
Source: US Bureau of Labour Statistics



# Diverging Destiny 5: Parental Time/Quality and Resources for children

- A growing Opportunity gap for parenting and children's opportunities by income and Education  
(Putnam, 2012; Reardon, 2012)

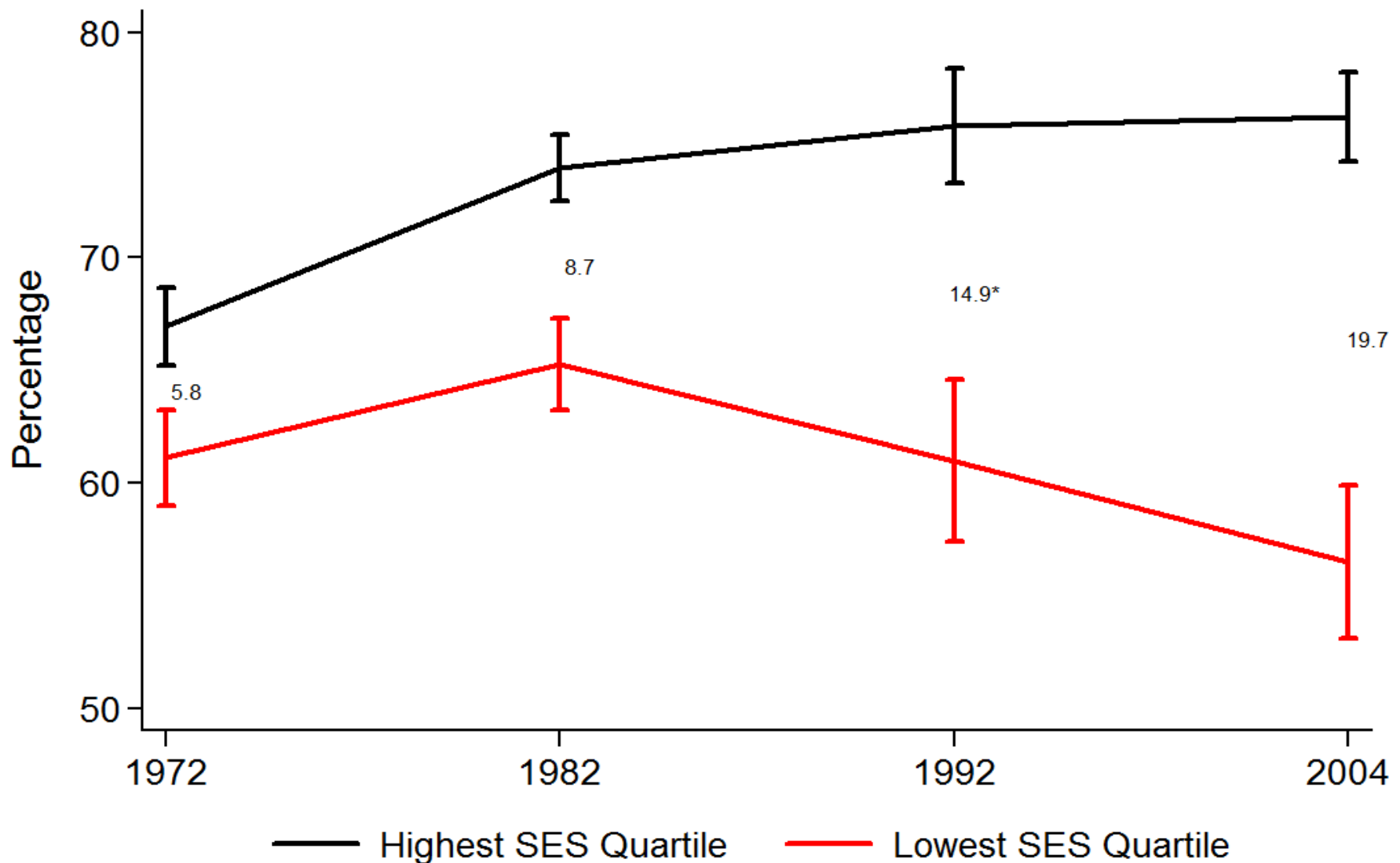
# GROWING CLASS GAP IN TIME SPENT WITH PARENTS (1970s vs 2000s)



Non-Hispanic Whites Only  
Source: American Heritage Time Use Study

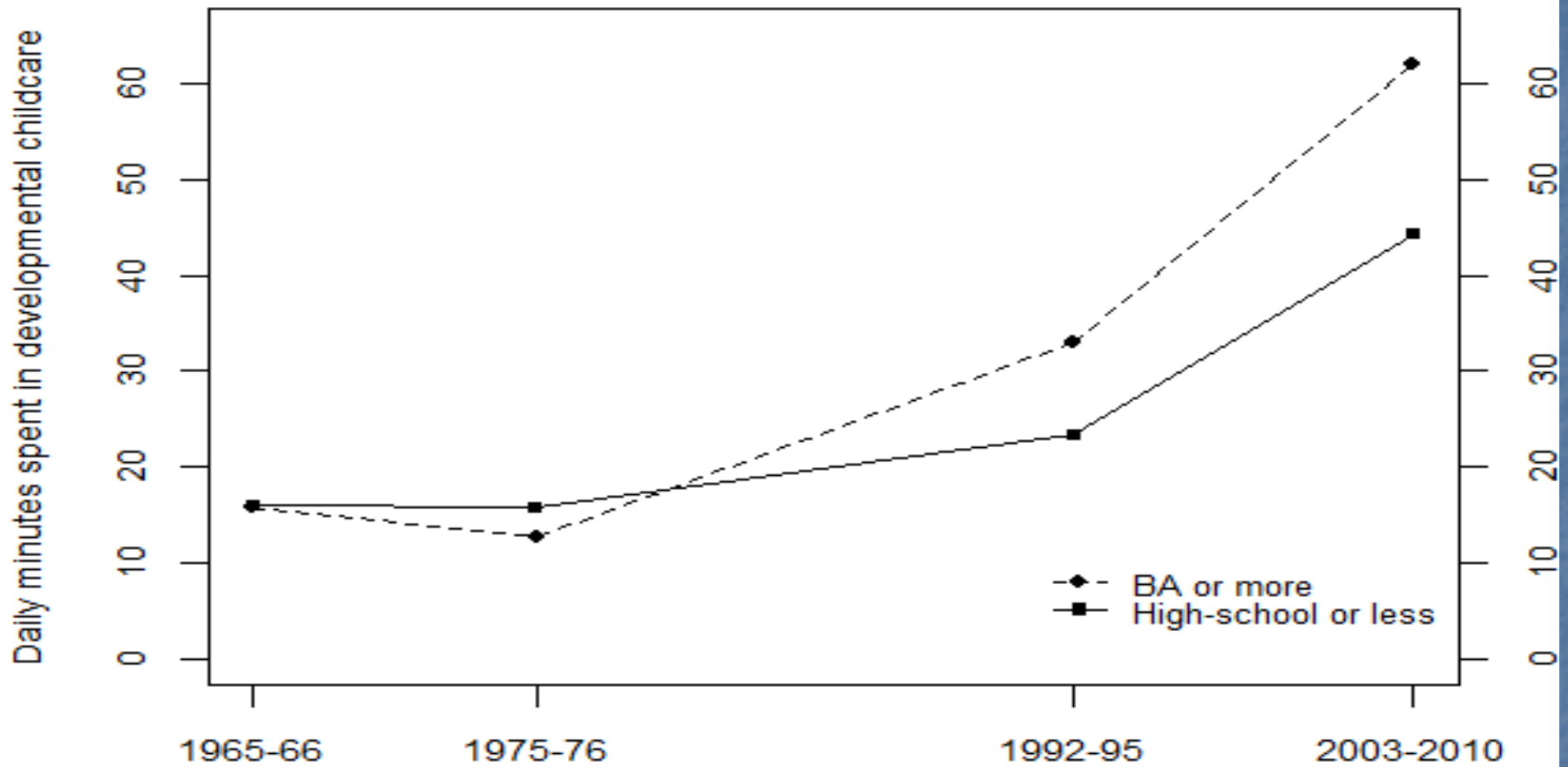


# GROWING CLASS GAP IN EXTRACURRICULAR ACTIVITY (EXCL. SPORTS)



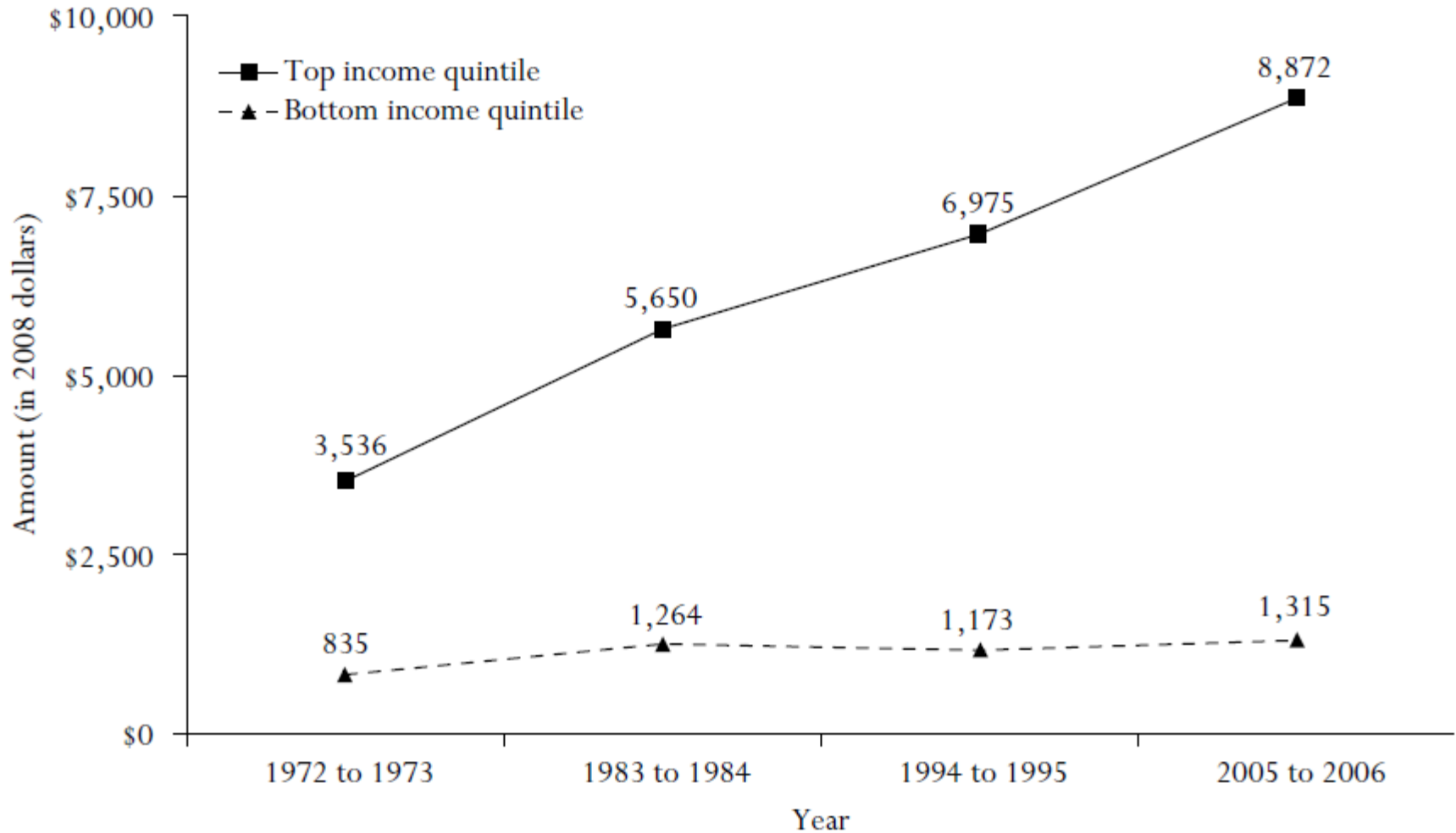
Non-Hispanic Whites Only, \* indicates that gap is significantly different than previous survey  
Source: NCES Cohort Studies (NLS72, HS&B, NELS:88, ELS:2002)

# GROWING CLASS GAP IN PATTY-CAKE AND “GOODNIGHT MOON” TIME WITH CHILDREN





# GROWING CLASS GAP IN ENRICHMENT EXPENDITURES ON CHILDREN, 1972-2006



# Rural America Restructuring Prosperous Small Towns and Farming?



# Still great assets!

- More Home ownership
- More connections to place and extended family
- Better connections with schools/teachers
- Less random violent crime
- Better faith based connections
- School entry skills are good



# Diverging Destinies for Rural Families: Economic Restructuring

1. dramatic decrease in farming (less than 5% of economy)
2. disappearance of key industries
3. Emergence of a service economy





# Jobs in the Service Economy

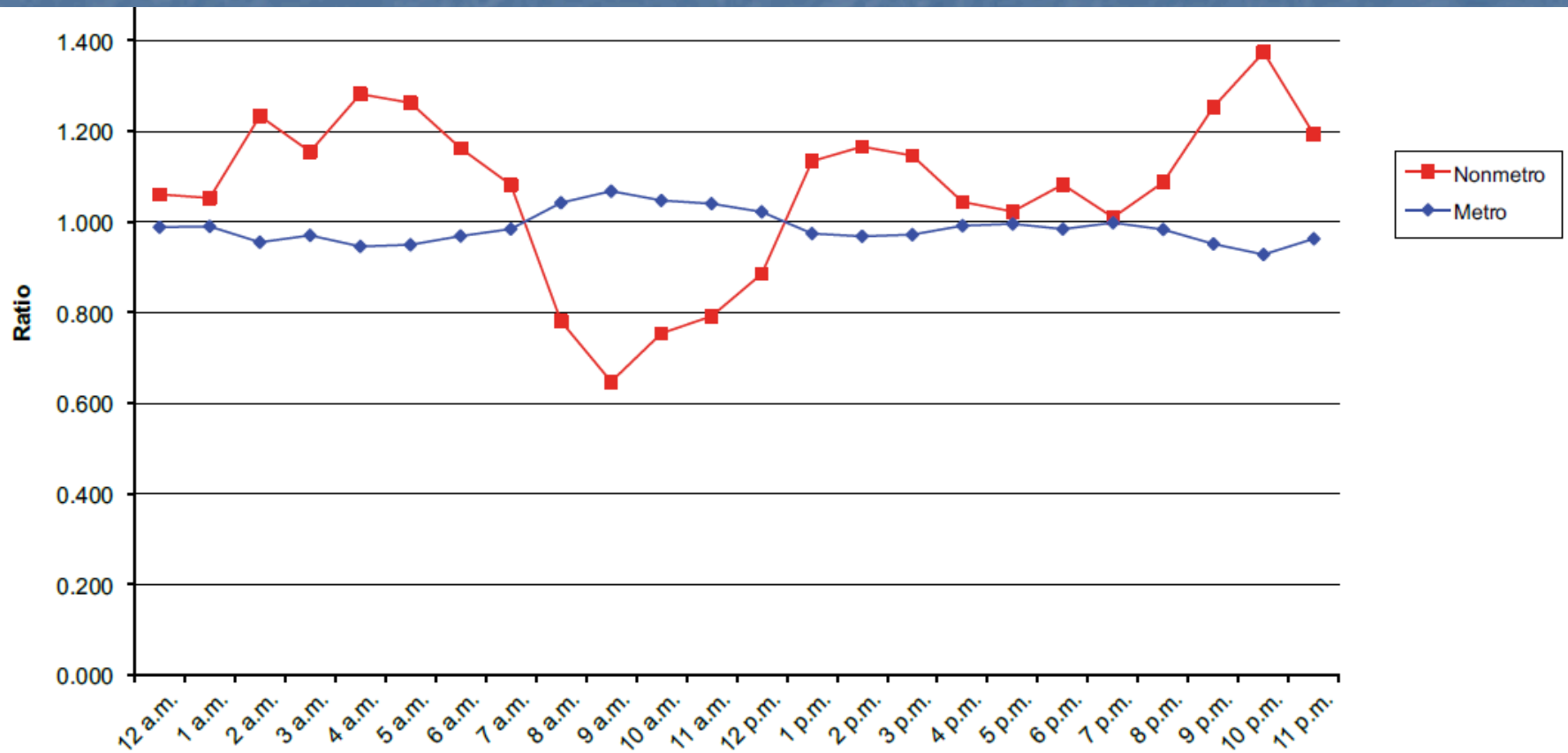


Lower paying jobs

Fewer benefits

Irregular job hours

# Relative Ratio Of Nonmetropolitan And Metropolitan Workers By Time Arrived At Work

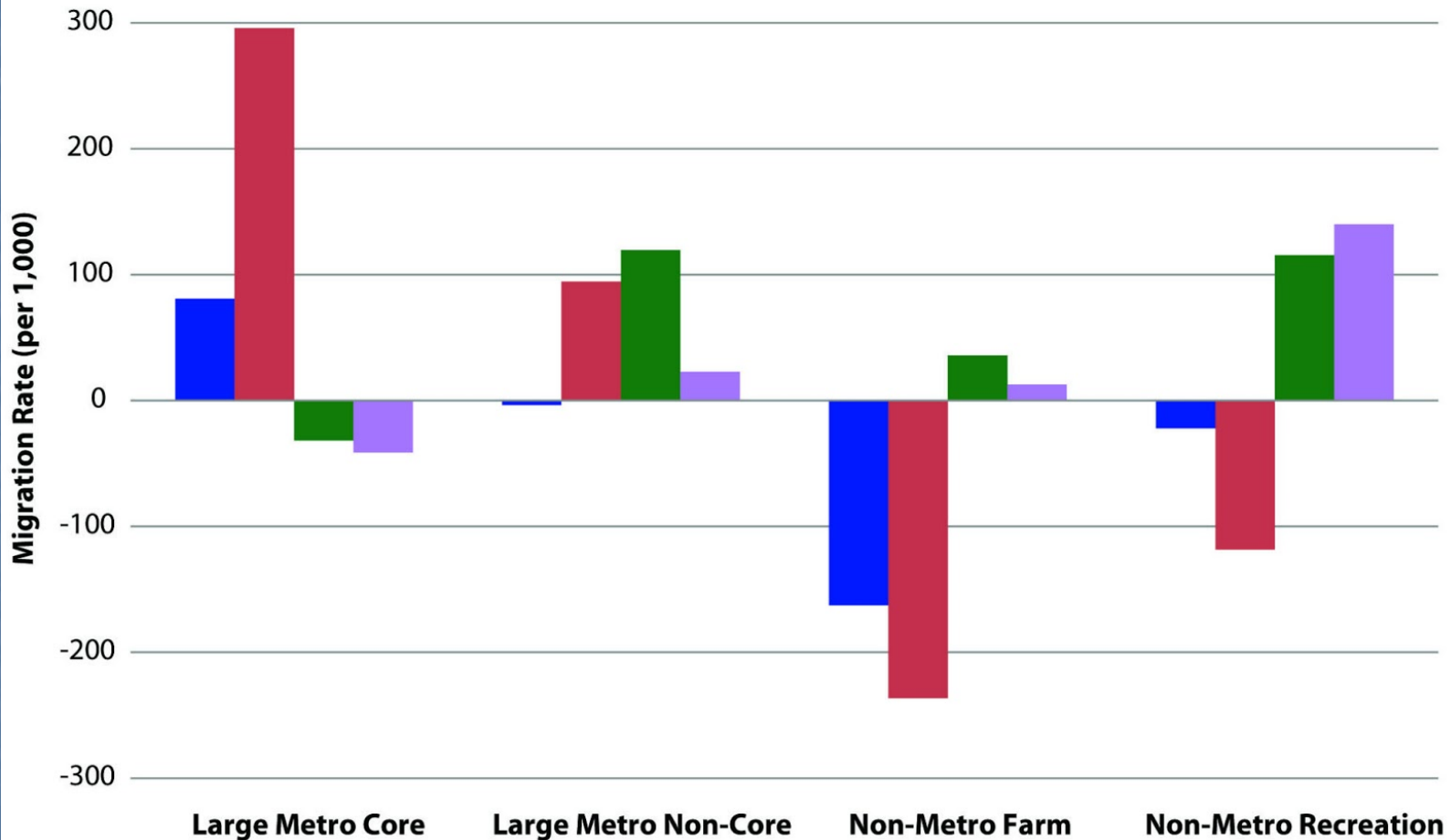


Saenz, R. (2009). *Rural Workers More Likely to Work Nontraditional Shifts. Issue Brief No. 5.* Durham, NH: Carsey Institute.



# Outmigration of Young Adults (15-39) in Rural America

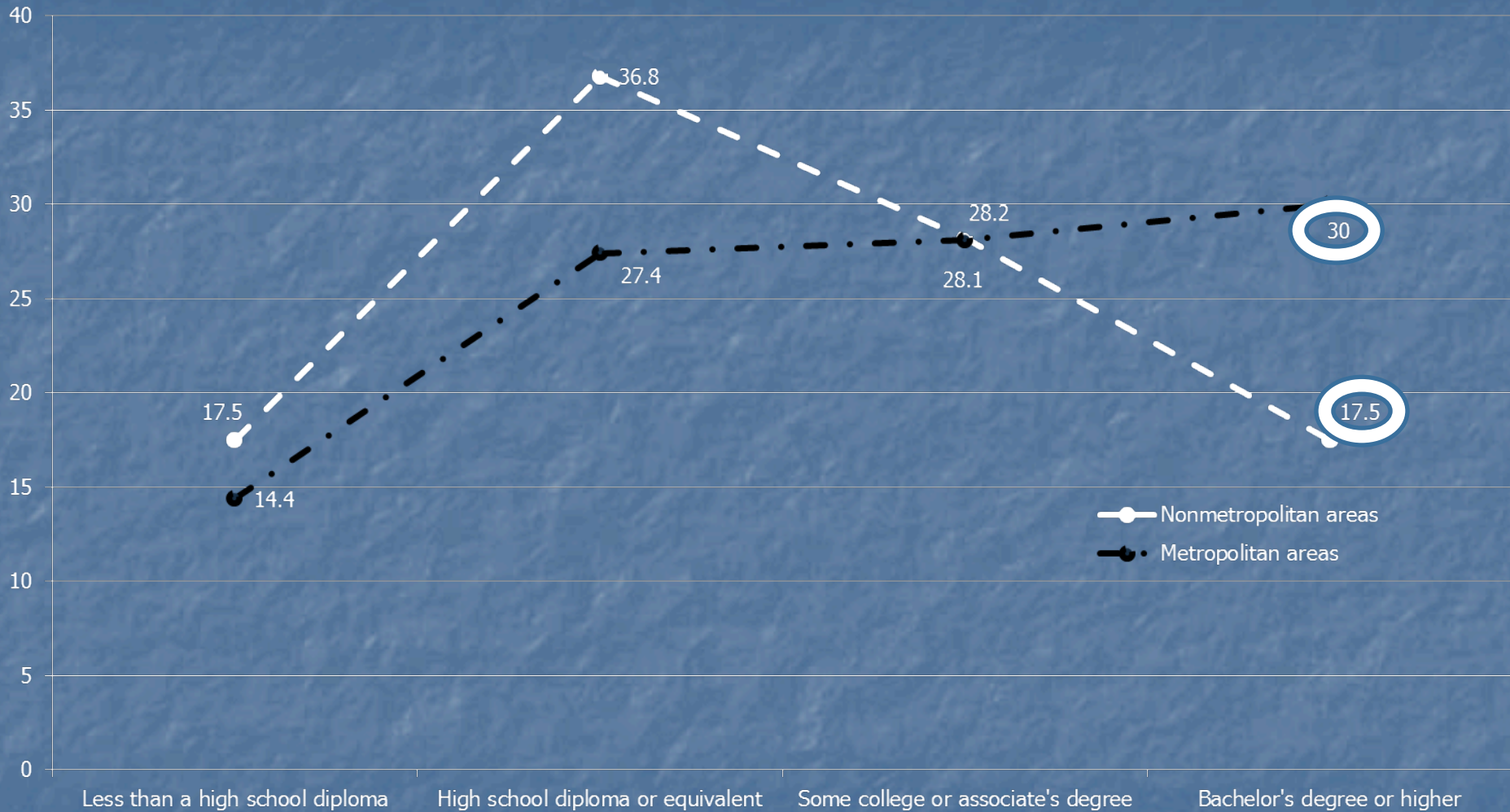
Net Migration Trends for Selected Metropolitan and Nonmetropolitan Counties, 2000 to 2010



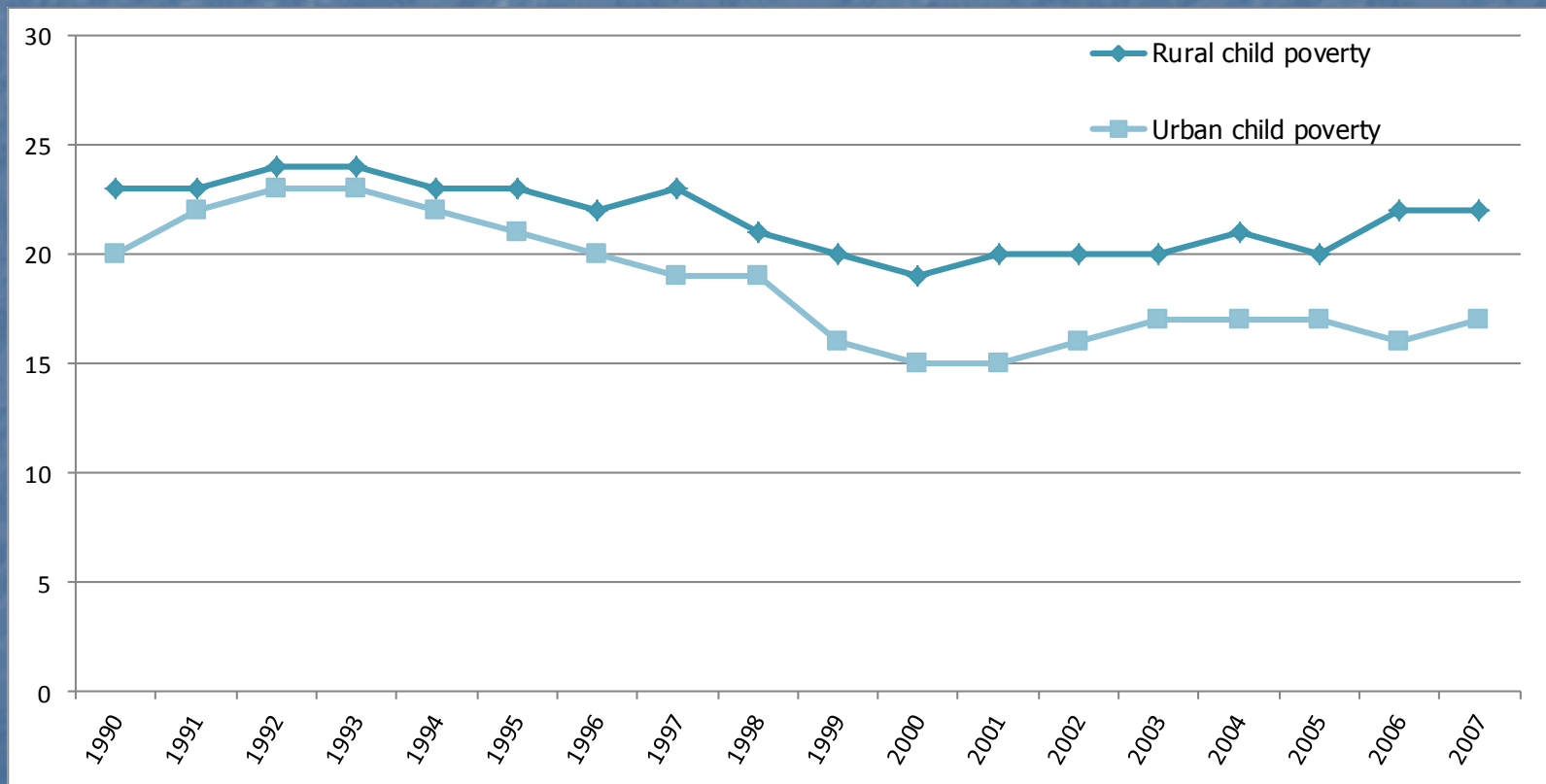
Source: Winkler et al., 2013  
Analysis: K.M. Johnson, UNH

■ Emerging Adults ■ Young Adults ■ Family Age ■ Older

# Educational attainment for the population age 25 years and older, 2006-2010



# Child Poverty in Rural and Urban Areas: 1990 - 2007



O'Hare (2009)



# The Family Life Project: Children's Lives in Low Wealth Rural Communities\*

Phase I: Lynne Vernon-Feagans  
Martha Cox and Ann  
Crouter

Phase II: Lynne Vernon-Feagans  
Mark Greenberg

Phase III: Lynne Vernon-Feagans  
Mark Greenberg

\*2PO1HD039667 funded by NICHD with  
cofunding by Minority Health and NIDA



Family Life  
PROJECT



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL



Center for  
Developmental Science



FPG Child Development Institute  
The University of North Carolina at Chapel Hill

SCHOOL OF  
EDUCATION

Photos by Jack Lauterer and  
the FPG Child Development  
Institute

# FLP Sample = 1292 Children\*

## North Carolina

African American  
Non-African American

## Poverty Level

0-200%

>200%

490

29

168

86

## Pennsylvania

Non-African American

344

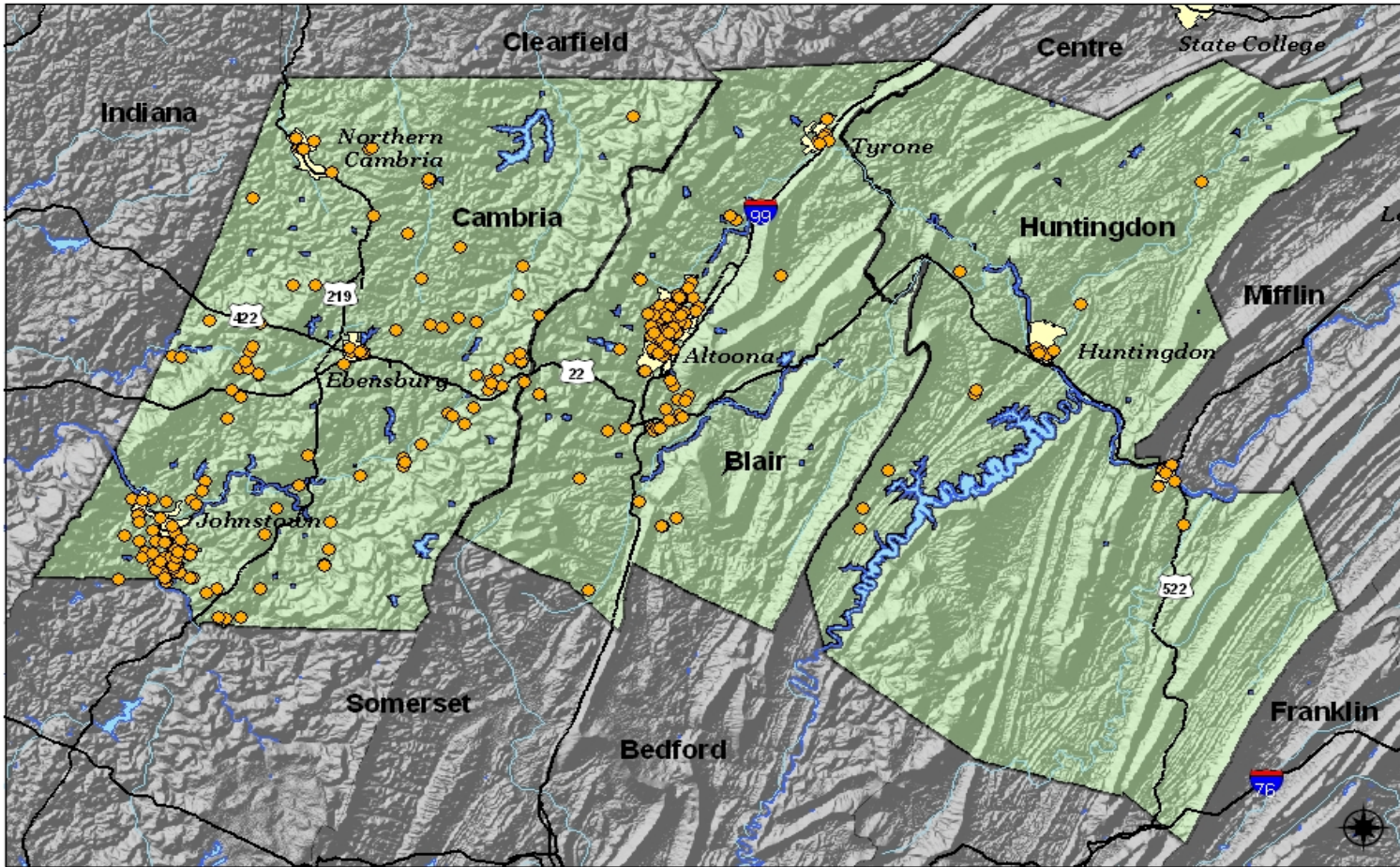
175

### \*Recruitment Summary





# The Family Life Project: Participant locations in Pennsylvania

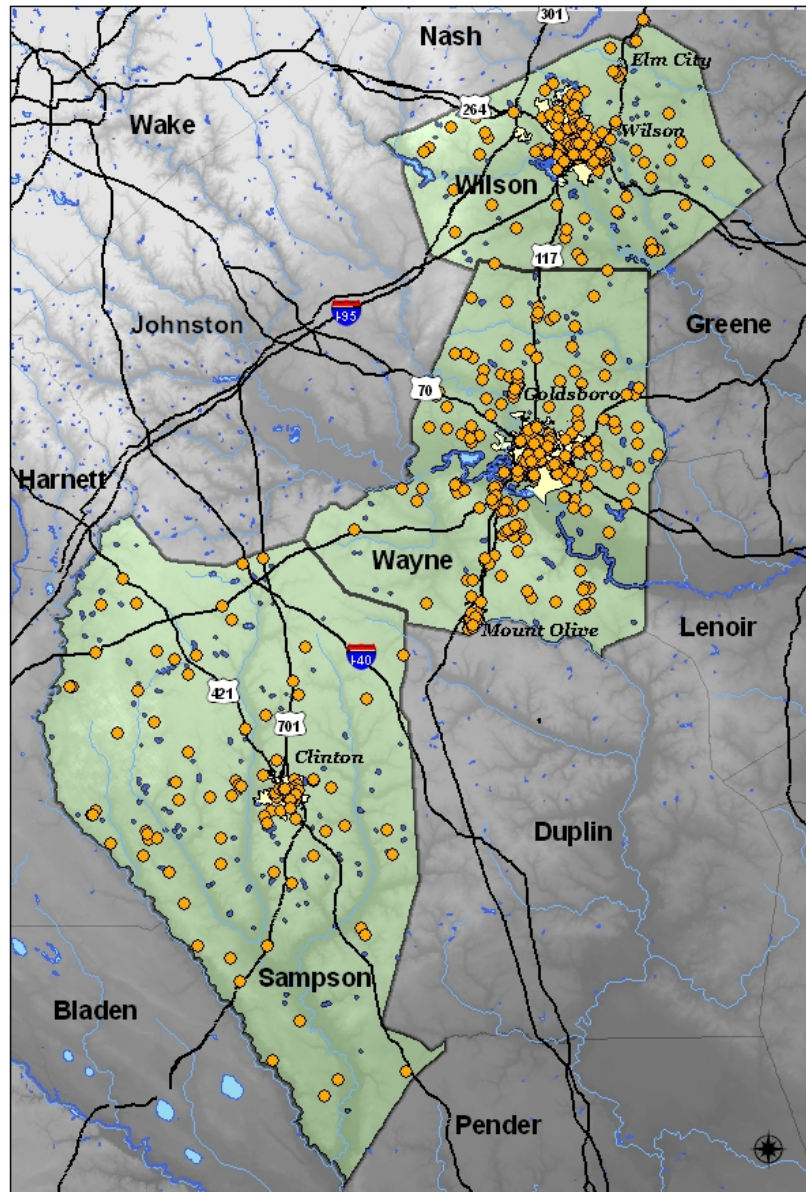


- Participants
- Hydro
- Major Roadway
- Surrounding Counties
- Project Counties
- Cities

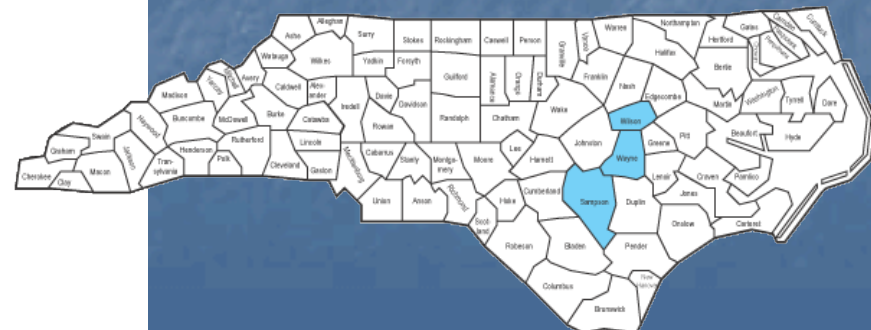




# The Family Life Project: Participant locations in North Carolina



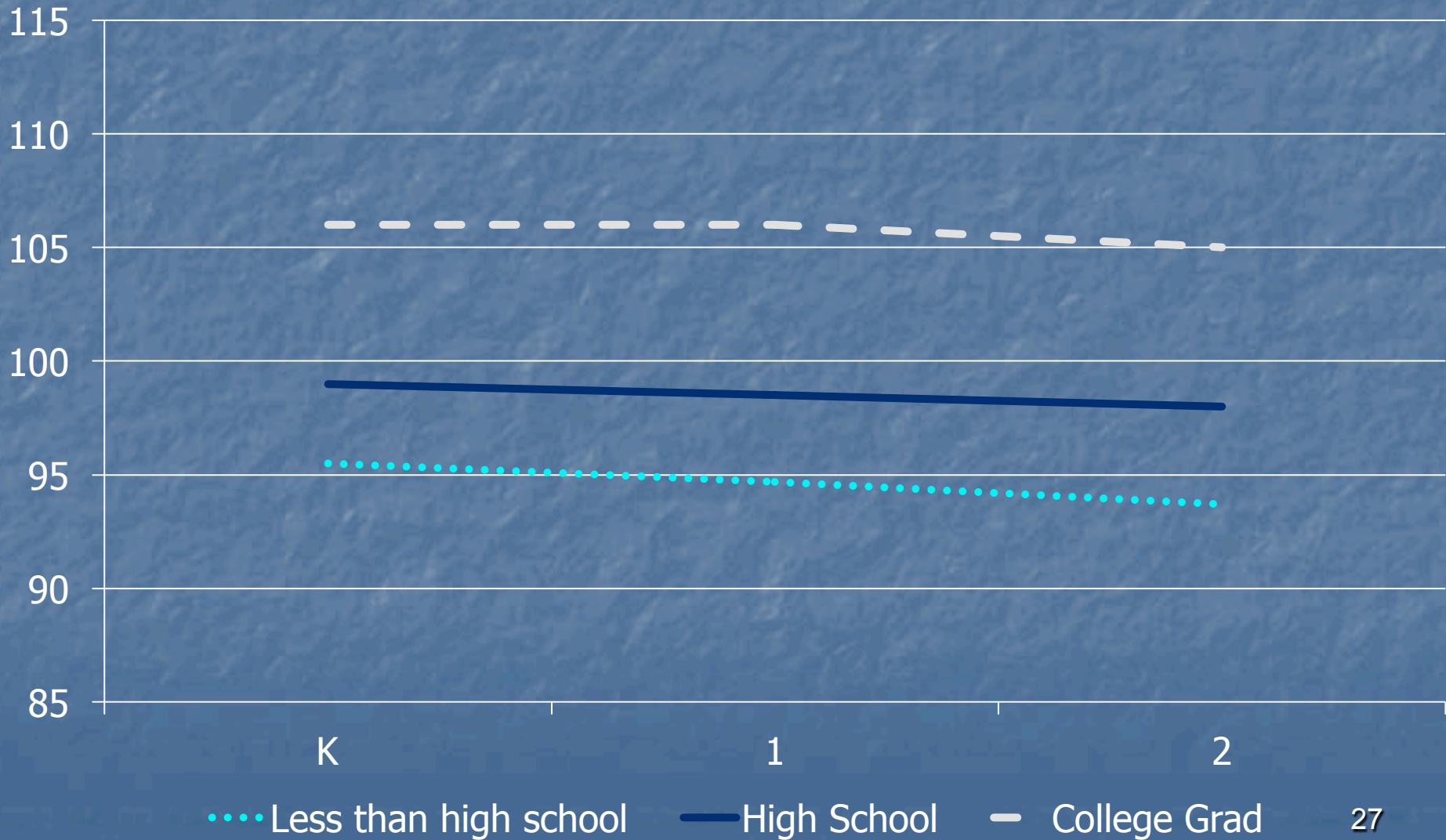
- Participants
- Surrounding Counties
- Major Roadways
- Cities
- Project Counties
- Hydro



# Family Life Project Children in 2nd grade

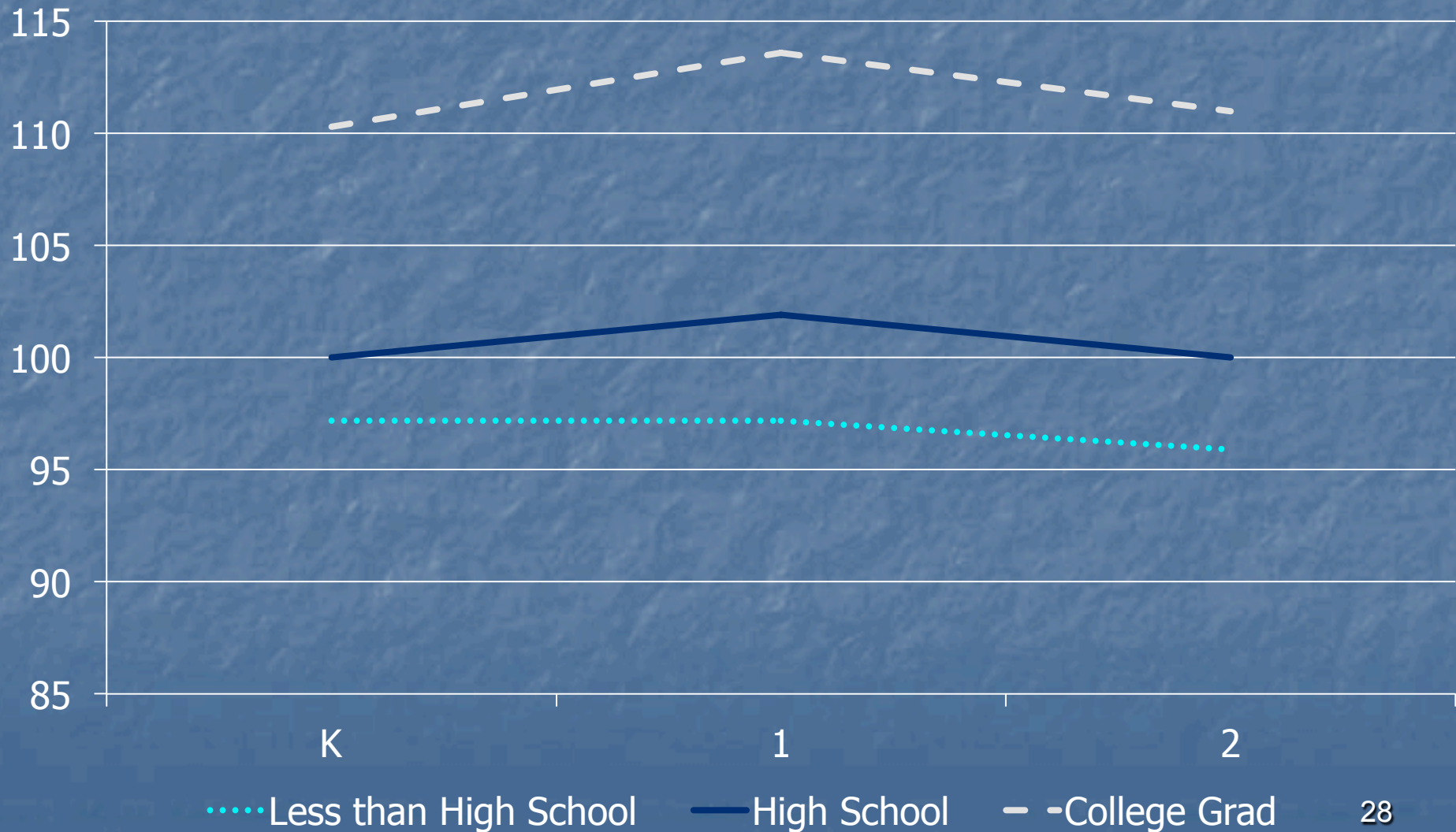
Variable	%	M	SD	Min-Max
Gender, girl	50%			
Race, Black	46%			
Income, below 200% poverty line	<b>78%</b>			
Primary Caregiver's Education, in years		15.1	2.6	7-22
Primary Caregiver's Employment Status, employed	64%			
Single-parent Families	33%			
Literacy Achievement				
PPVT Standard Score, Kindergarten		94.1	15.9	43-138
WJ-R Letter-Word Identification, standard score, 2 <sup>nd</sup> Grade		104.8	11.9	32-134
WJ-R Picture Vocabulary, standard score, 2 <sup>nd</sup> Grade		98.1	10.4	59-133
WJ-R Passage Comprehension, standard score, 2 <sup>nd</sup> Grade		95.3	11.8	20-125

# Diverging Destinies: WJ Picture Vocabulary By Maternal Education





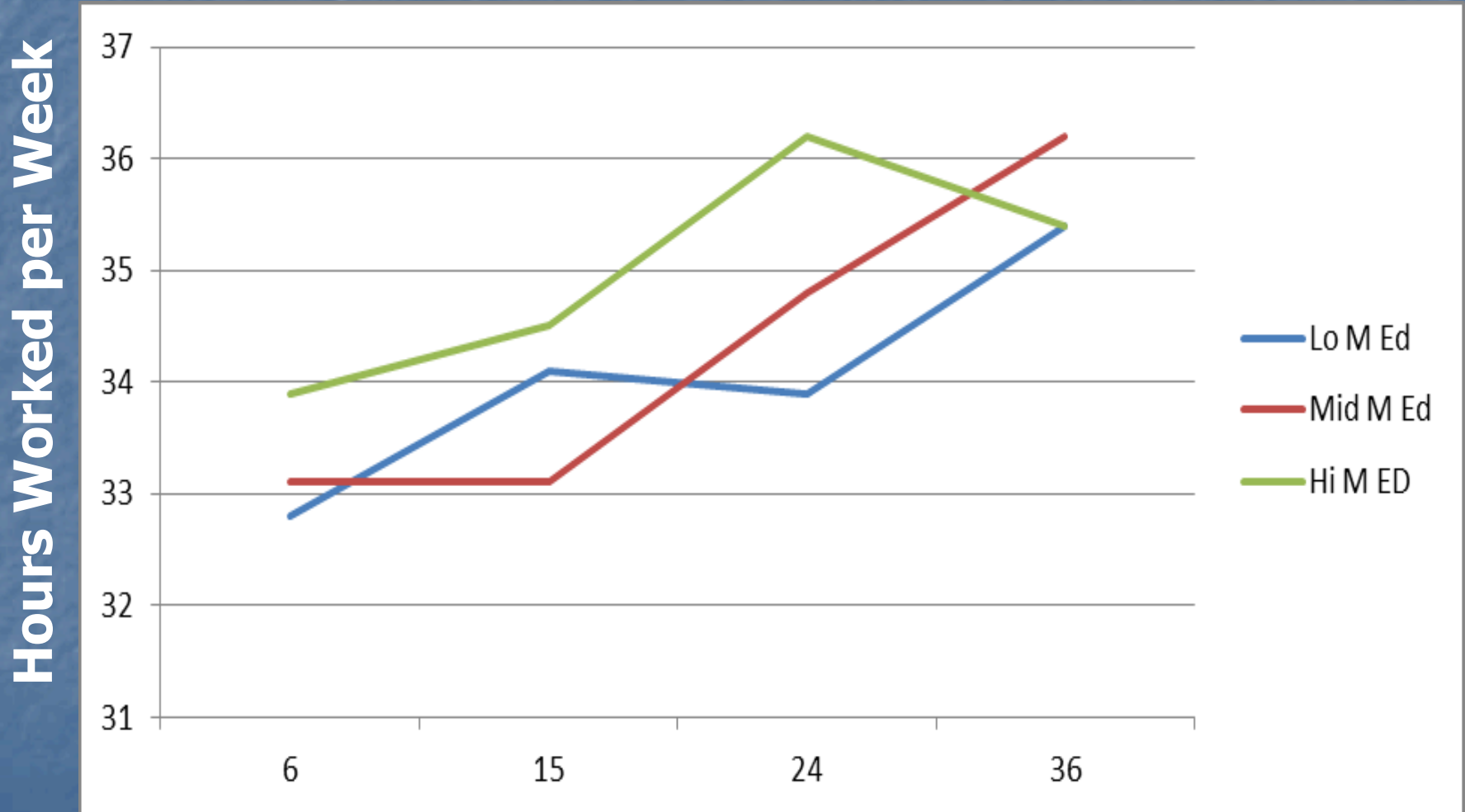
# Diverging Destinies: WJ Applied Problems By Maternal Education



# Examine 3 aspects of Family Life related to diverging destinies

- **Household chaos** at 5 timepoints over the first 3 years of life and language at 3 years of age
- **Cumulative Risk** at 5 timepoints over the first three years of life and language at 3 years of age.
- **Maternal language input** at 3 years of life and child language at 3 years and at school entry.

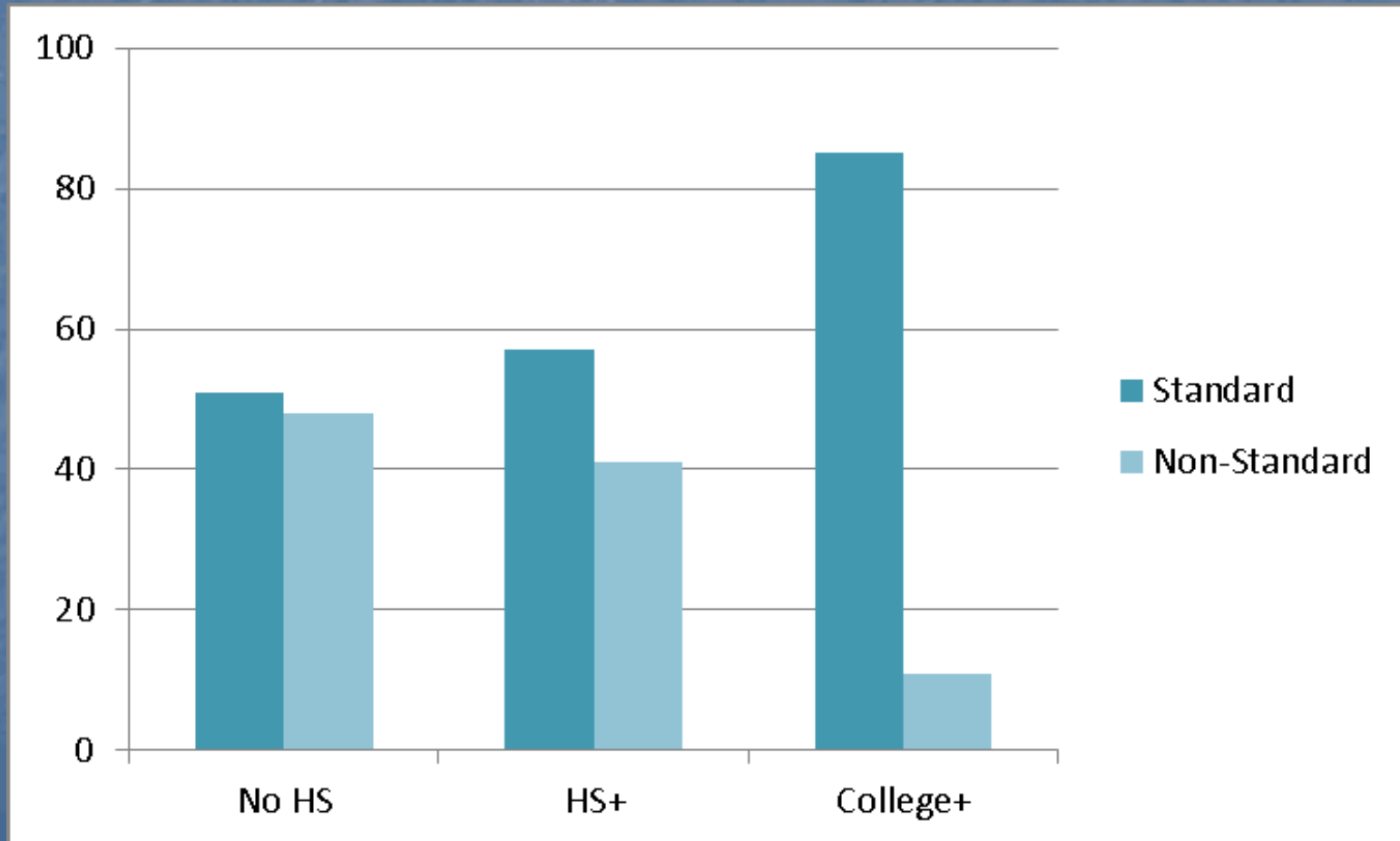
# Maternal Working Hours By Education (40% nonstandard)



Child Age in Months



# Mother Work Schedules: The Family Life Project



# Household Chaos, Non-standard work schedules and Education

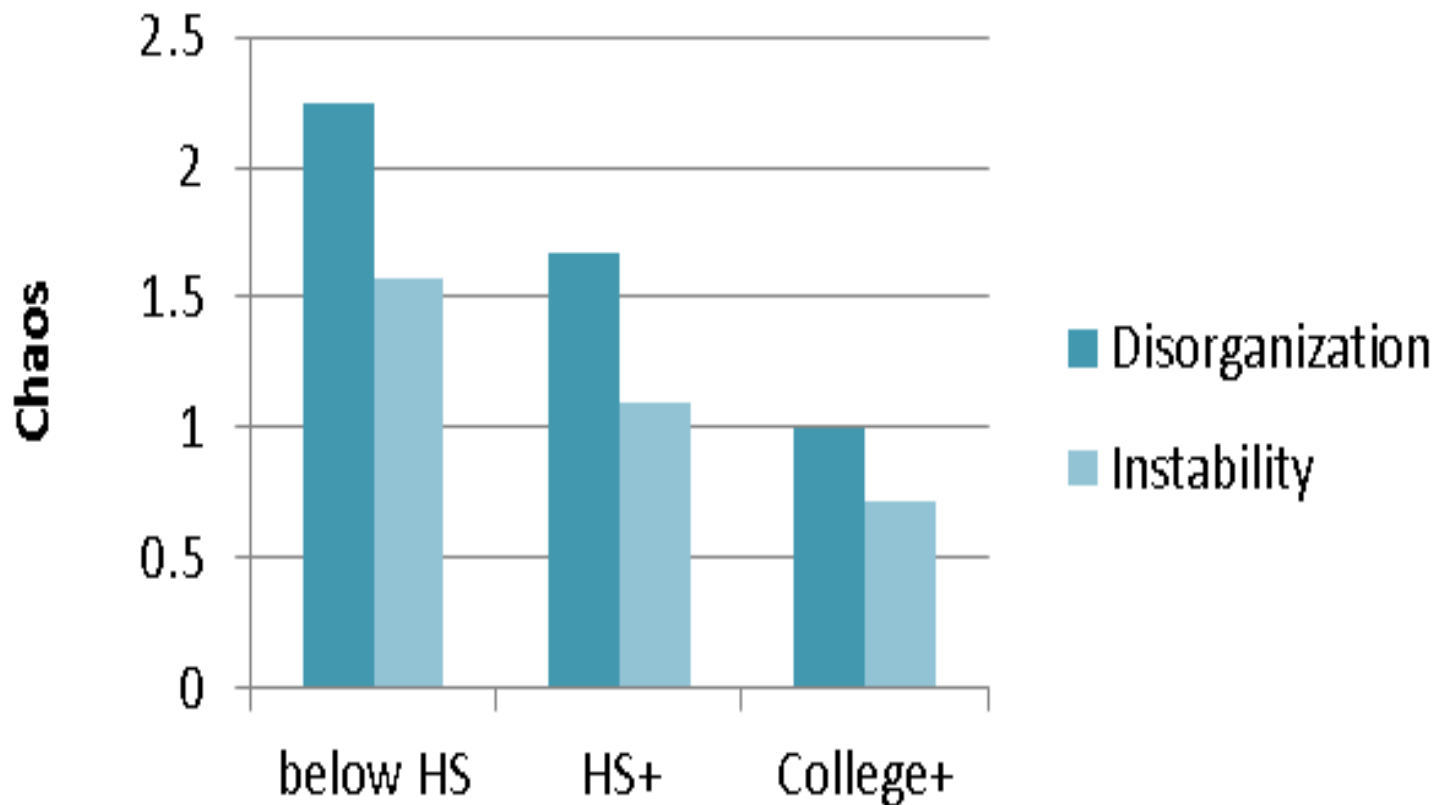


# HOUSEHOLD CHAOS: a measure of Economic Restructuring on Family Life at 5 timepoints from 2-36 months of age

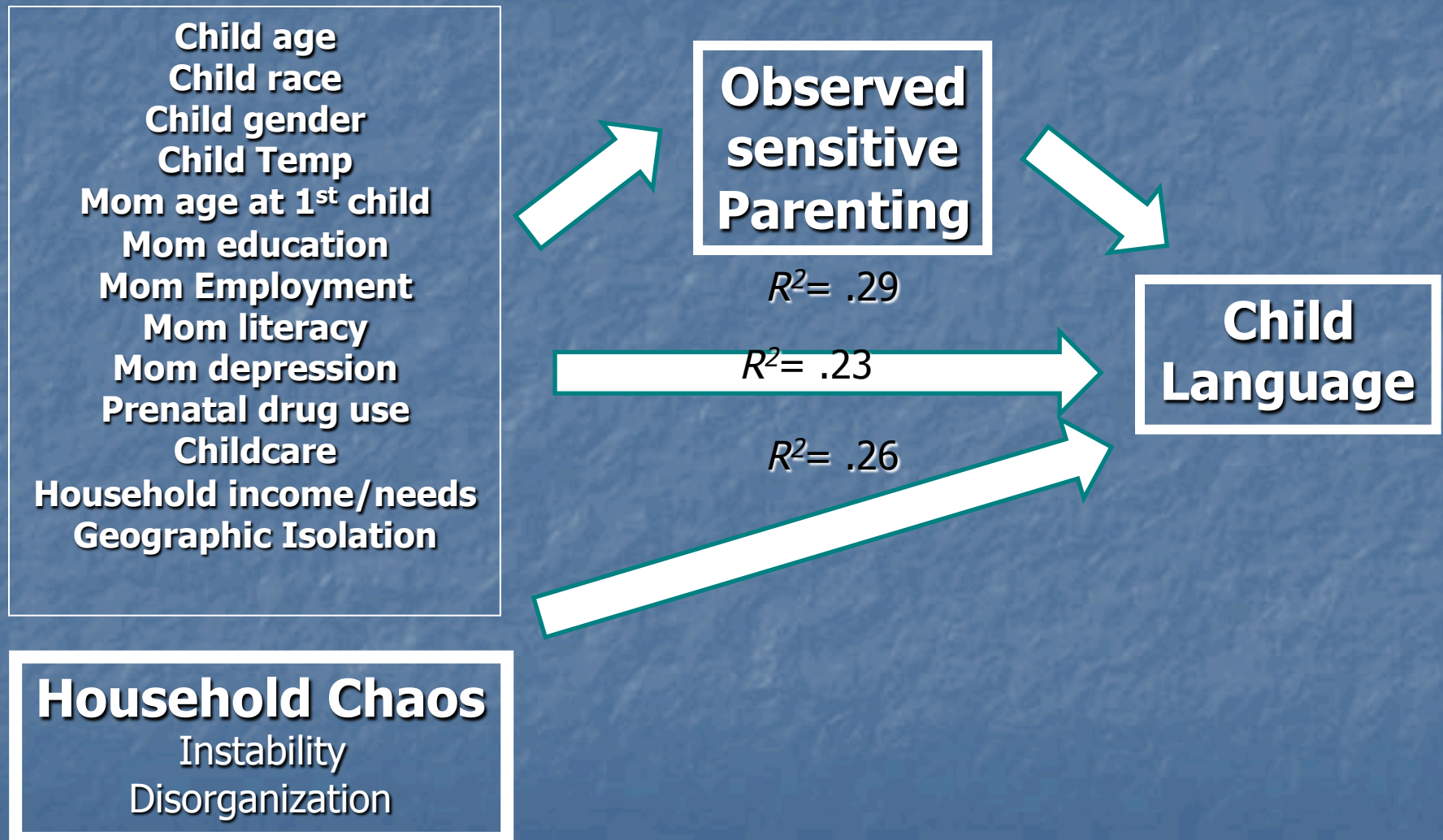
- **Instability: Changes in home and people in the home**
- **Disorganization: unpredictability and clutter in the home**



# Household Chaos by Mother Education



# Chaos, Poverty and Parenting: Predictors of 36 month Language Development\*



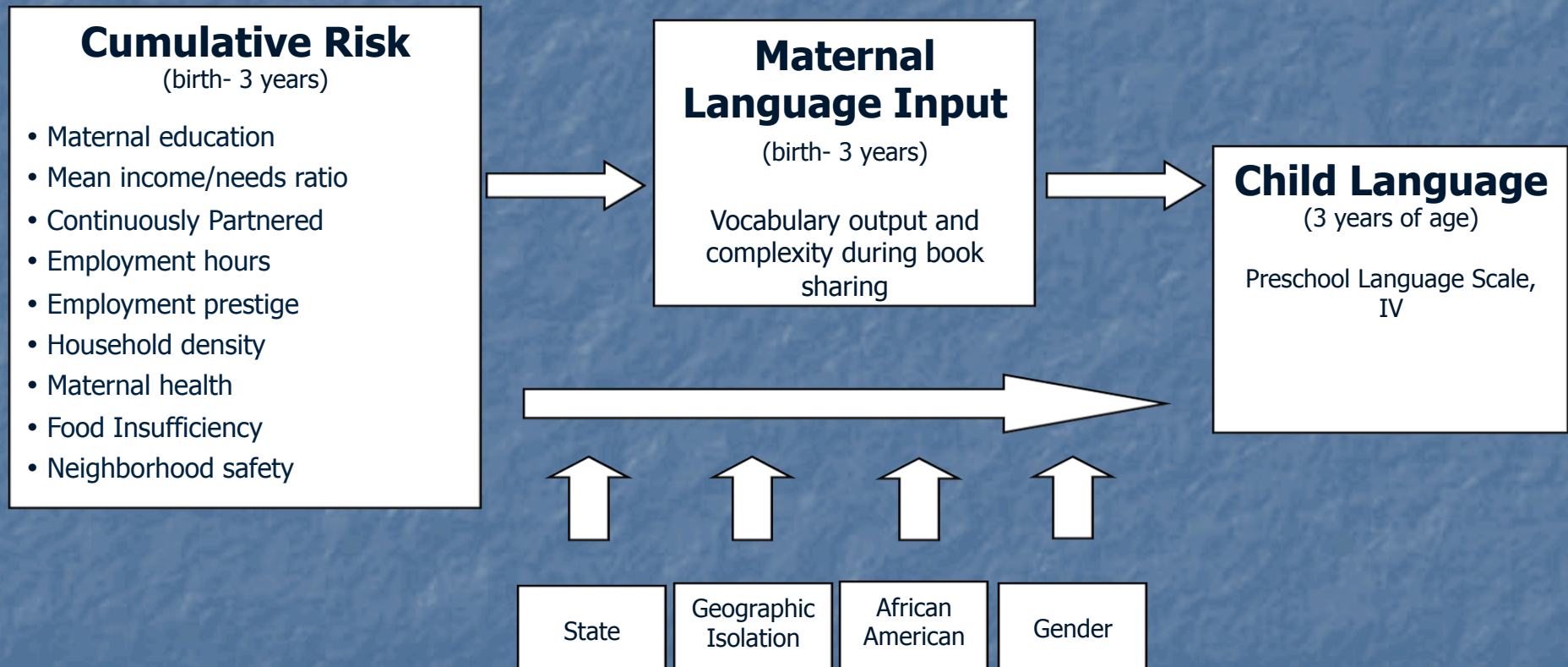
\*Vernon-Feagans, Garrett-Peters, Willoughby & Mills-Koonce (2012)

# Cumulative Risk, maternal language and child language





# Cumulative Risk, Parenting and Child Language at 36 months



# Picture Book Sharing Task at 6, 15, 24 and 36 months





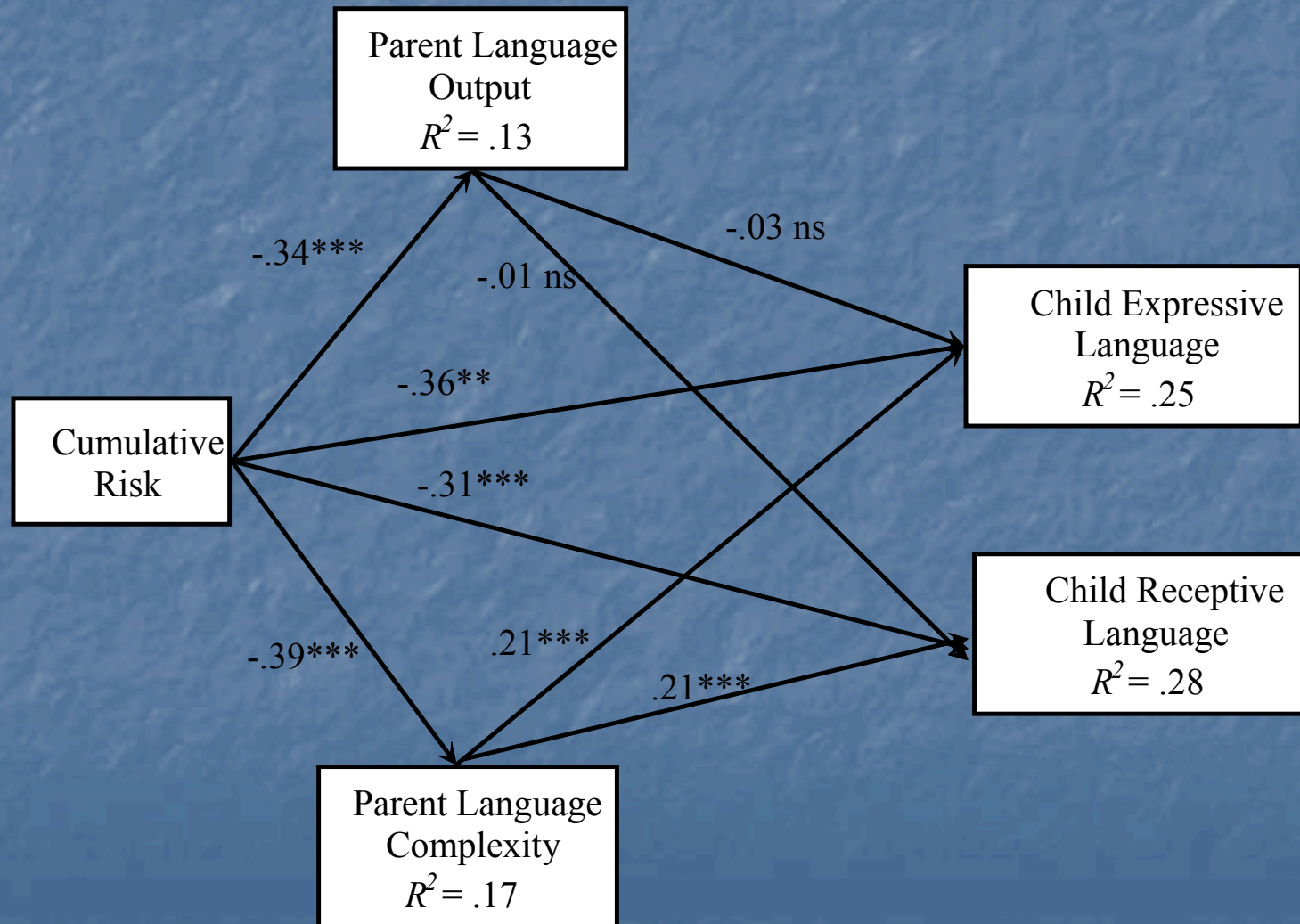
# Maternal Language Input

- Transcribed all language and gestures by mother and child in SALT (software program that automatically counts a variety of language markers)
- Maternal vocabulary (number of different words, time in session)
- Maternal language complexity (mean length of utterance, # of turns on topic, and number of complex conjunctions)



# Path Coefficients

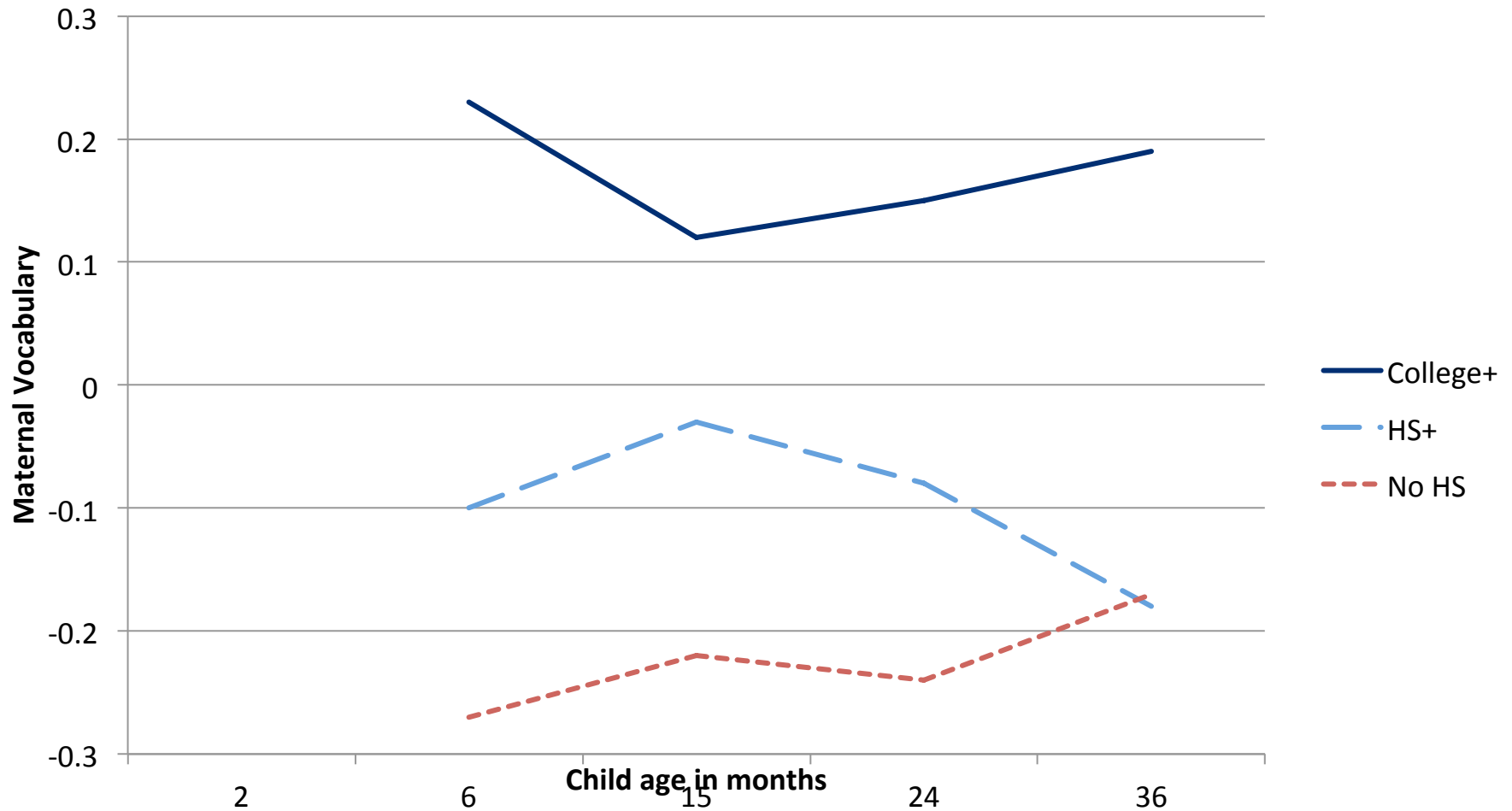
## Parent Language As A Mediator Of The Relationship Between Cumulative Risk And Children's Language Development



# Maternal Language, nonstandard work hours and education

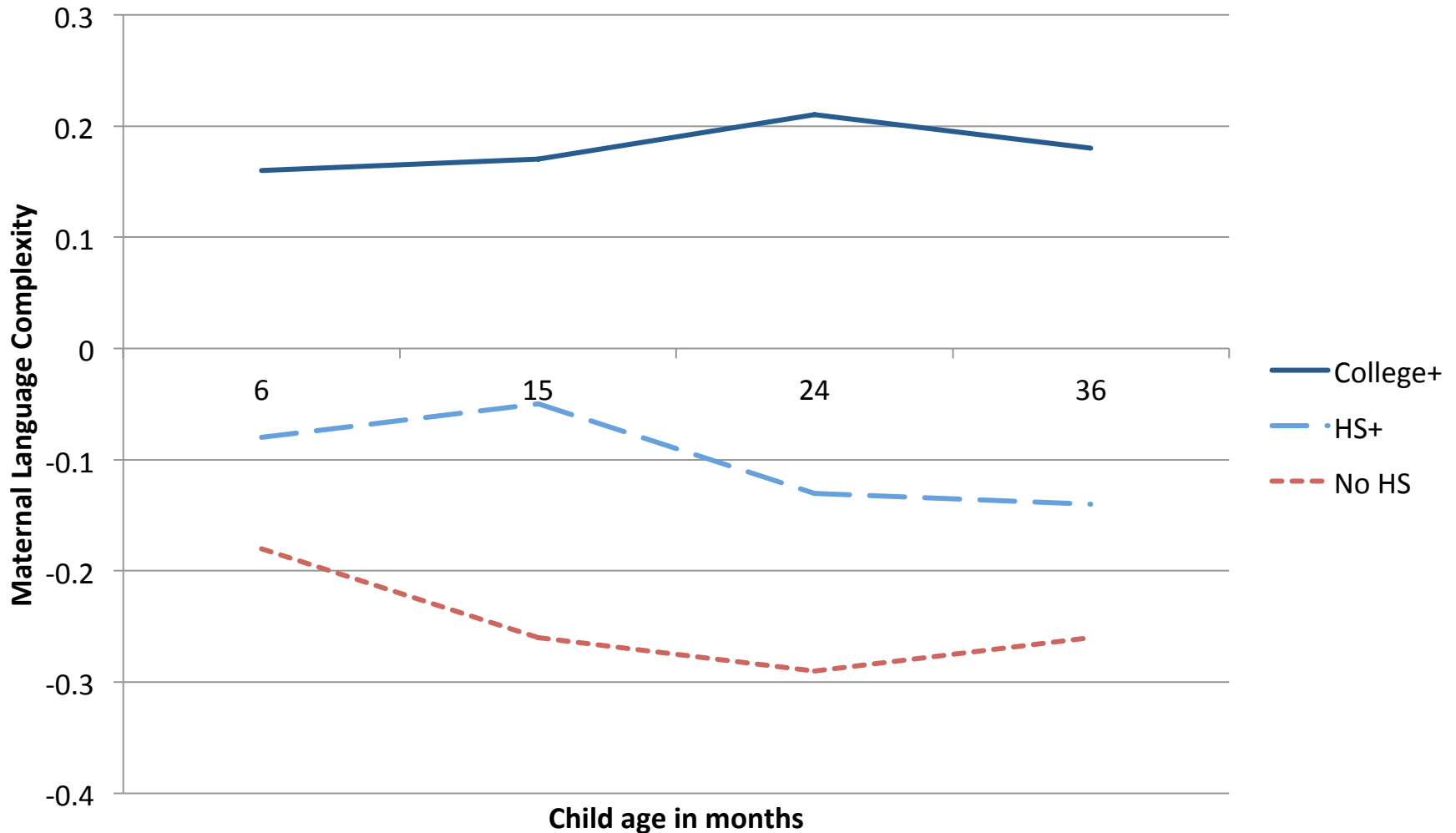


# Maternal Language: Vocabulary





# Maternal Language: Complexity



# Cargiver/child verbal Interactions as a buffer against poorer child language



# Variables used at 3 years of age to predict language at 3 and 5 years of age

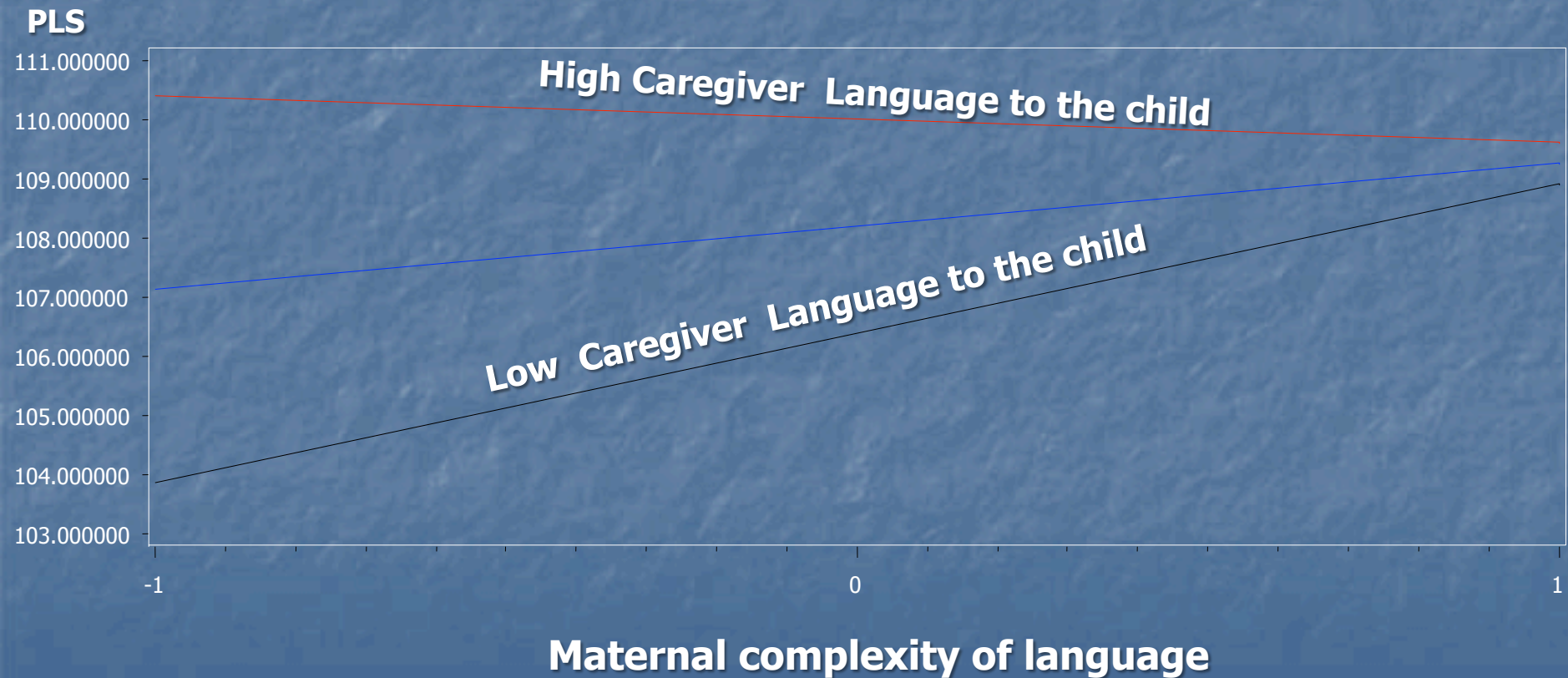
- **Control Variables** including the childcare and home HOME
- **Maternal vocabulary output** in the home during a wordless picturebook
- **Caregiver/Child Language Interactions** in childcare setting
- **Maternal Vocabulary and complexity X Caregiver Language**



# Results

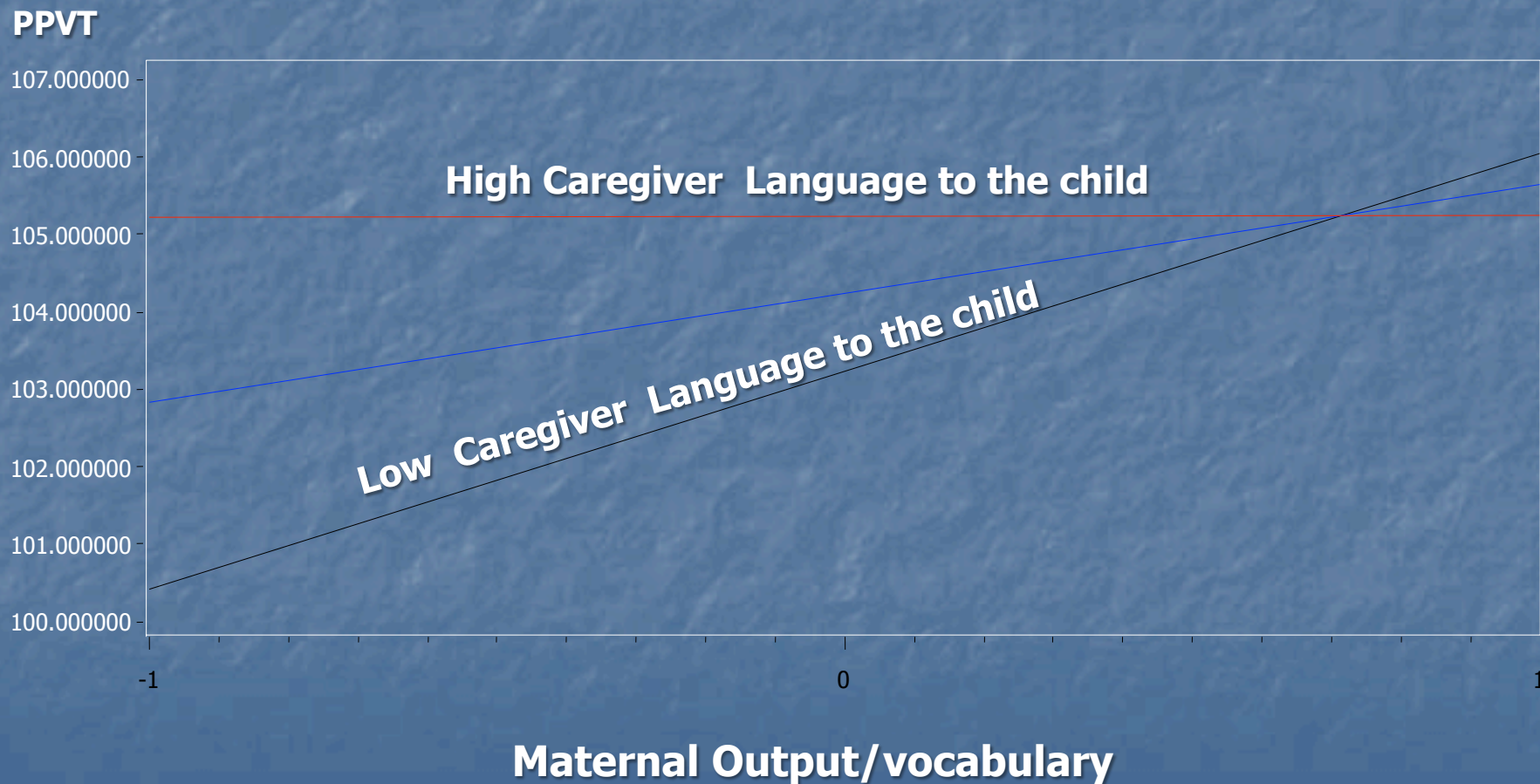
- Even when we controlled for the quality of the home and childcare (HOME) Children whose mothers used less vocabulary and especially less complex language had poorer language at 3 years and just before school entry.

# Predicting PLS 36 month Expressive: Maternal complexity X Caregiver Language Interactions with the child





# Predicting PPVT Two years Later: Maternal Language vocabulary output X Caregiver Language Interactions with the child





# Summary

- Economic restructuring has dramatically changed the lives of families in low wealth rural communities, especially in less educated families with parents working more standard work hours and with high school educated parents no longer able to live a middle class life style.
- This economic restructuring is likely impacting lower educated parents ability to provide optimal parenting for their children and provide the resources their children need for optimal development.
- Higher levels of verbal interactions between the child and caregiver in childcare may be a buffer against poorer outcomes for children when the mother talks less and less complexly in the home.