The Economic Case for Investing in Montana's Young Children

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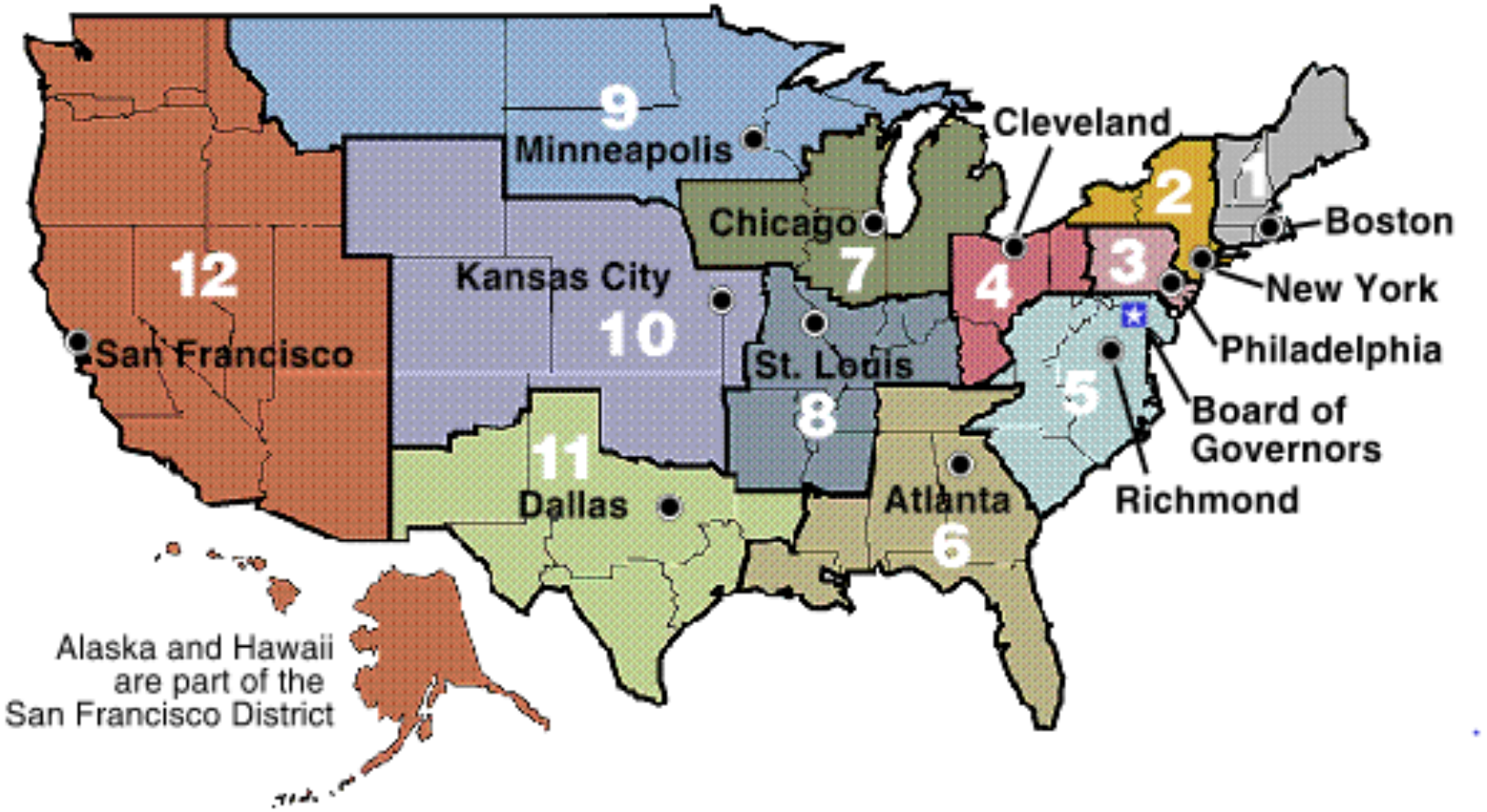
**The views expressed here are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.*

Federal Reserve System

Overview



Federal Reserve

Community Development

- Function within the Federal Reserve System.
- Promote fair access to credit and economic growth in LMI communities.
- Research. Information Sharing. Training. Convening.

FEDERAL RESERVE BANK OF MINNEAPOLIS
HELENA BRANCH

FedCommunities.org
Federal Reserve community development resources promoting people, place, practice and small business

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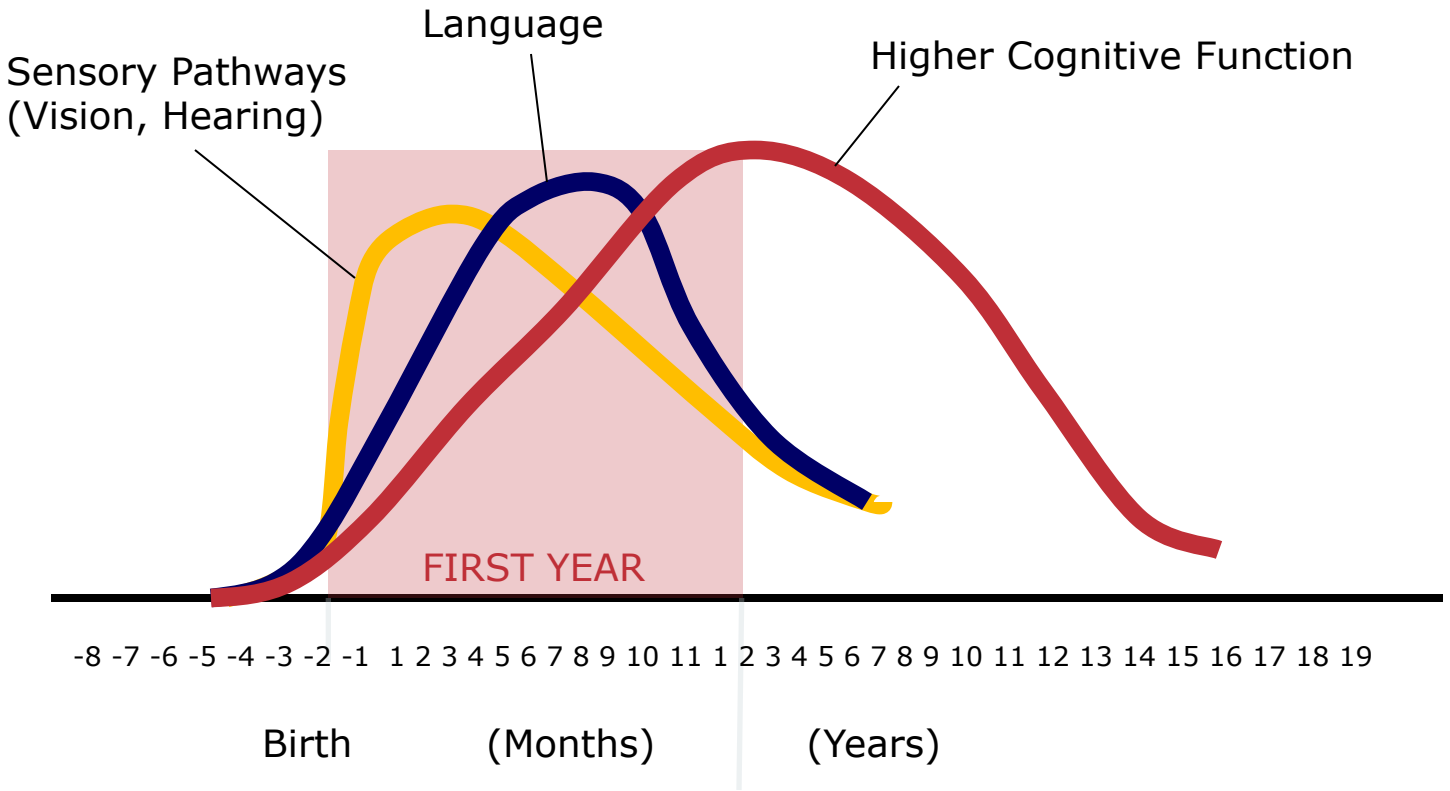
Human Brain Development

Synapse Formation Dependent on Early Experiences

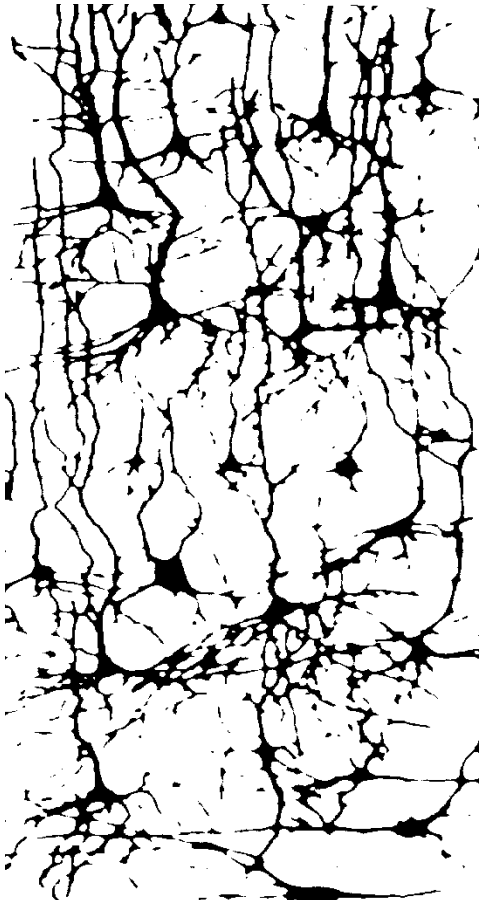


Source: C. Nelson (2000)

Human Brain at Birth

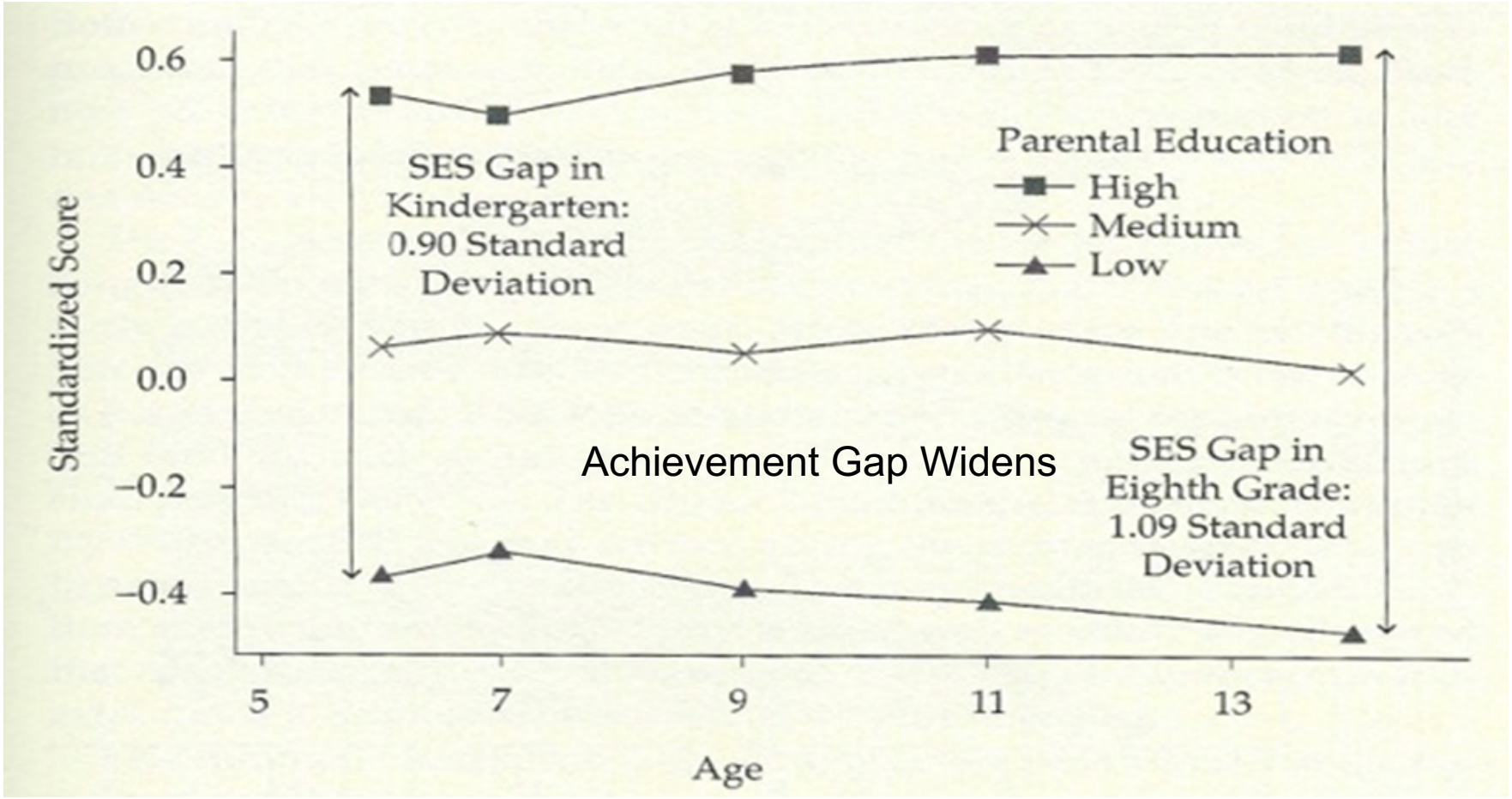
6 Years Old

14 Years Old



Source: Chugani, Phelps & Mazziotta (1987)

Average reading scores of U.S. children by socio-economic status group (parent education)



Bradbury, Corak, Waldfogel, and Washbrook (2015)

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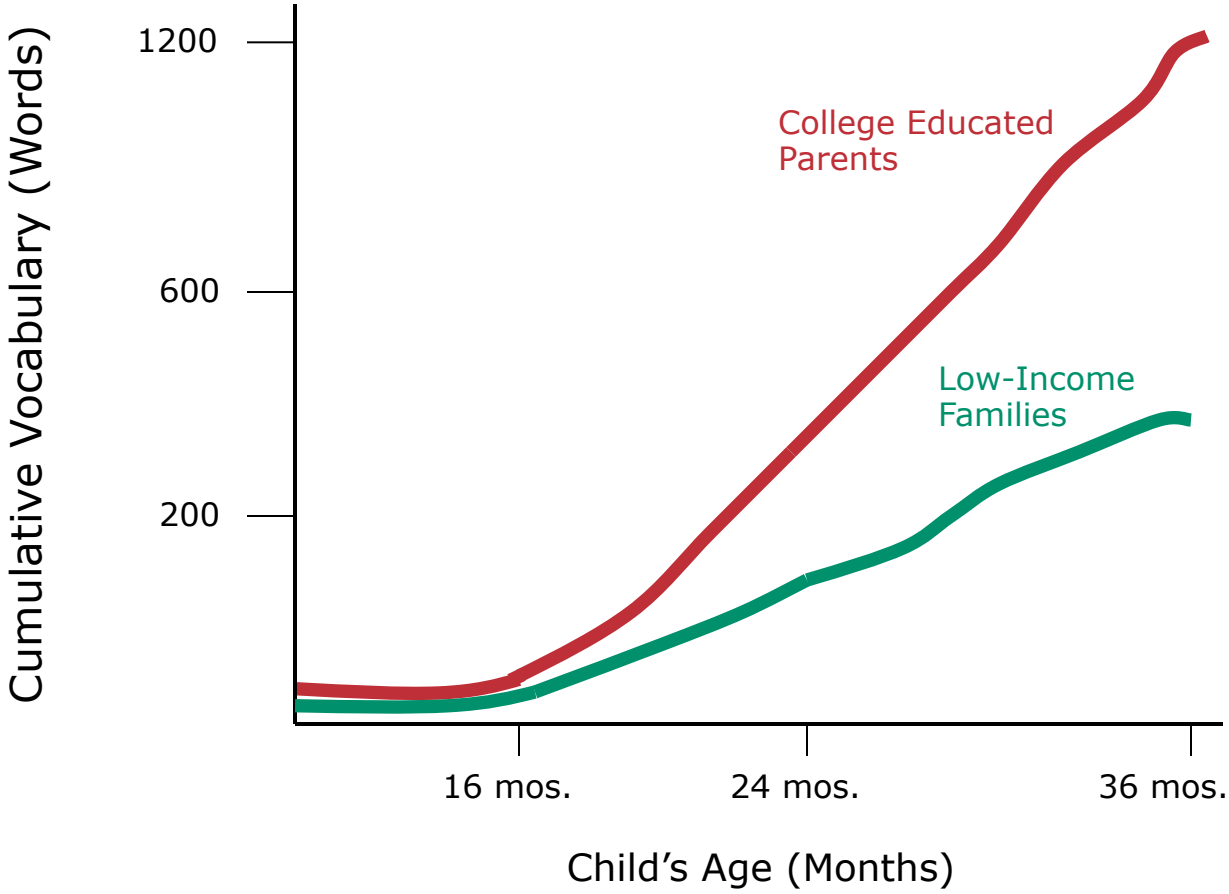
Barriers to Social Mobility Emerge at a Very Young Age



Source: Hart & Risley (1995)

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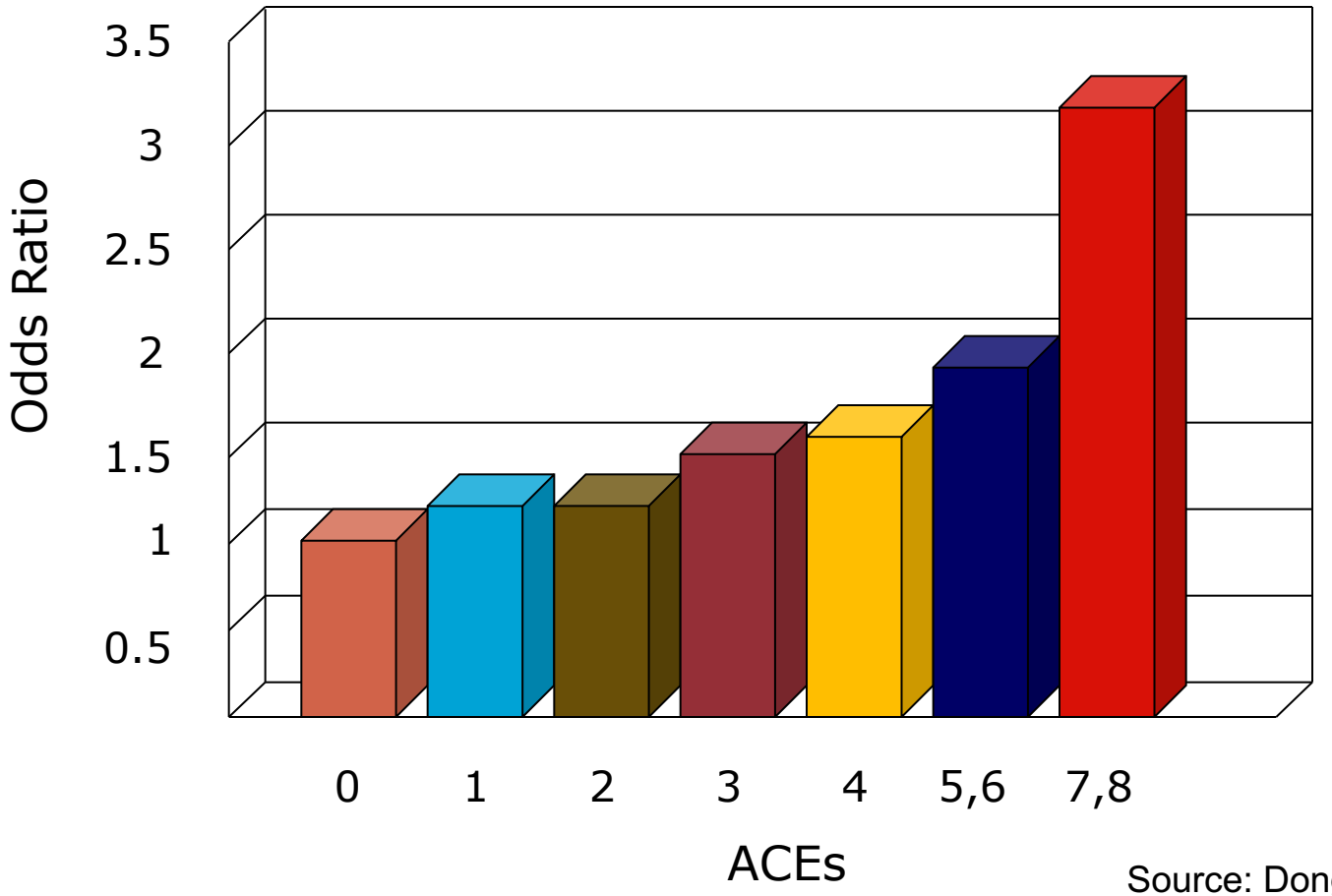
Risk Factors for Adult Heart Disease are Embedded in Adverse Childhood Experiences

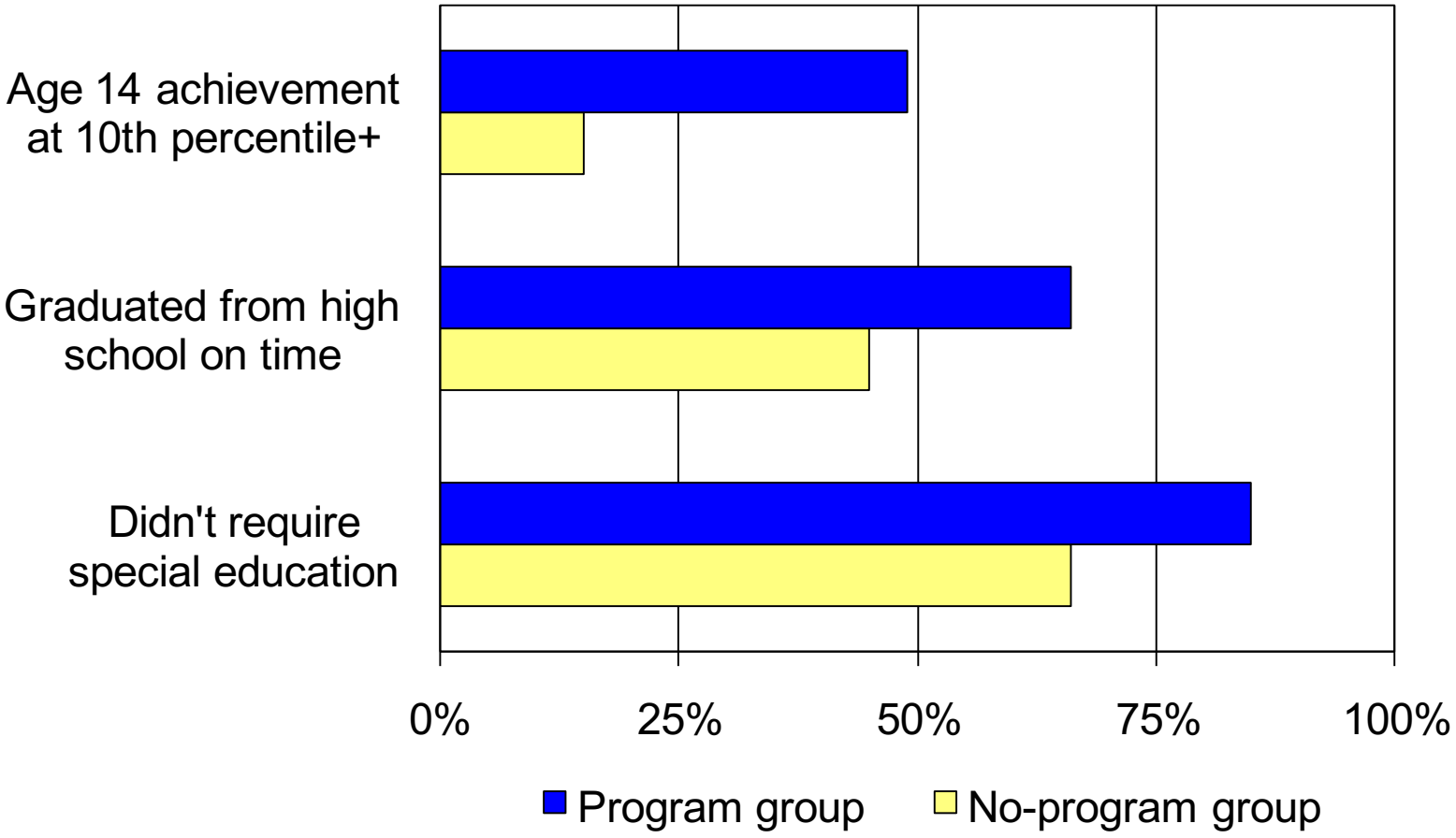


Source: Dong et al, 2004

High/Scope Study of Perry Preschool

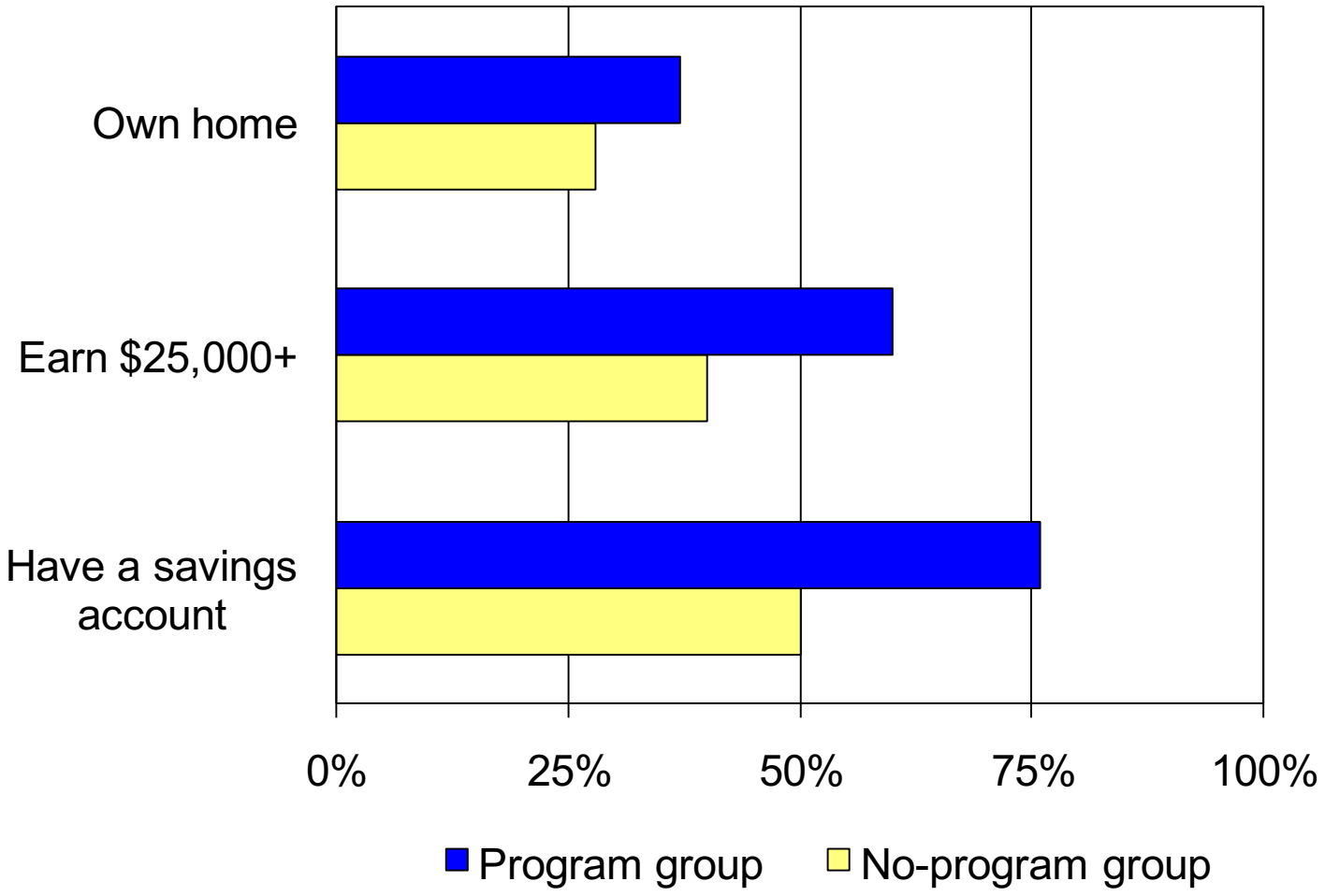
- In early 1960s, 123 children from low-income families in Ypsilanti, Mich.
- Children randomly selected to attend Perry or control group.
- High-quality program with well-trained teachers, daily classroom sessions and weekly home visits.
- Tracked participants and control group through age 40.

Perry: Educational Effects



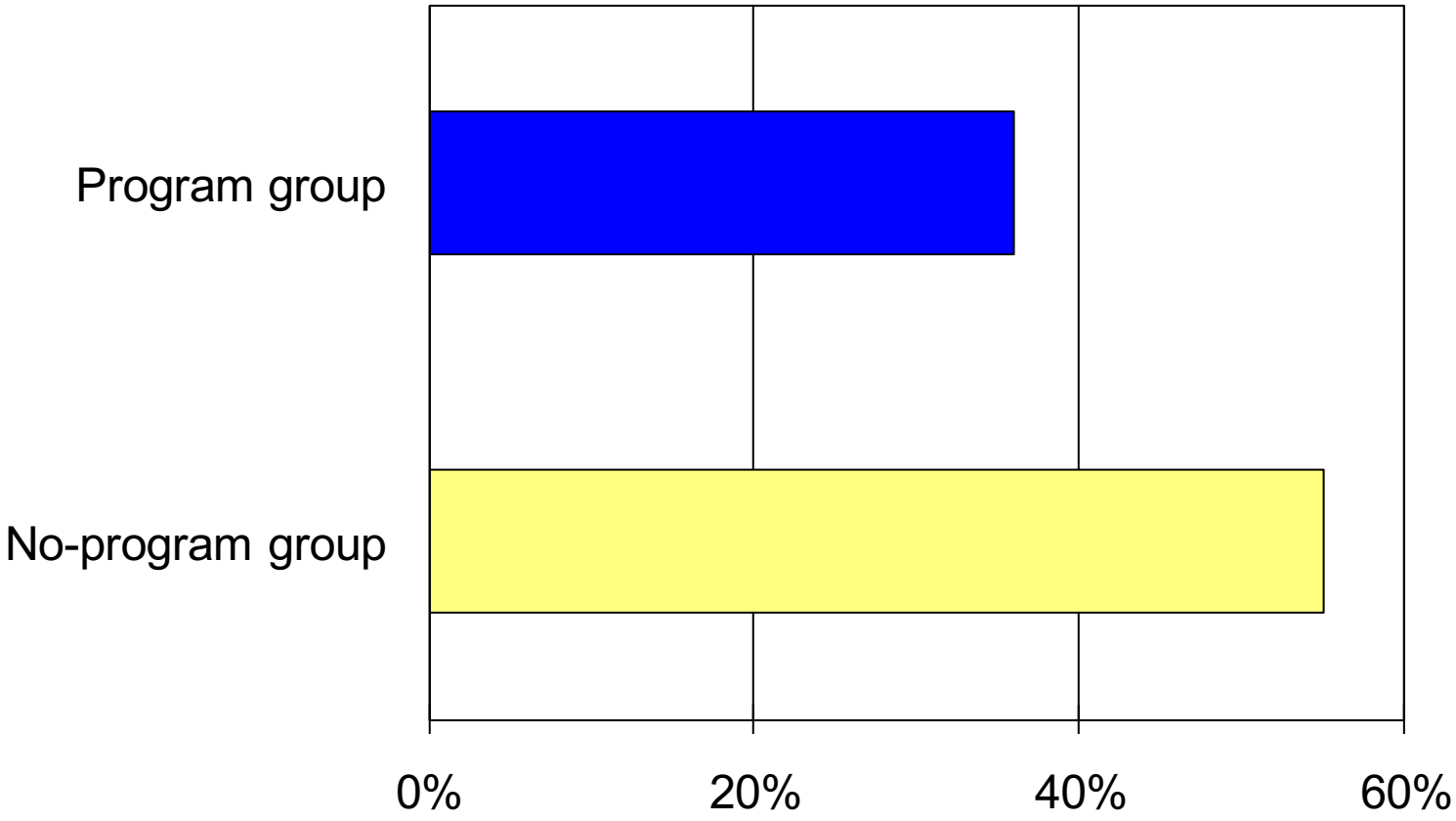
Source: Schweinhart, et al. (2005)

Perry: Economic Effects at Age 40



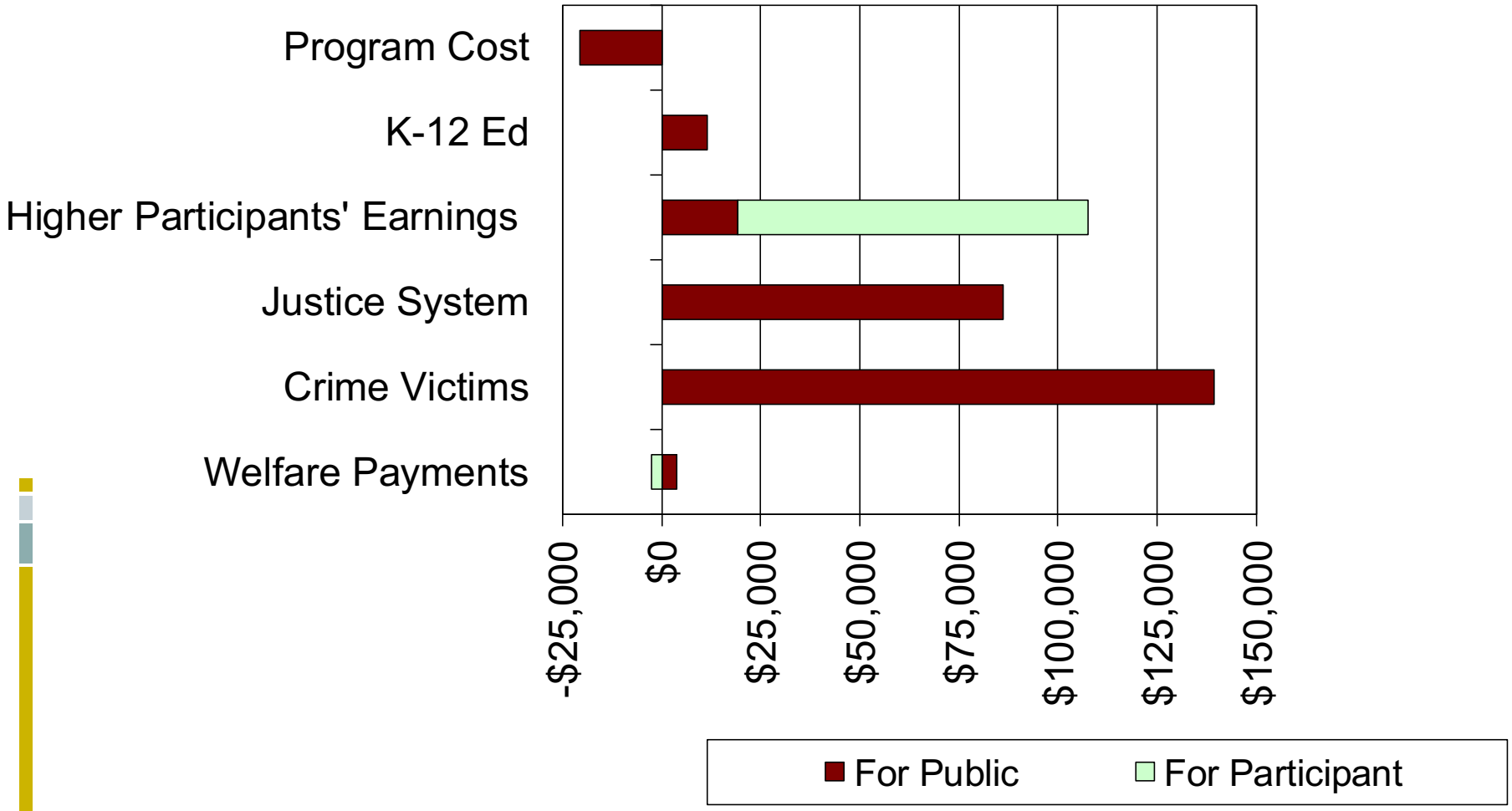
Source: Schweinhart, et al. (2005)

Perry: Arrested 5 or More Times Before Age 40



Source: Schweinhart, et al. (2005)

Perry Preschool
Costs and Benefits Over 62 Years



Source: Schweinhart, et al. (2005)

Benefit-Cost Ratios for Other Longitudinal Studies

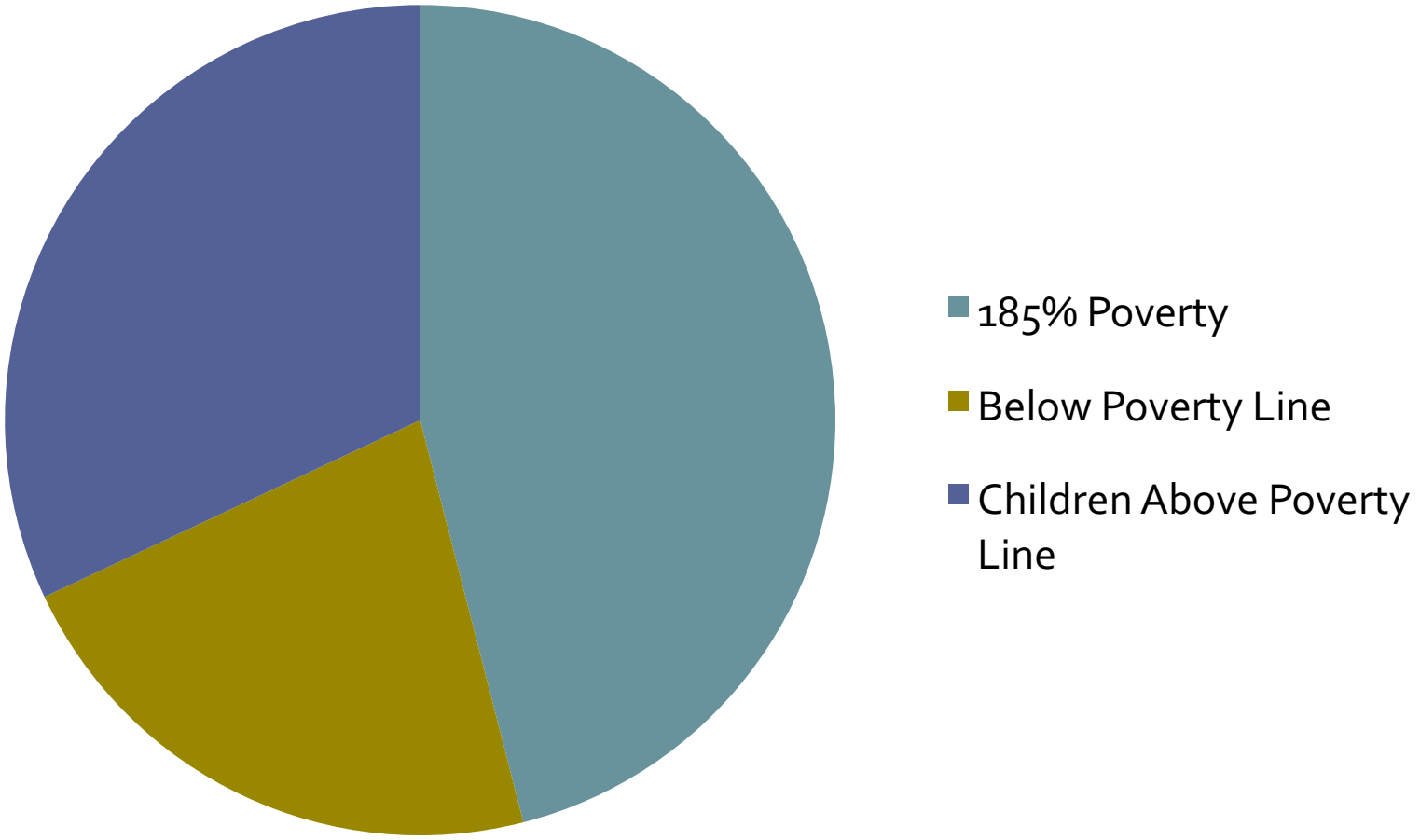
- Perry Preschool
  - $16 to $1
- Abecedarian Educational Child Care
  - $7 to $1
- Chicago-Child Parent
  - $10 to $1
- Elmira Prenatal/Early Infancy Project
  - $5 to $1

Sources: Garcia, Heckman, Leaf, & Prados (2016); Reynolds, Temple, White, Ou, & Robertson (2011); Karoly, et al (1998)

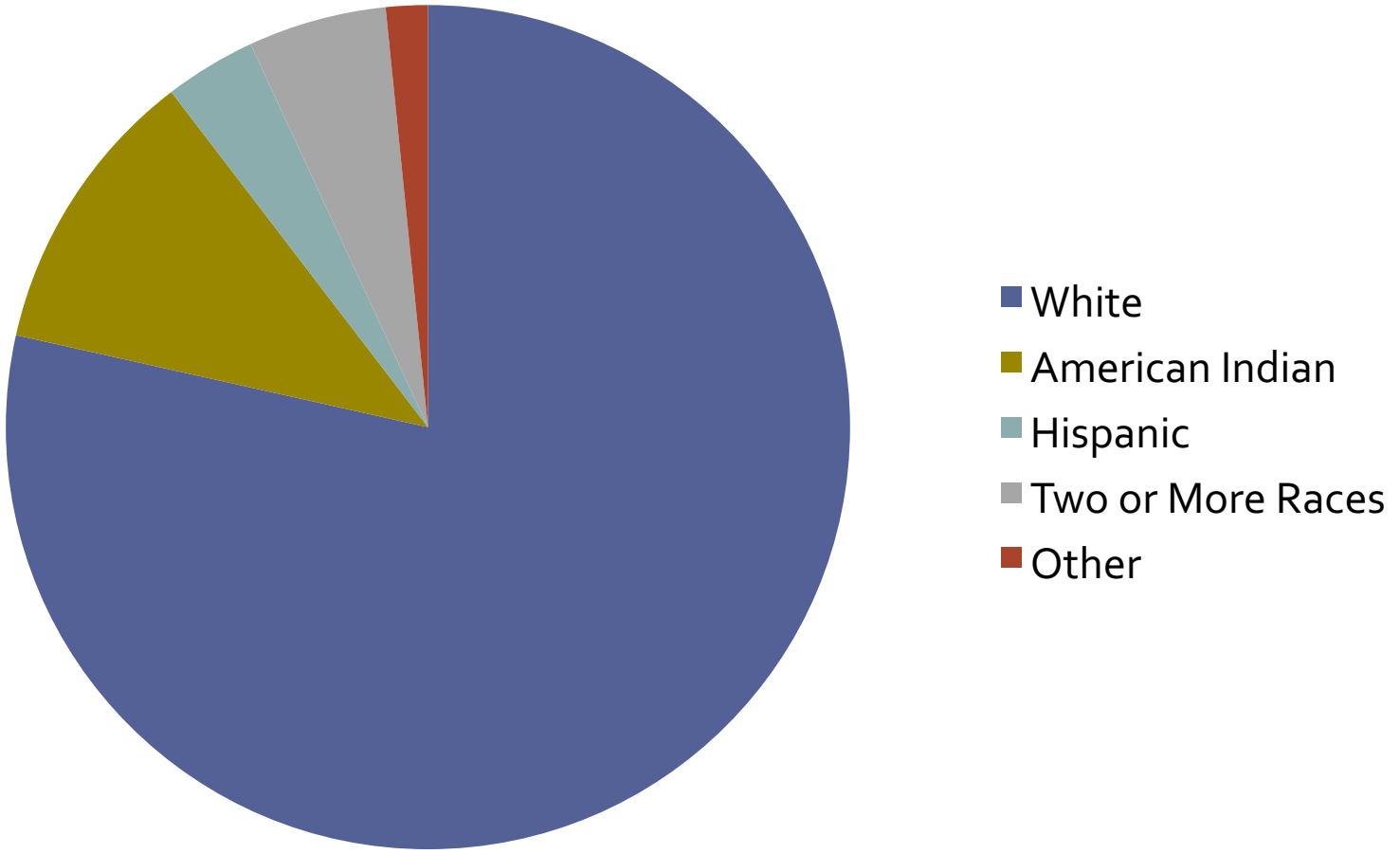
Short-Term Benefits

- Fewer low-weight and pre-term births
- Fewer emergency room visits
- Reduced child abuse and neglect
- Reduced grade retention and special education
- Reduced employee absenteeism and turnover

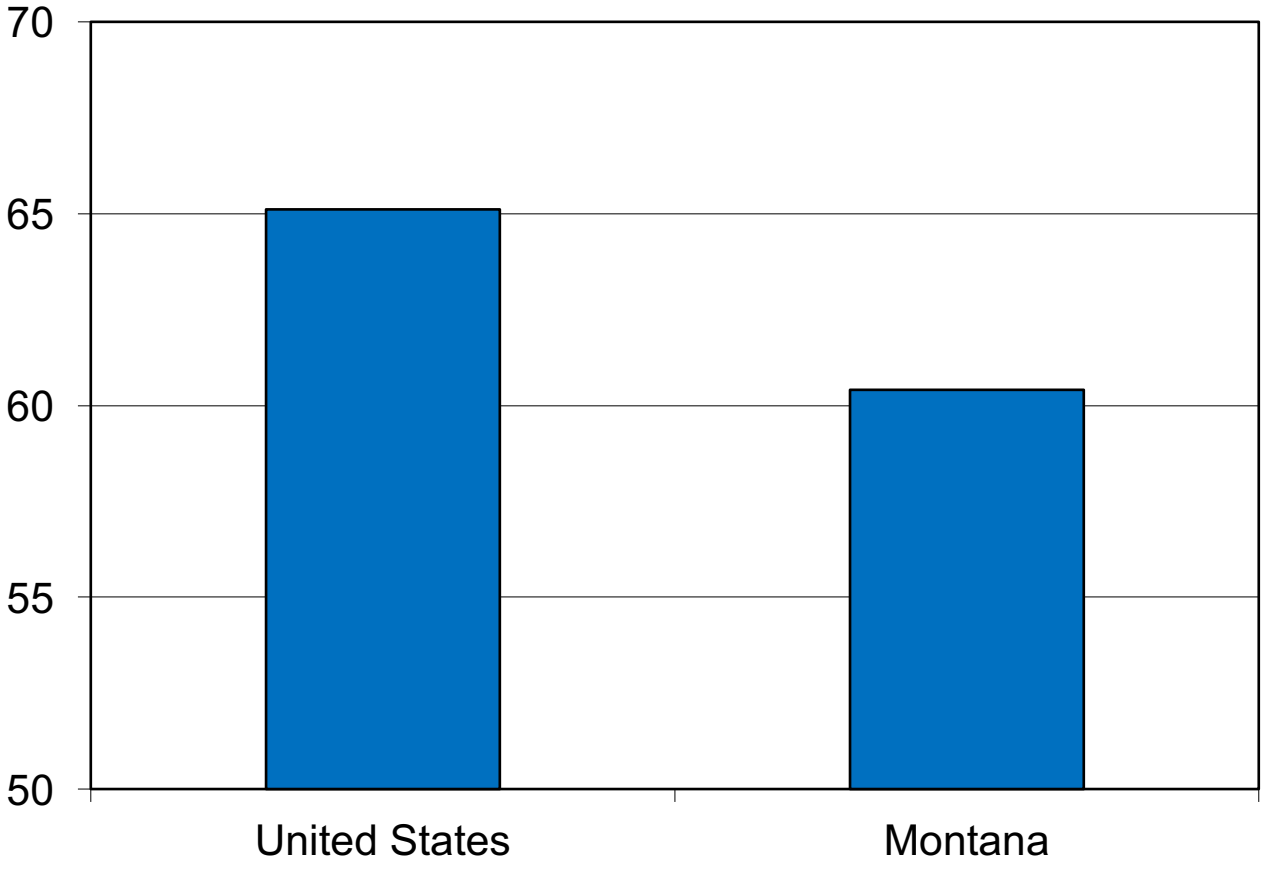
Montana Children Under Age 6 by Poverty Level



Montana Children Under Age 5 by Race/Ethnicity



Percent of Children Under 6 Years Old With All Parents in the Labor Force, 2015



Source: American Community Survey

Lessons Learned from Research

- Invest in quality
- Involve parents
- Start early
- Reach vulnerable children and families
- Bring to scale

Key Investments

- Home visiting
- Early learning programs
- Quality child care
- Parent education
- Child welfare system
- Health care

What Are You Willing To Invest?

- Teach Your Own Children/Grandchildren
- Mentor Other Moms
- Volunteer To Reach Young Children
- Work In Your Current Job
- Become Involved in State-wide Projects

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