
Qualitative/Quantitative Synergies in Random-Assignment Program Evaluations

**Christina M. Gibson
Duke University**

**Greg J. Duncan
Northwestern University and Russell Sage
Foundation**

**in Thomas S. Weisner (ed.) *Discovering Successful
Pathways In Children's Development: New Methods In
The Study Of Childhood And Family Life*, Chicago:
University of Chicago Press**

Two interventions

My focus:

- **New Hope**
 - Family-based work support intervention

Same approach taken in:

- **Moving to Opportunity**
 - Family-based residential mobility intervention
-

Overview of talk

Experimental evaluations can be enhanced when they include both quantitative and qualitative elements

- **Key design features**
 - **Mixed methods help understand program effects**
 - **Mixed methods can benefits future work**
 - **Limits of mixed methods**
-

The New Hope project

- **A community-initiated anti-poverty program operating in two poor neighborhood areas in Milwaukee**
 - **Randomized design**
 - **Enrolled 1,367 people between August of 1994 and December of 1995**
-

The New Hope “treatment”

Work 30 hours per week and New Hope provides:

- **a wage supplement**
 - **health insurance**
 - **childcare subsidy job access (a community service job if needed)**
 - **supportive case workers**
-

Larger policy context

- **Shift focus of welfare reform evaluations from mothers' work & dependence to child and family well-being**
 - **Is New Hope a model for the next stage of support for low-income families?**
-

Child and family impact evaluation team

- ***MDRC:*** Hans Bos, Robert Granger
 - ***Northwestern University:*** Greg Duncan, Christina Gibson, Eboni Howard, Katherine Magnuson, Jennifer Romich
 - ***University of Texas-Austin:*** Aletha Huston, Rashmita Mistry, Danielle Crosby
 - ***UNC Chapel Hill:*** Vonnie McLoyd
 - ***UCLA:*** Tom Weisner, Cindy Bernheimer

 - Product of the MacArthur Foundation's Network on Successful Pathways Through Middle Childhood, Jacque Eccles, Chair; major support from NICHD
-

Quantitative component of evaluation

- Baseline survey
- Child and Family survey (CFS) (N=578) at 24, 60 and 96 months
- Teacher surveys (N=418) at 24, 60 and 96 months
- Woodcock-Johnson test at 60 and 96 months
- Management Information System (MIS) on program take-up
- Earnings reported by employers to the Social Security Administration

Child and family impact papers for 24 and 60 months
in *Child Development* and (we hope) *Developmental Psychology*

Qualitative component

Involved 45 *randomly-selected* experimental and control families

Six visits per year between years 2 and 4, with a single follow-up in year 8

- Semi-structured “conversation” covering pre-defined topics
 - Measure theoretically interesting concepts – e.g., sustainability of family routines
-

Key design lessons

- **Randomly sample qualitative cases**
 - Led to an understanding of unanticipated yet key circumstances (use of the EITC; Romich and Weisner, forthcoming)
 - Provides insurance against false assumptions by providing a representation of cases
 - **Use same individuals to gather both kinds of data**
 - Able to reconcile findings of two methods
 - Enhances knowledge base of other researchers
-

Better understand program effects

Qualitative data can provide insight for quantitative program findings

- New Hope's impacts on achievement and behavior of boys vs. girls

Example: scores on the academic subscale of the teacher-reported Social Skills Rating System

Figure 1: Impacts on levels of children's achievement

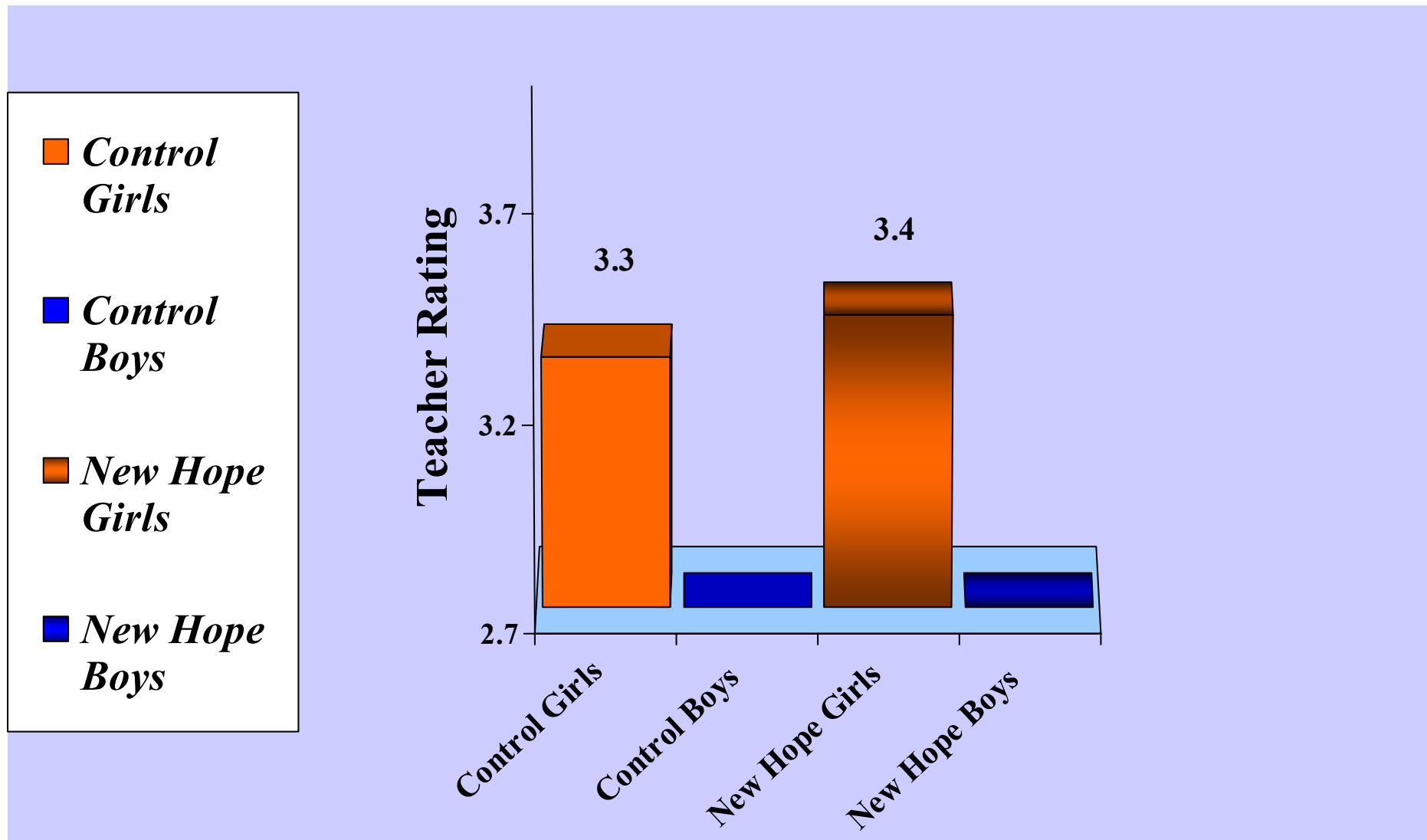


Figure 1: Impacts on levels of children's achievement

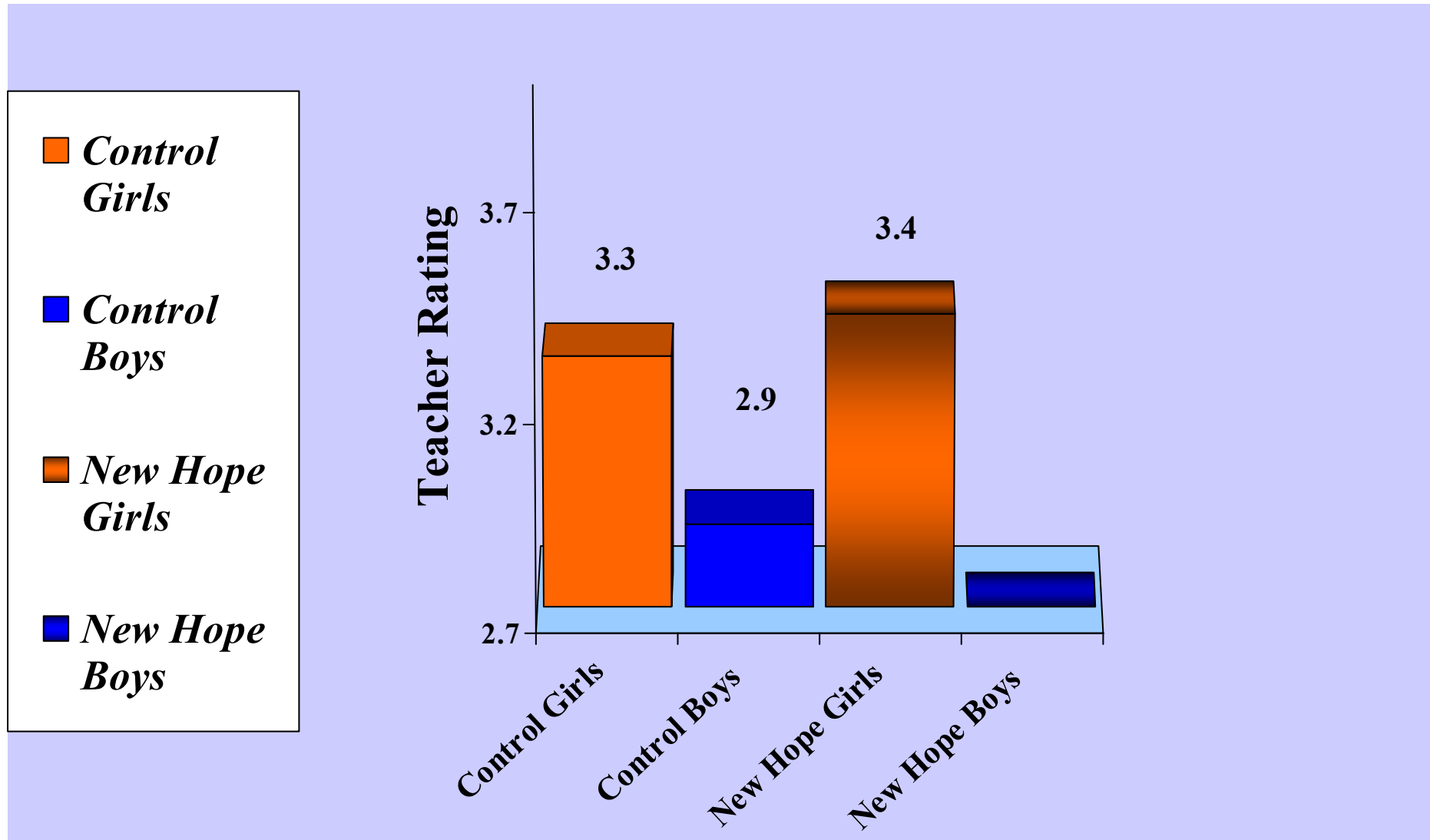


Figure 1: Impacts on levels of children's achievement

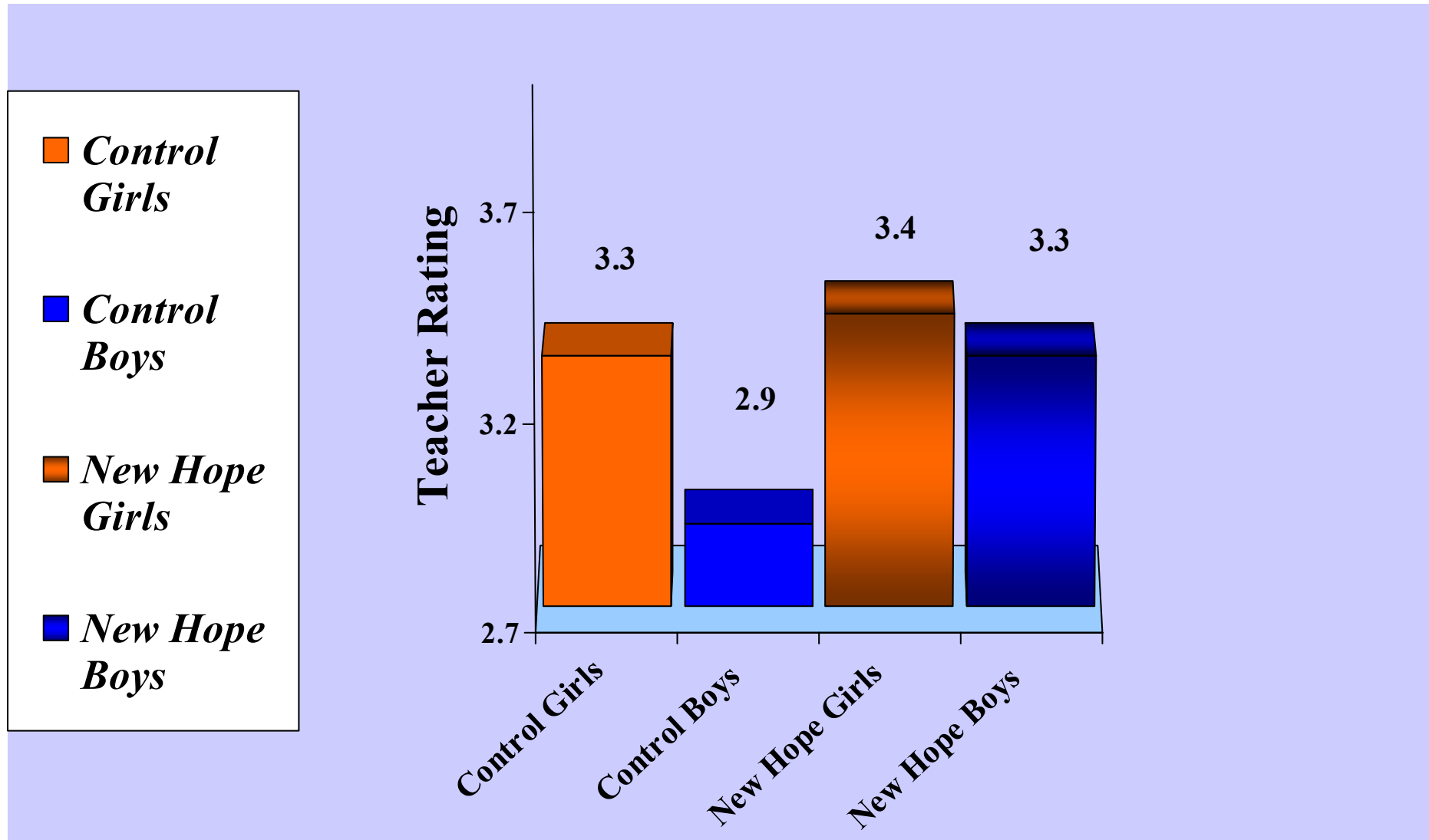
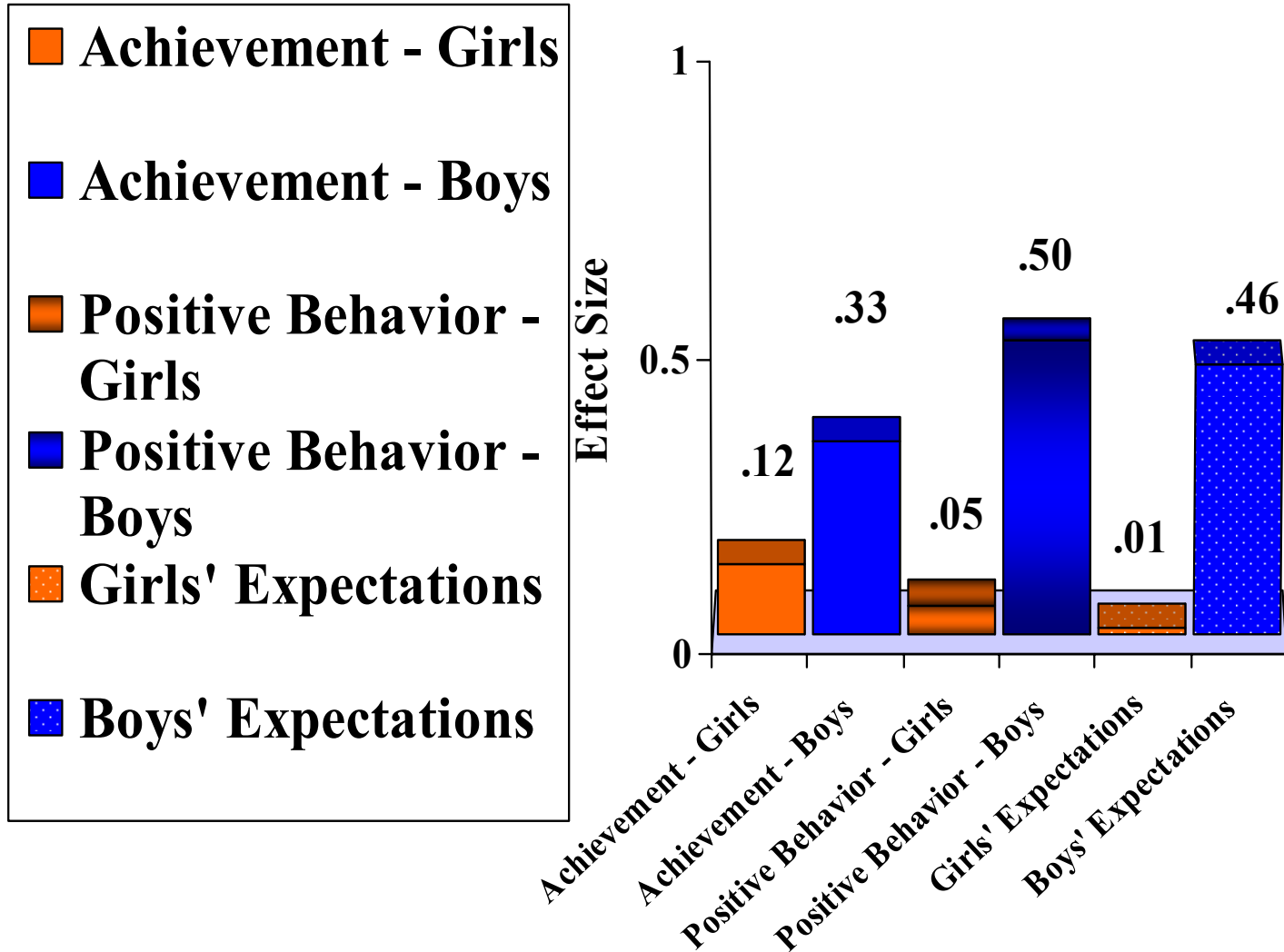


Figure 2: Impacts on achievement, behavior and expectations



Why boys did better

- Not all places have gangs, but [my neighborhood] is infested with gangs and drugs and violence. My son, I worry about him. He may be veering in the wrong direction... Its different for girls. For boys, its dangerous. [Gangs are] full of older men who want these young ones to do their dirty work. And they'll buy them things and money.”

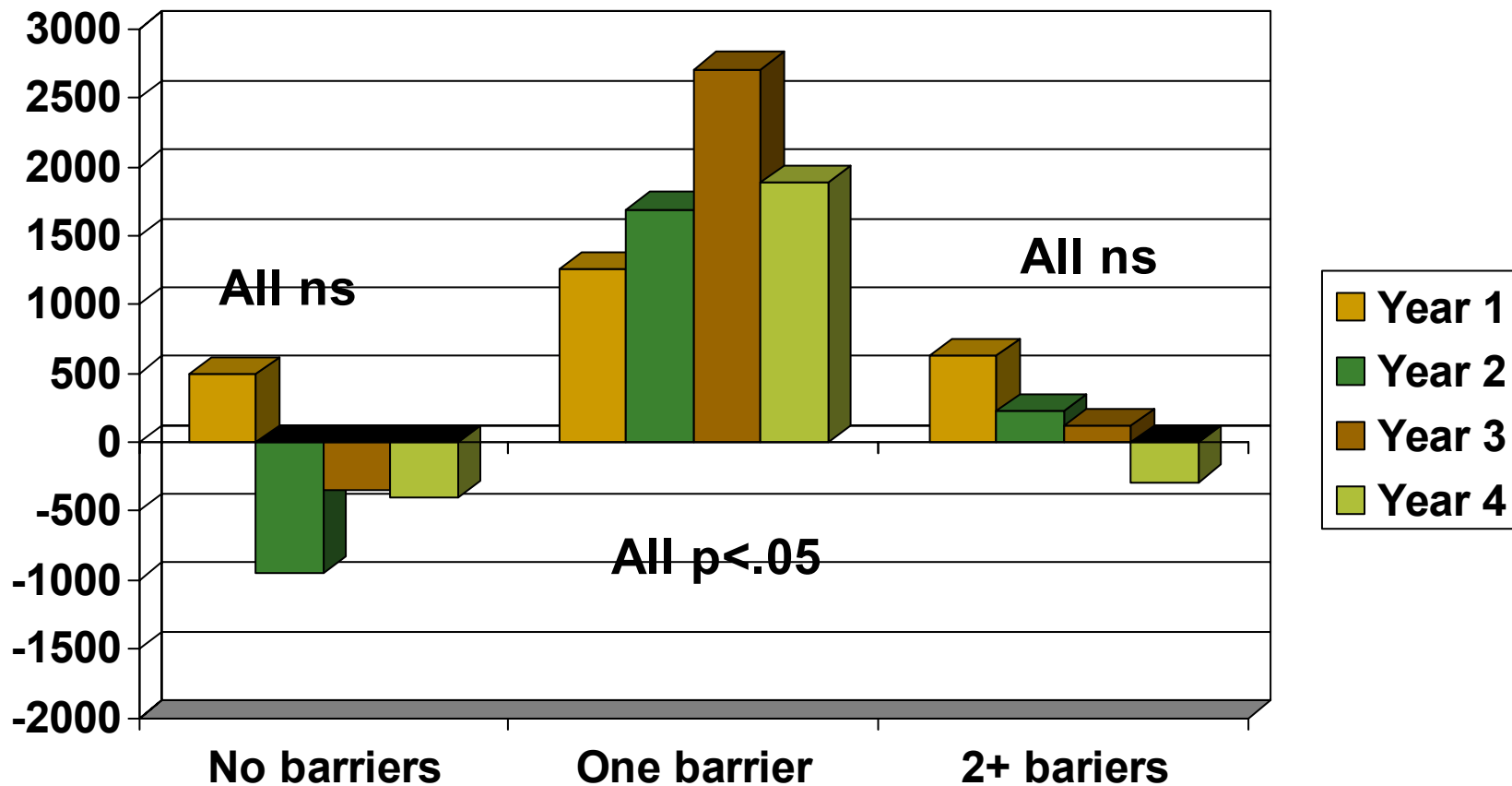
Jackie, 35 year old African American mother of four

- Further quantitative work confirmed this difference for families in bad neighborhoods
-

Discover subgroups for whom program effects were largest

- **New Hope's heterogeneous earnings impacts**

New Hope Earnings Impacts By Number of Potential Employment Barriers



New Hope's heterogeneous earnings impacts

- Maria attributes her success to New Hope. “I could not be where I am without New Hope”, she said. In particular, it was New Hope’s subsidized childcare that allowed her to look for and keep a job that would pay her enough to live on. Otherwise, without New Hope, she would have had only six weeks of subsidized childcare from the state. While that would maybe have been long enough for her to find a job, it wouldn’t have been long enough for her to earn enough money to pay for childcare on her own.
-

Quantitative uses of qualitative data

44 observations can produce useful confidence intervals

Especially relevant for items difficult to capture in a survey

- **Example: Pervasive nature of child problems that interfered with family functioning (Weisner and Bernheimer, 2000)**
-

Benefits to future work

- **Generate survey measures for future rounds of data collection**
 - NHES indicated important measures of family well-being not adequately measured on two-year survey
 - **Quantitatively explore qualitative findings**
 - Evaluate puzzling take-up patterns found through fieldwork
-

Limits

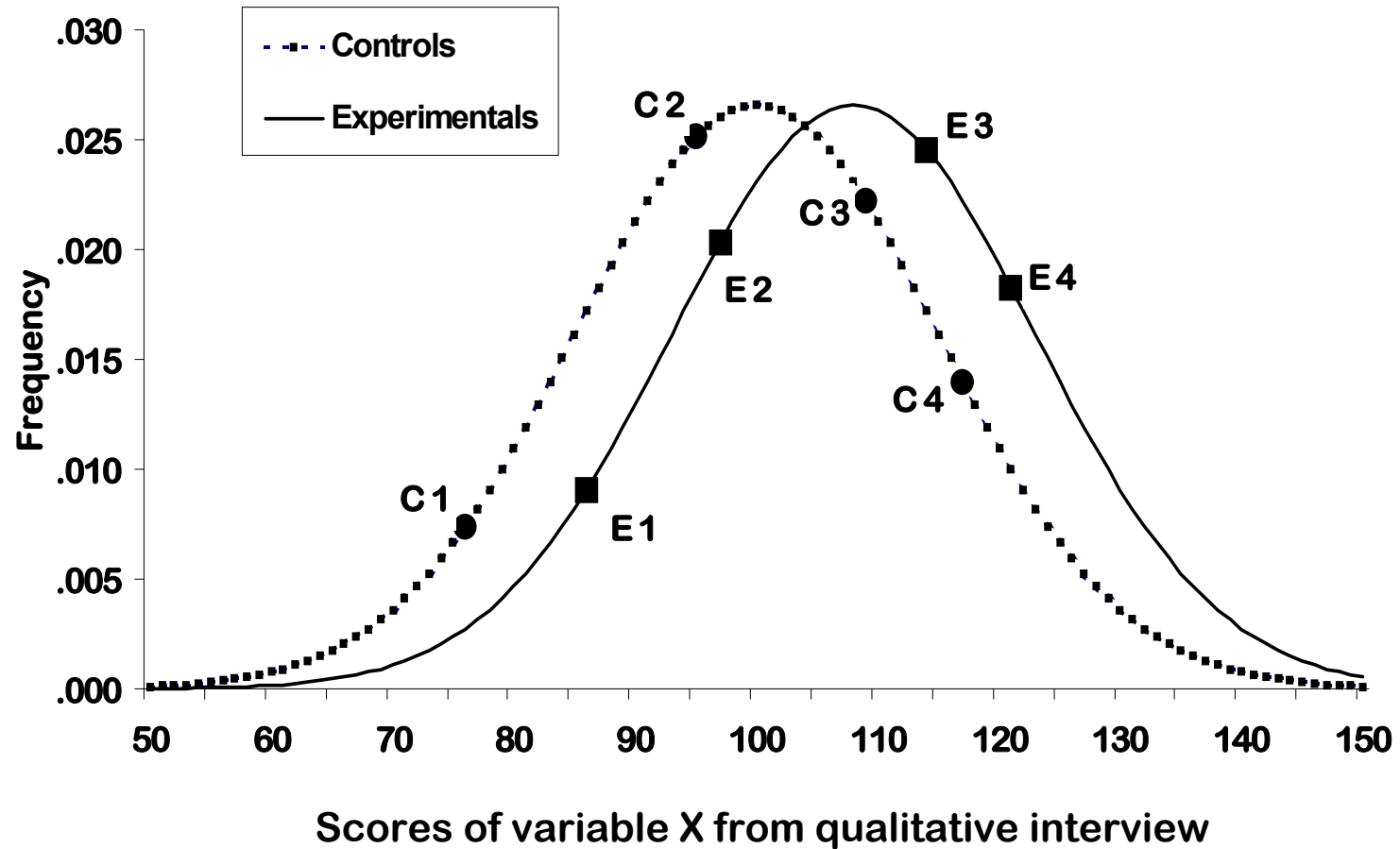
- **Cannot use qualitative data to identify program effects**
 - **Costly to collect; what is the optimal mix?**
 - **Must use qualitative data carefully when illustrating quantitative findings**
-

Conclusion

- **Use of both quantitative and qualitative methods enriches evaluation efforts**
 - **Interaction of two can be quite productive and illuminate results that otherwise would be obscured**
-

**greg-duncan
@northwestern.edu**

Inability of Qualitative Data to Identify Program Impacts



MTO: The Moving to Opportunity for Fair Housing Demonstration Program

- **A random-assignment experiment testing whether moves to low-poverty areas produce significant social and economic benefits for the families involved**
-

MTO 3-Group randomization

- The *experimental group* received housing vouchers that could be used only in <10% poverty census tracts. Counseling agencies helped the experimental group families to locate and lease suitable housing.
 - The *Section 8 group* received regular Section 8 vouchers, which could be used anywhere they found a suitable unit. No counseling.
 - The *control group* received no vouchers but continued to be eligible for project-based assistance.
-

Child mental health and behavior (age 12-19)

Control
group
mean

Exp. minus
control
difference

Psychological distress

Girls

30%

-5*

Boys

21

ns

Lifetime generalized anxiety disorder

Girls

9

-4*

Boys

4

ns

Youth reported behavior problems

Girls

35

ns

Boys

34

+8*

Child schools and achievement

	Control group mean	Exp. minus control difference
Standardized test scores		
Girls	0	ns
Boys	0	ns
Percentile rank of school		
Girls & Boys	15 th	+4*
<i>Compare: Percentile rank of neighborhood poverty</i>		
Girls & Boys		+11*
% White students in school		
Girls & Boys	9%	+5%
Enrolled in school		
Girls 15-20	55%	+8*
Boys 15-20	59%	ns