

Investment in Early Childhood Development



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Investment in Early Childhood Development

- Cost-benefit studies demonstrate high public return
- Early investments impact economic growth
- Case study: Measuring impact of St. Paul Early Childhood Scholarship Program

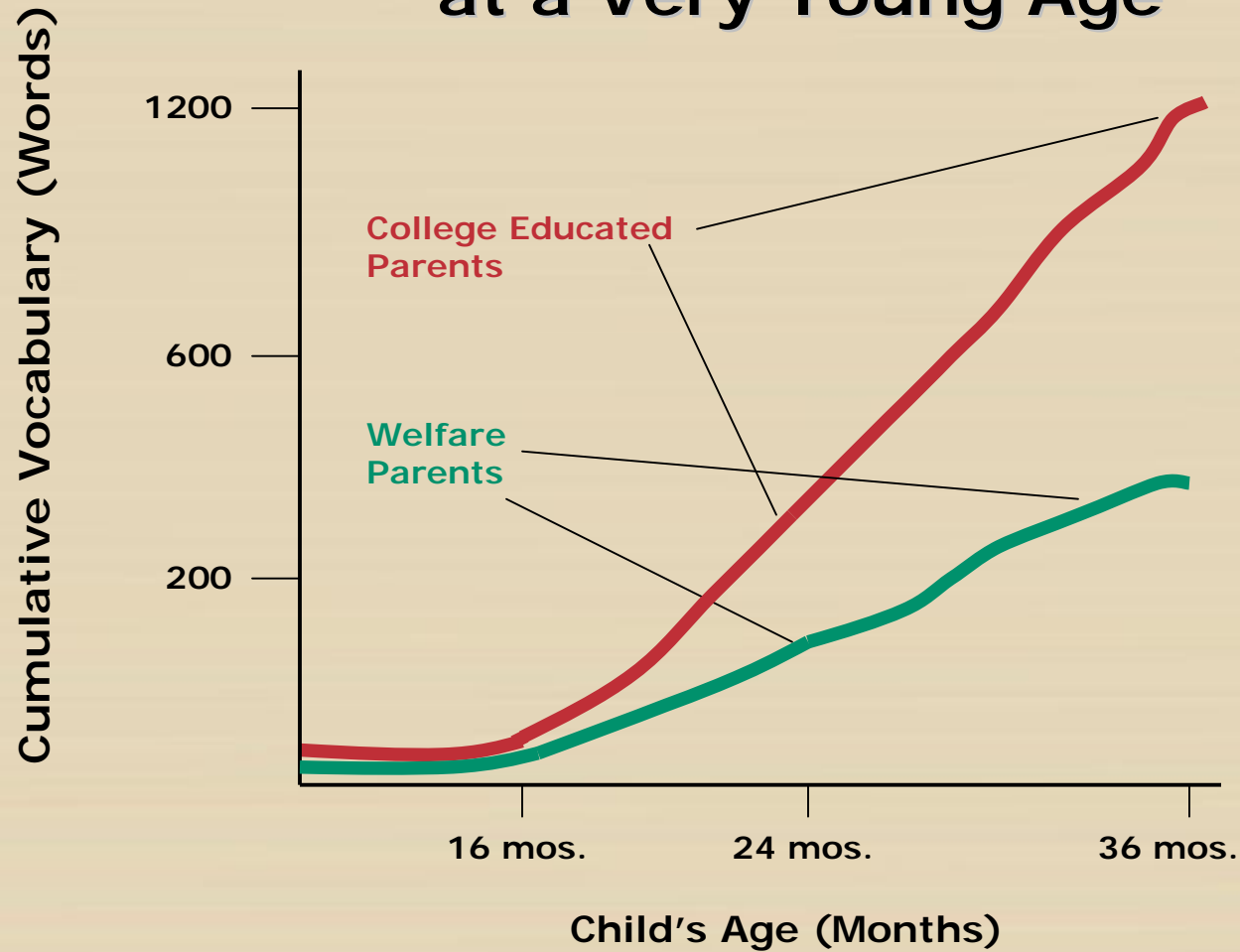


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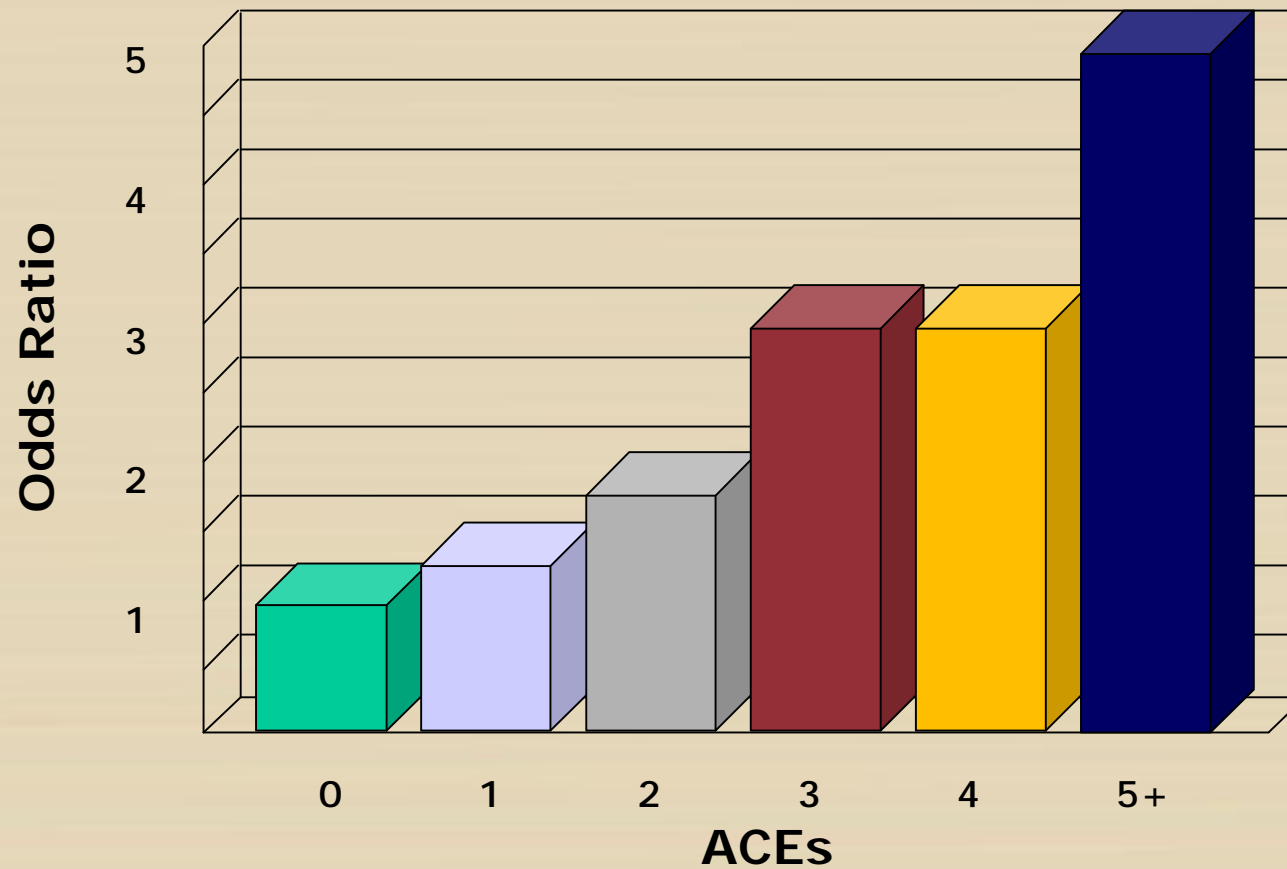
Barriers to Social Mobility Emerge at a Very Young Age



Source: Hart & Risley (1995)



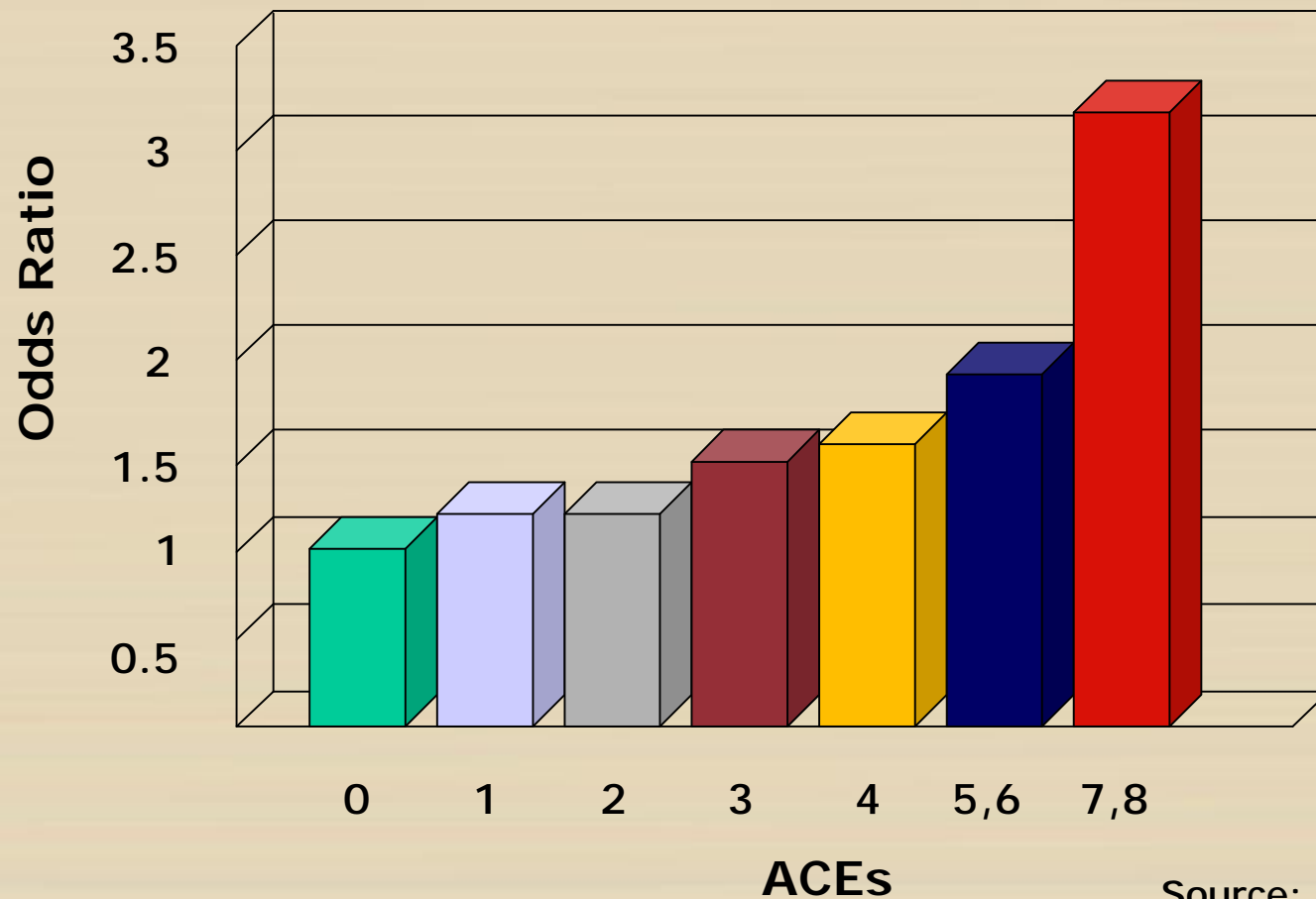
Risk Factors for Adult Depression are Embedded in Adverse Childhood Experiences



Source: Chapman et al, 2004



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



Source: Dong et al, 2004

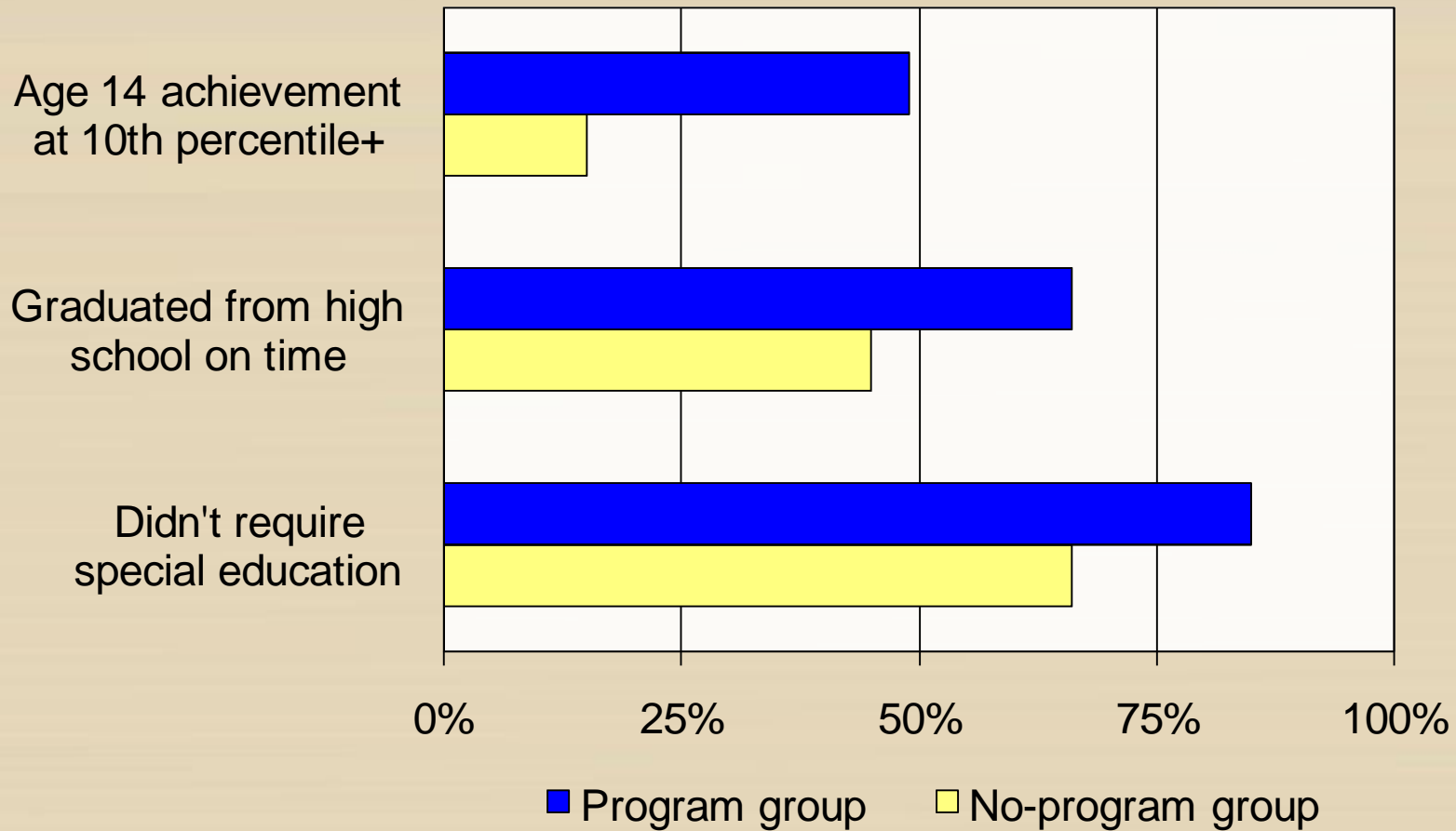


High/Scope Study of Perry Preschool

- 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.



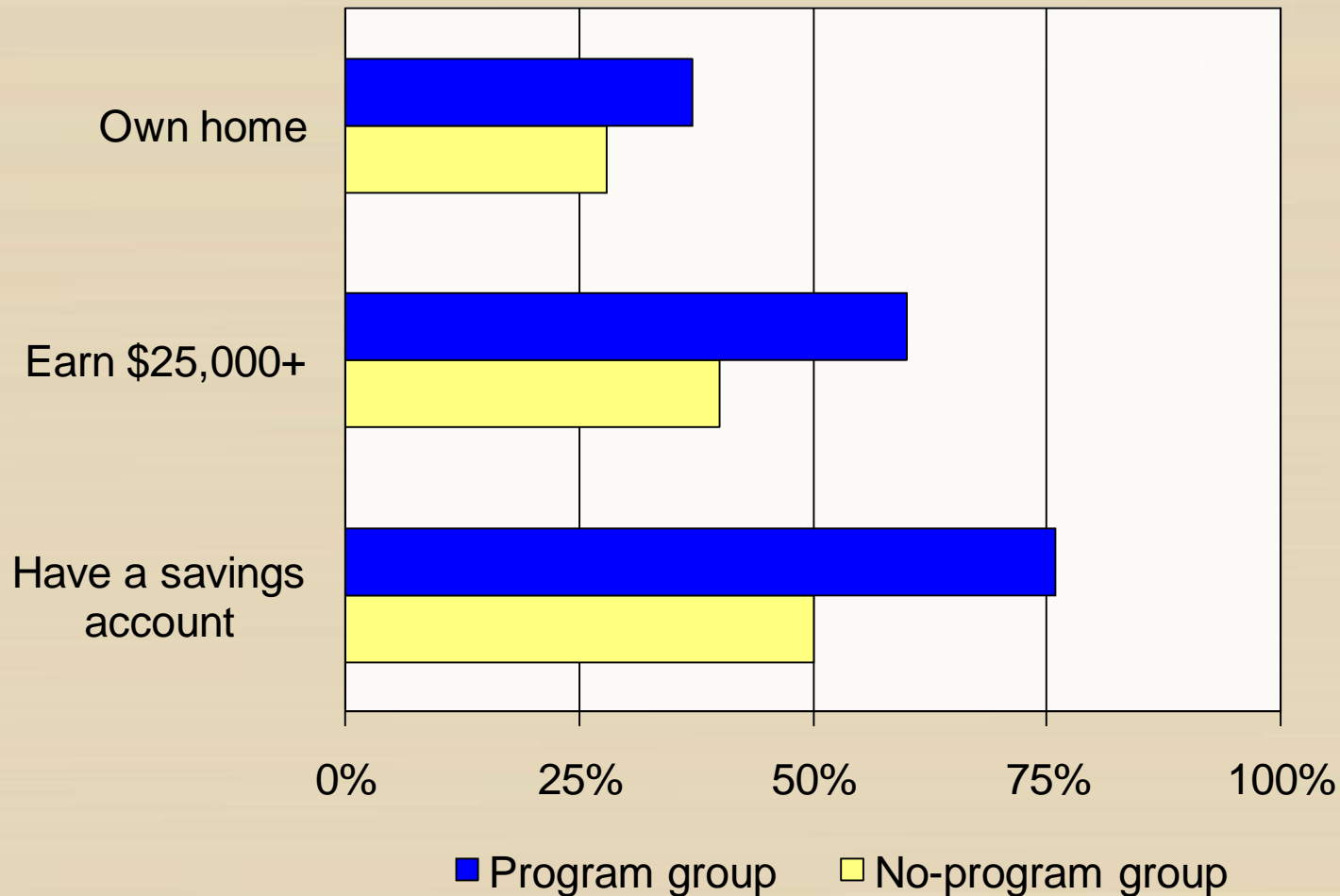
Perry: Educational Effects



Source: Schweinhart, et al (2005)



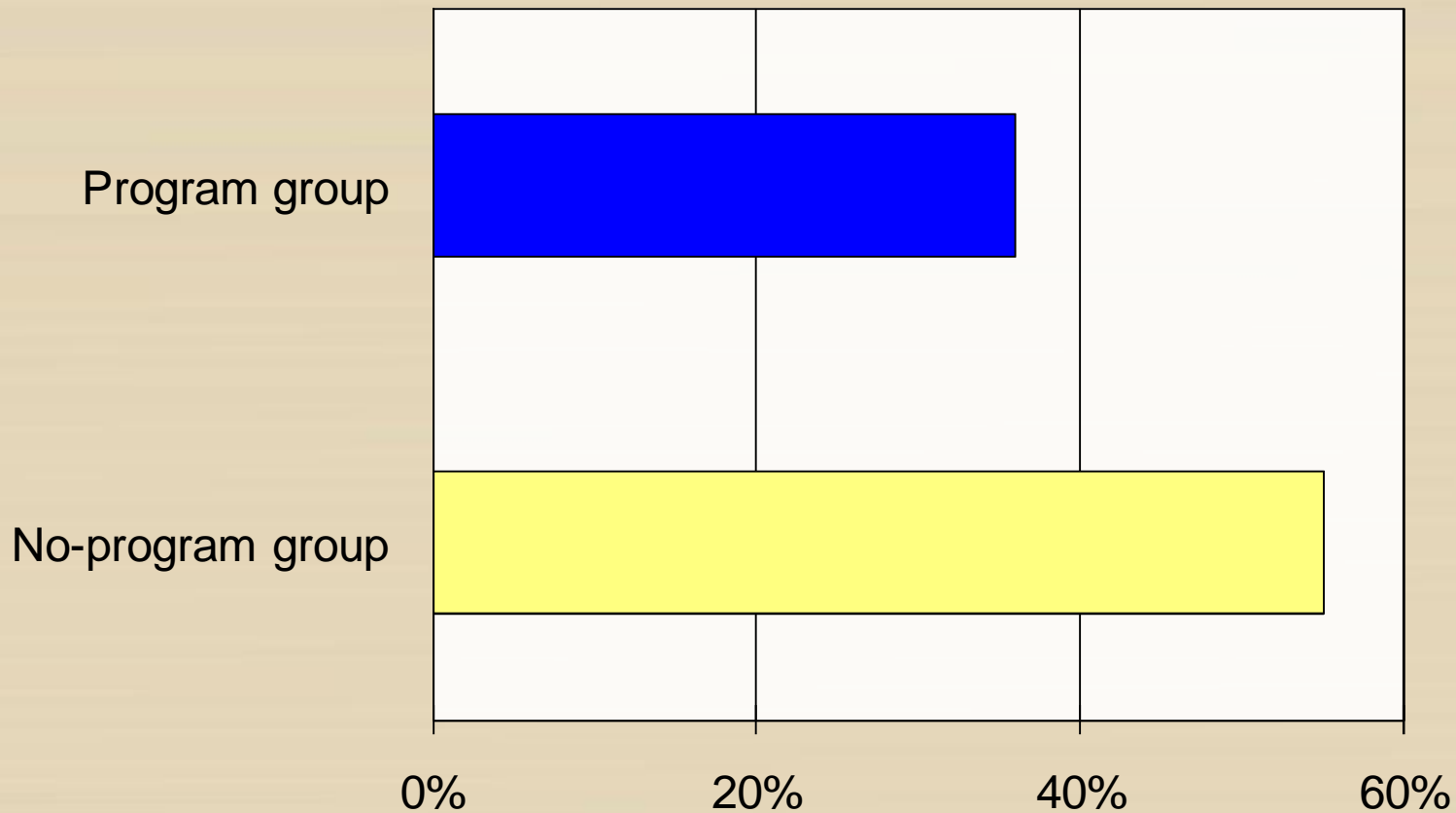
Perry: Economic Effects at Age 40



Source: Schweinhart, et al (2005)



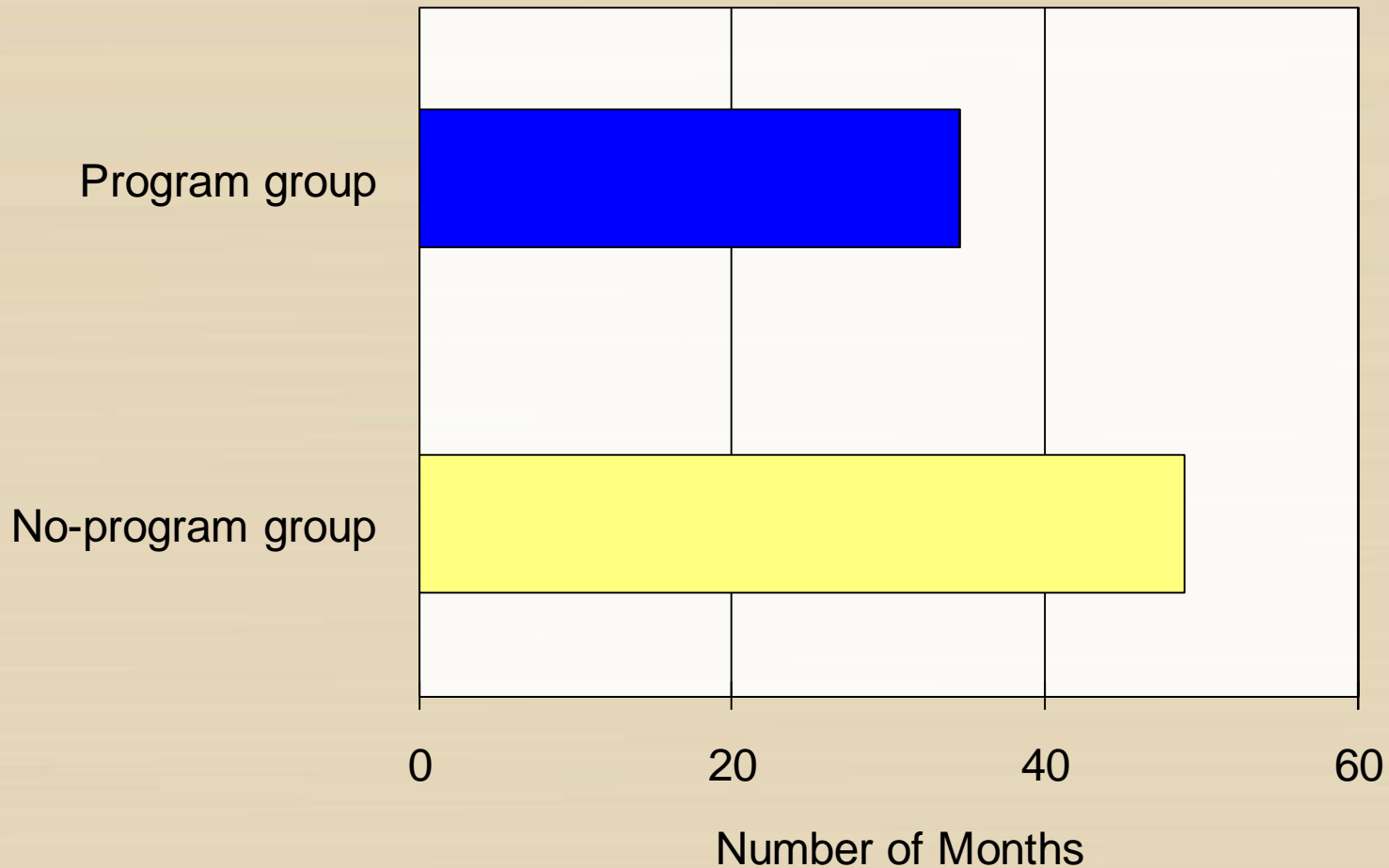
Perry: Arrested 5 or More Times Before Age 40



Source: Schweinhart, et al (2005)

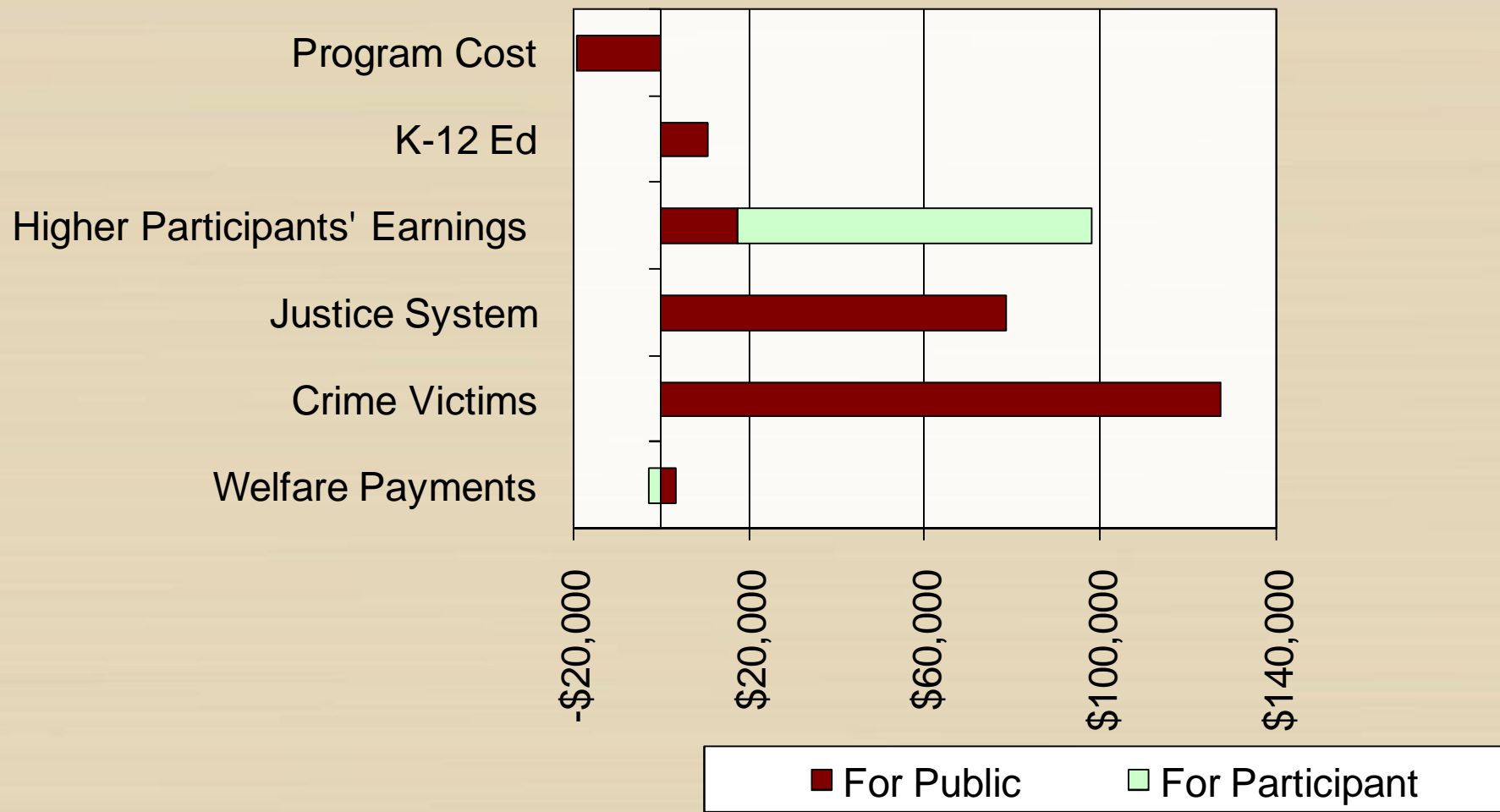


Perry: Average Number of Months Served in Prison by Age 40



Source: Schweinhart, et al (2005)

Perry Preschool Costs and Benefits Over 62 Years



Source: Schweinhart, et al (2005)



Perry Preschool — Estimated Return on Investment

- Benefit-Cost Ratio = \$16 to \$1
- Annual Rate of Return = 18%
- Public Rate of Return = 16%
- Heckman Reanalysis = 10%

Sources: Schweinhart, et al (2005); Author's calculations; Heckman, Moon, Pinto, Savelyez, & Yavitz (2010)

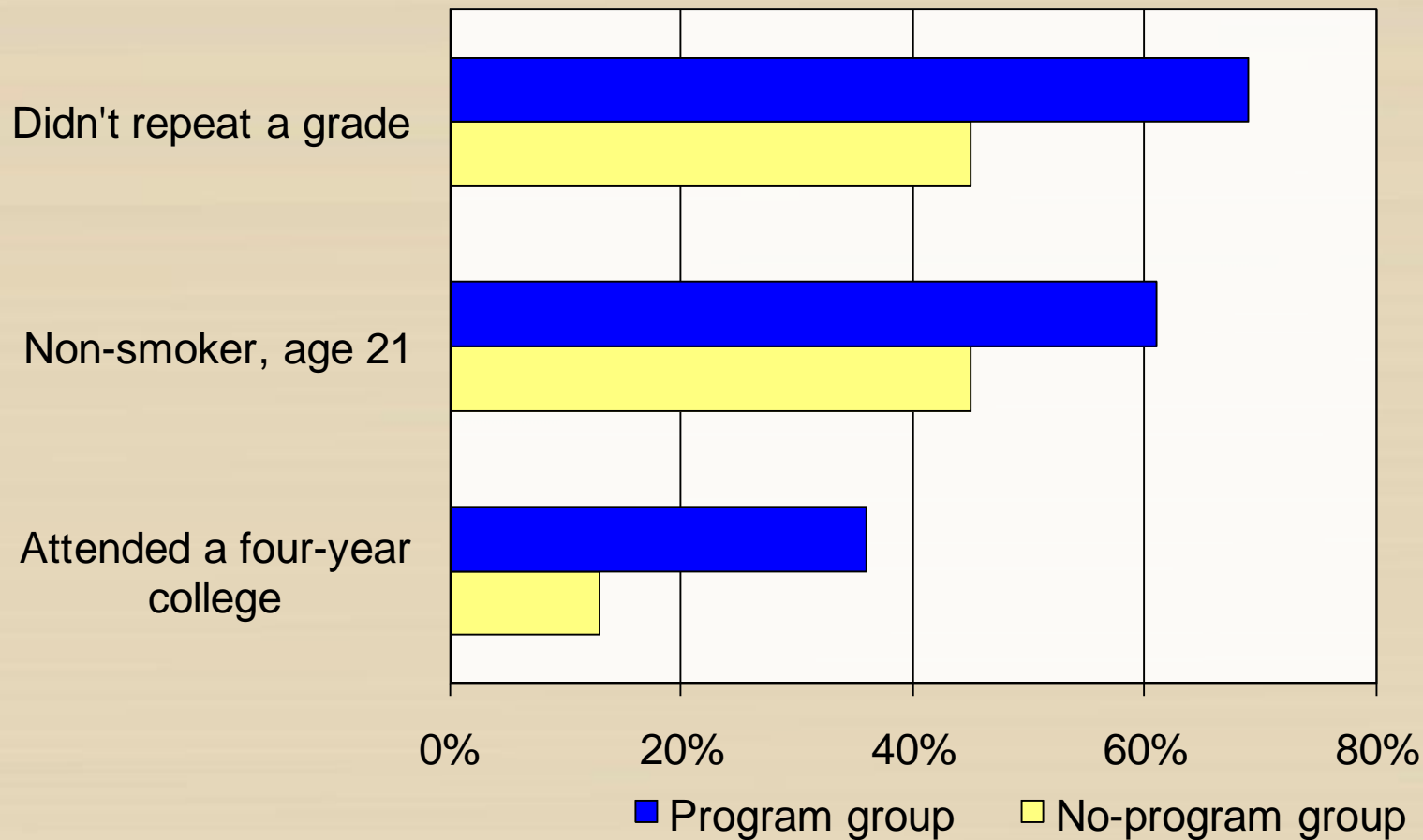


Abecedarian, Educational Child Care

Full-day, year-round program near Chapel Hill, N.C. Children from low-income families were randomly selected to attend Abecedarian or control group.



Abecedarian: Educational and Health Effects



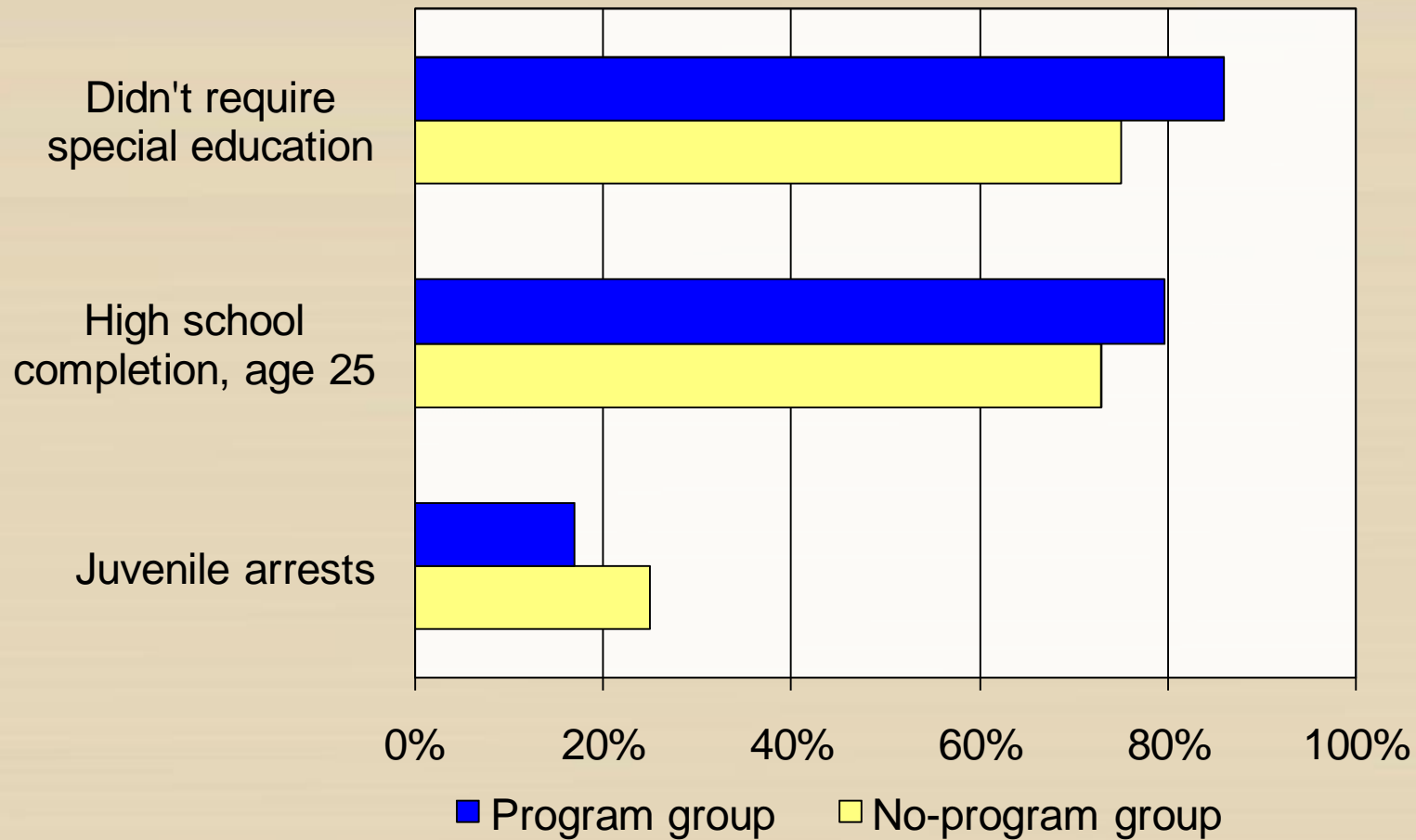
Source: Masse & Barnett (2002)



Chicago Child-Parent Centers

Half-day, large-scale program in Chicago public schools. Comparison group was a sample of eligible nonparticipants.

Chicago Child-Parent Centers



Source: Reynolds, Temple, White, Ou, & Robertson (2011)

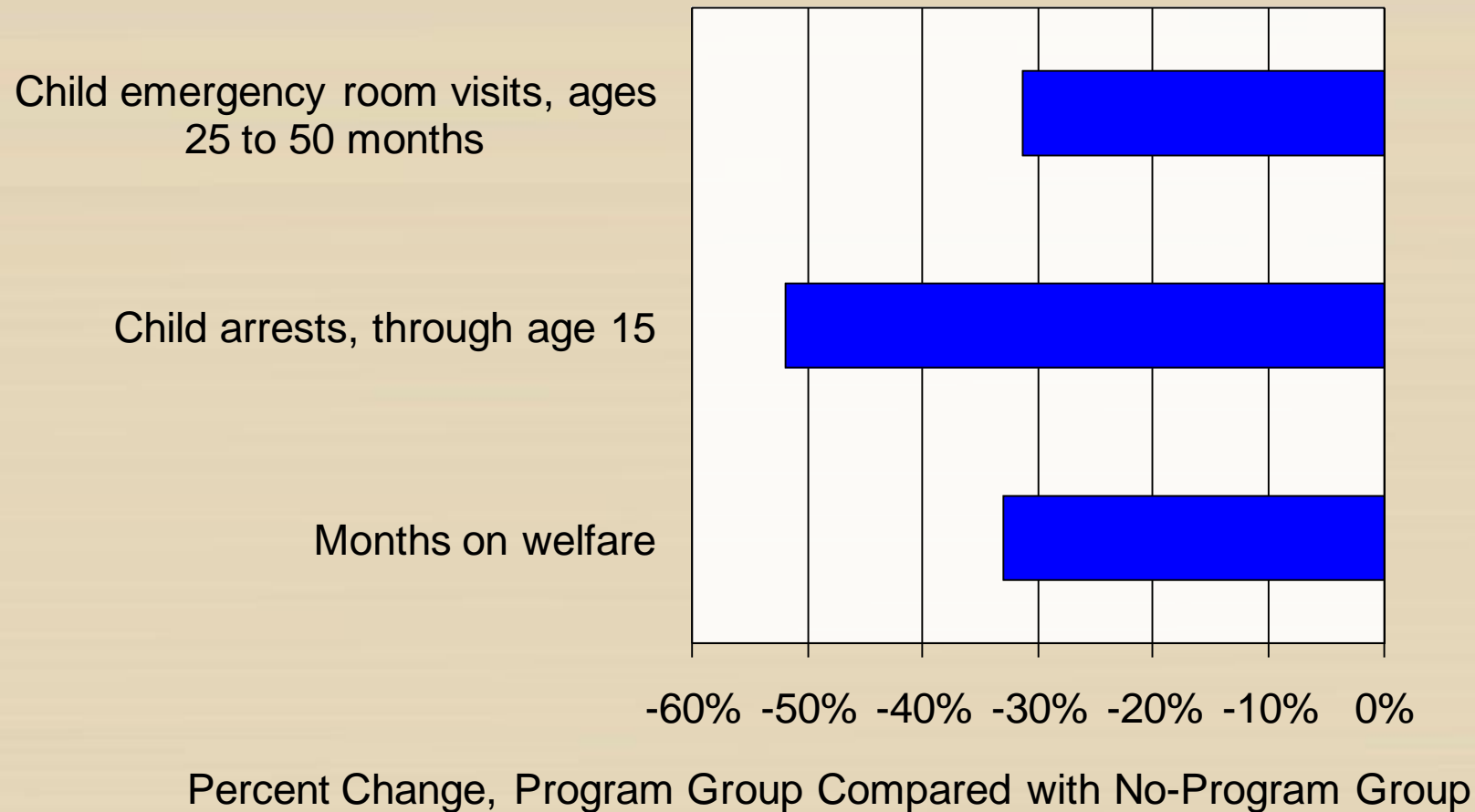


Elmira Prenatal/Early Infancy Project Higher-Risk Families

Home visiting program by registered nurses for at-risk mothers, prenatal through first two years of child's life. Randomly selected participants were compared with a control group.



Elmira Prenatal/Early Infancy Project High-Risk Families



Source: David Olds, et al (1997)



Benefit-Cost Ratios for Other Longitudinal Studies

- Abecedarian Educational Child Care
 - \$4 to \$1
- Chicago-Child Parent
 - \$10 to \$1
- Elmira Prenatal/Early Infancy Project
 - \$5 to \$1

Sources: Masse & Barnett (2002); Reynolds, Temple, White, Ou, & Robertson (2011); Karoly, et al (1998)

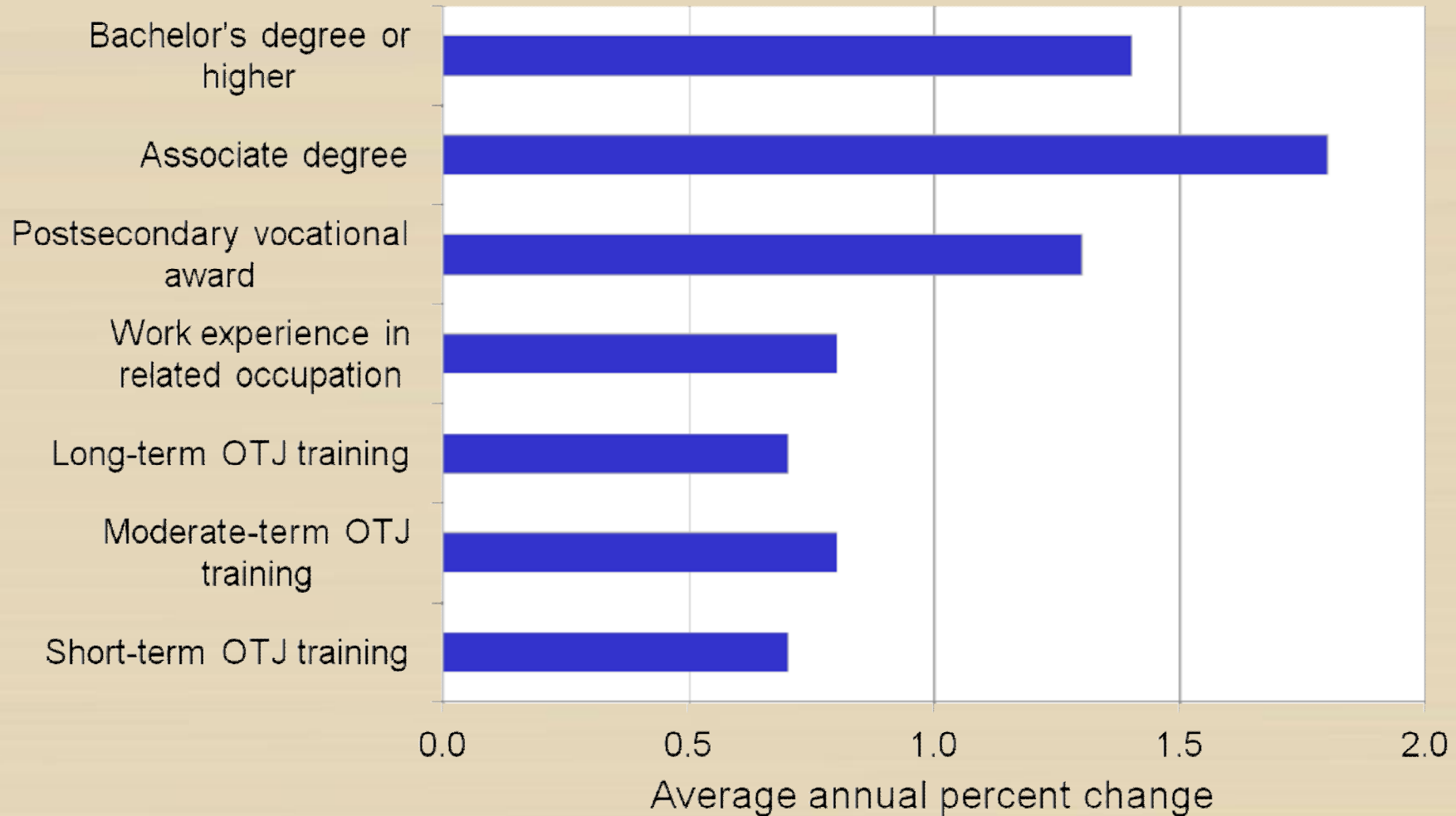


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Investing in Human Capital Pays Off

Occupation Growth by Primary Source of Education and Training, 2008 to 2018

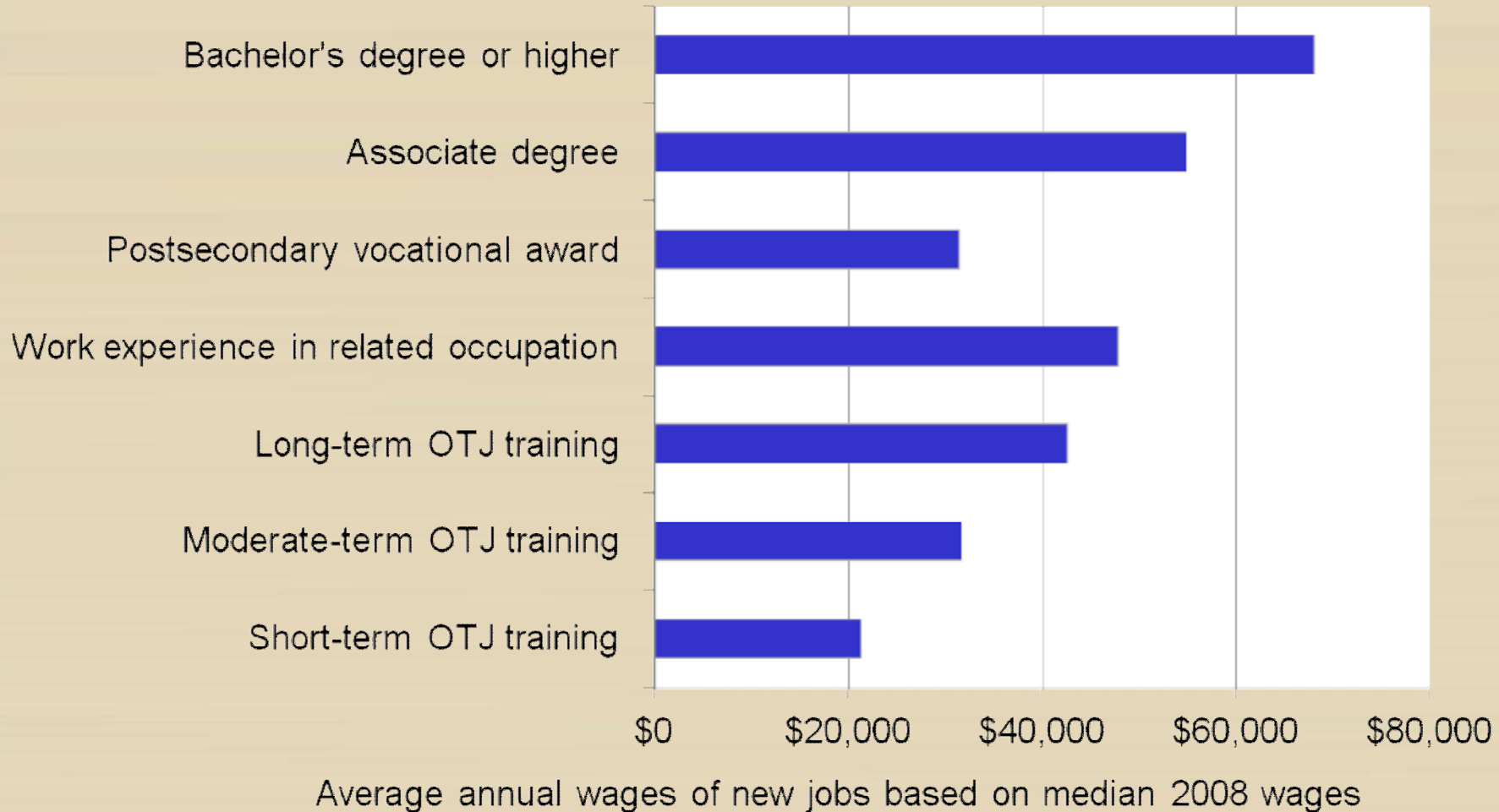


Source: U.S. Bureau of Labor Statistics, Employment Projections Program



Investing in Human Capital Pays Off

Average Annual Wages of New Jobs by Primary Source of Education and Training, 2008 to 2018



Source: U.S. Bureau of Labor Statistics, Employment Projections Program

Estimated Present Value of Adult Earnings

(Discount 3%)



Preventing a low birth weight birth	\$60,261
1 s.d. gain in early reading and math skills	\$26,587
1 s.d. gain in attention skills at age 5	\$3,323
1 s.d. gain in home environment	\$7,976

Sources: Brooks-Gunn, Magnuson, & Waldfogel (2009)



Economic Development Benefits

- Businesses attract parent employees and keep absenteeism relatively low
- Increase local income and jobs
 - Bartik: Ratio of present value benefits to costs range from \$1.85 to \$5.66
- Indirect and induced output and employment effects
 - Warner: Child care has higher multipliers than many other industries

Sources: Shellenback (2004), Bartik (2011), Warner (2009)



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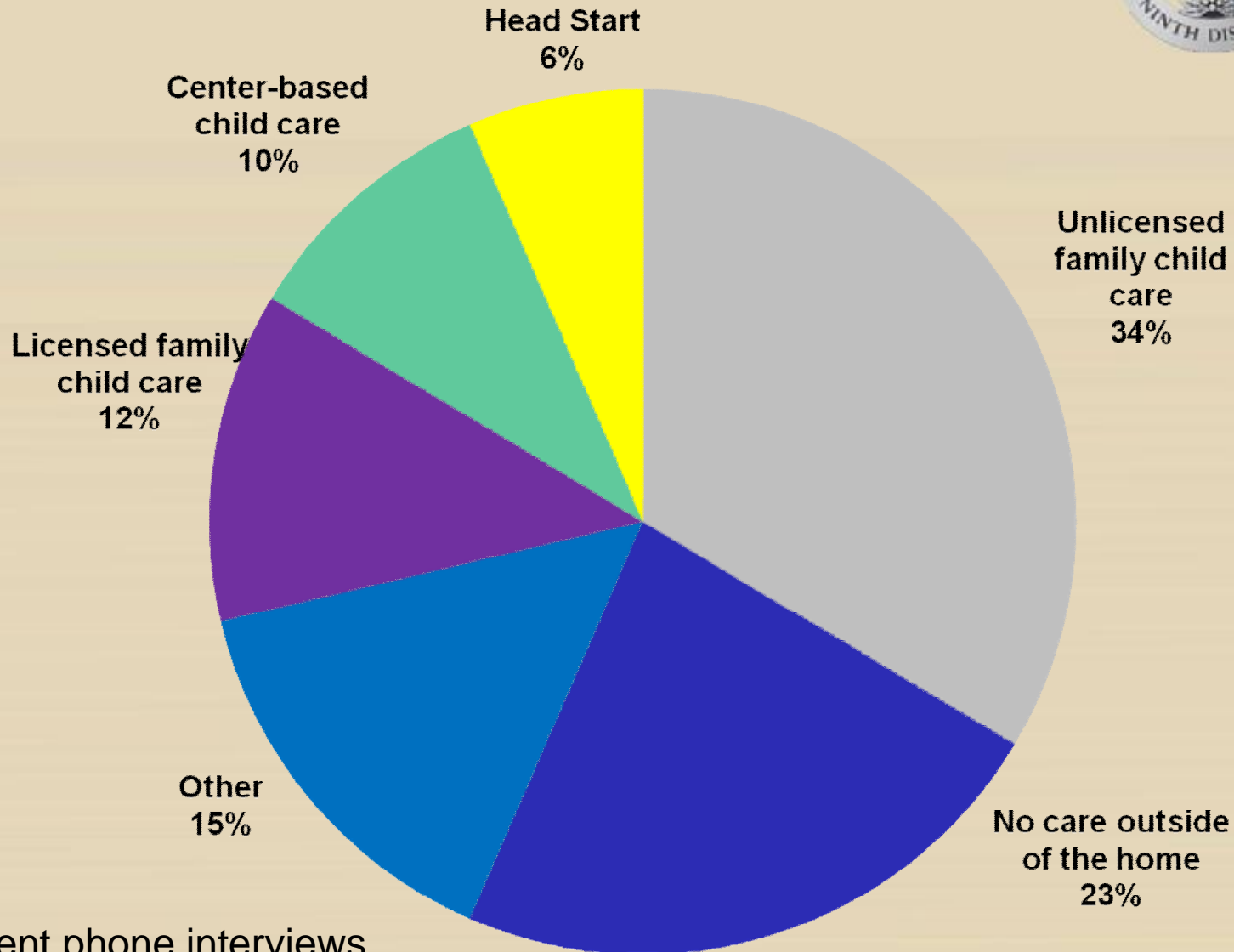
Goals of St. Paul Early Childhood Scholarship Program

- School readiness
- Parent engagement
- More high-quality openings at ECE programs

Funded by Minnesota Early Learning Foundation

Evaluated by SRI International

Parents' report of child's care prior to Scholarship Program enrollment

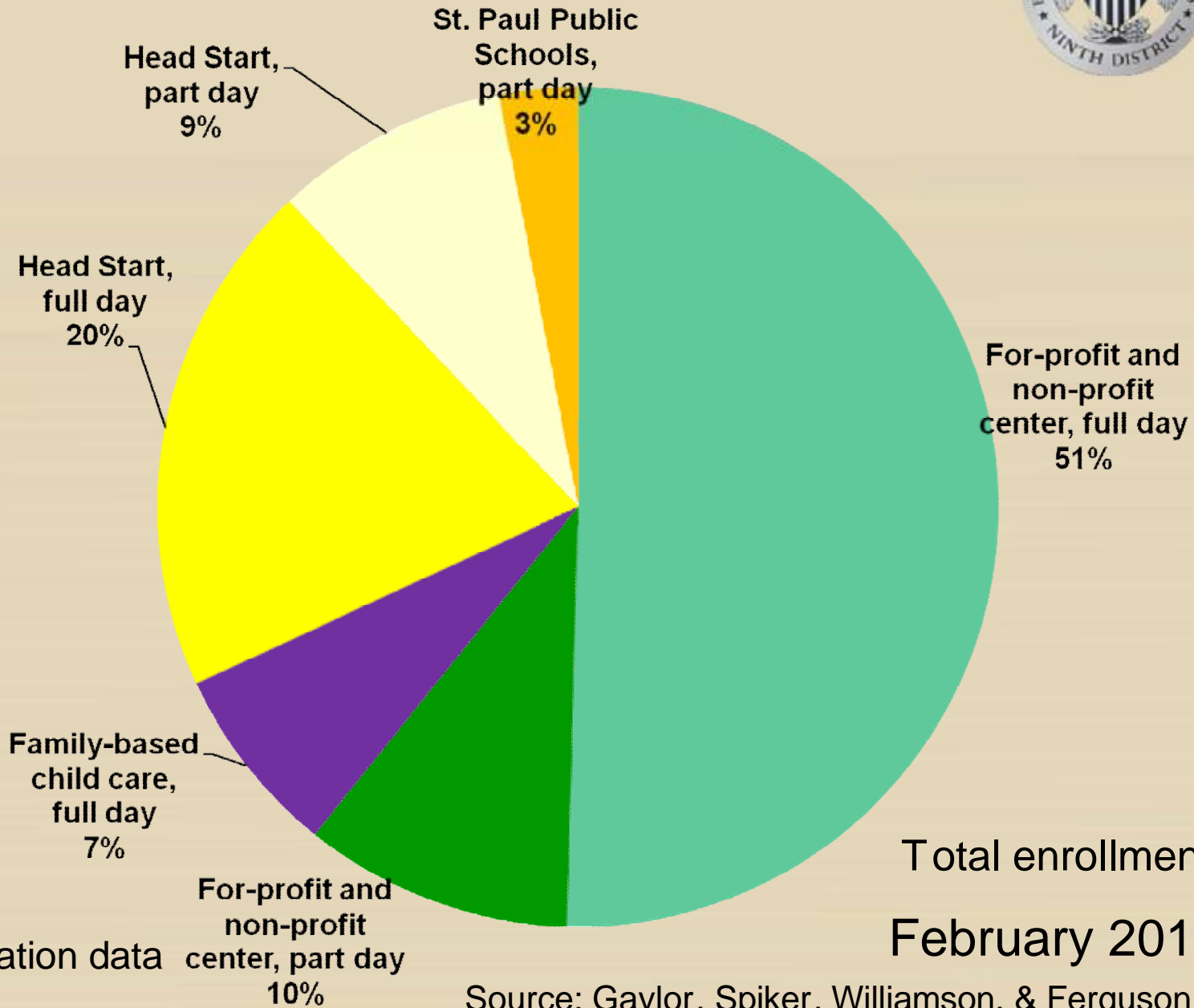


SRI parent phone interviews
(n=122)

December 2010

Source: Gaylor, Spiker, Williamson, & Ferguson. (2011)

Children enrolled in a variety of ECE programs



Administration data

Total enrollment: 232
February 2010

Source: Gaylor, Spiker, Williamson, & Ferguson. (2011)



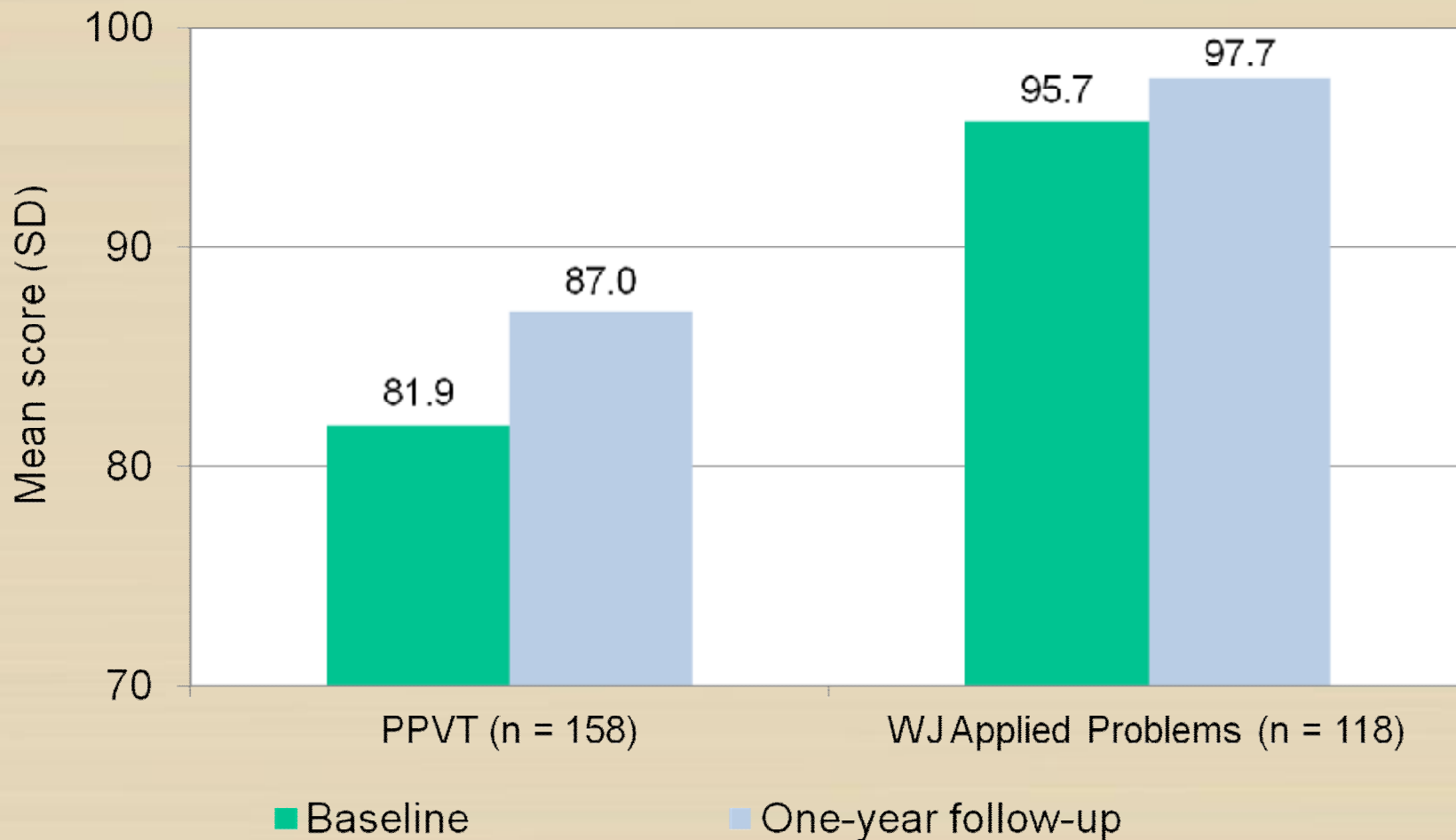
Positive comments from parent interviews

- Program considered user friendly
- Involved with ECE program and child's teacher
- Participation provided school and work opportunities
- Positive opinions about parent mentors

Source: Gaylor, Spiker, Williamson, & Ferguson. (2011)



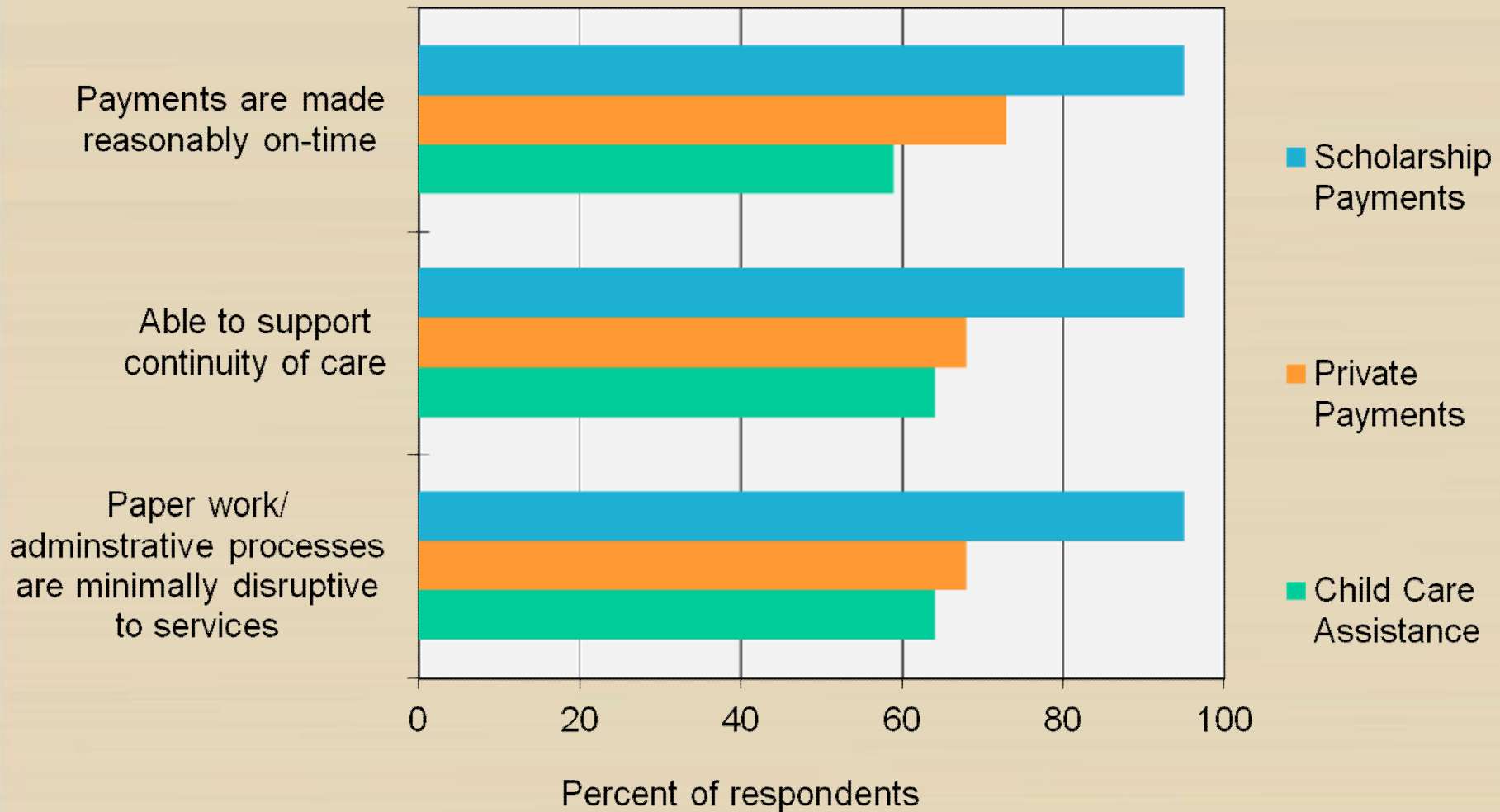
Children made gains in test scores for language and early math skills



Source: Gaylor, Spiker, Williamson, & Ferguson. (2011)



Programs reported benefits of scholarship funds



Source: Gaylor, Spiker, Williamson, & Ferguson. (2011)



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