



Promoting Healthy Development in Early Head Start

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Children ages 2 – 5:

- 20% overweight
- 12% obese

Health risks of child obesity:

- High blood pressure
- High cholesterol
- Kidney disease
- Diabetes
- Early puberty

(Deckelbaum & Williams, 2001; Ogden et al., 2012; Vos & McClain, 2008)



Early Head Start
concerned about obesity;
but unsure how to
approach problem



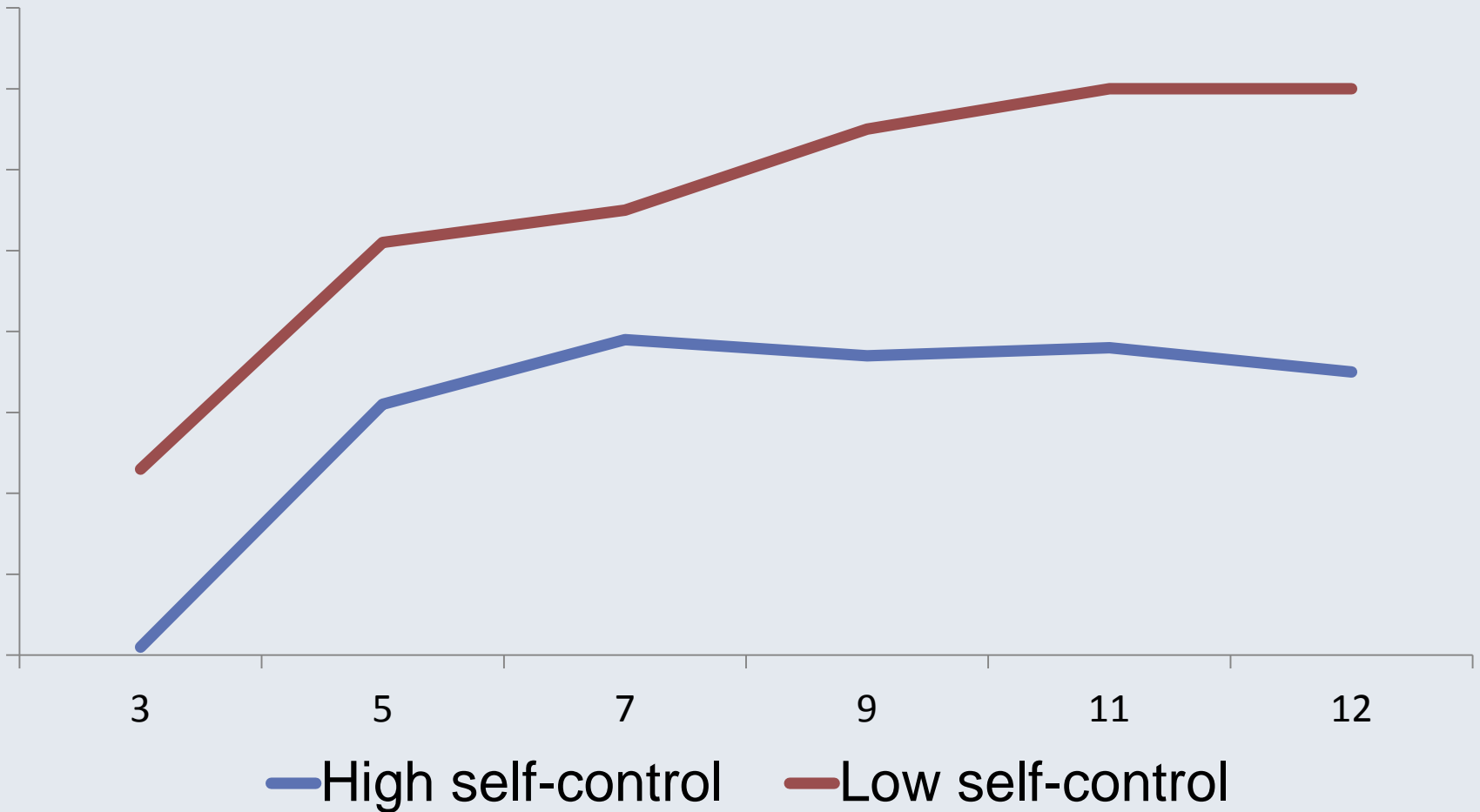
Parents not concerned
about obesity; priority
was children who are
well-behaved and can
succeed in school



Deliberate self-control emerges around age 2, when food preferences are formed

(Birch & Ventura, 2009; Kochanska, Murray, & Harlan, 2000; Kopp, 1982)

Self-control and BMI across childhood



(Francis & Sussman, 2003)

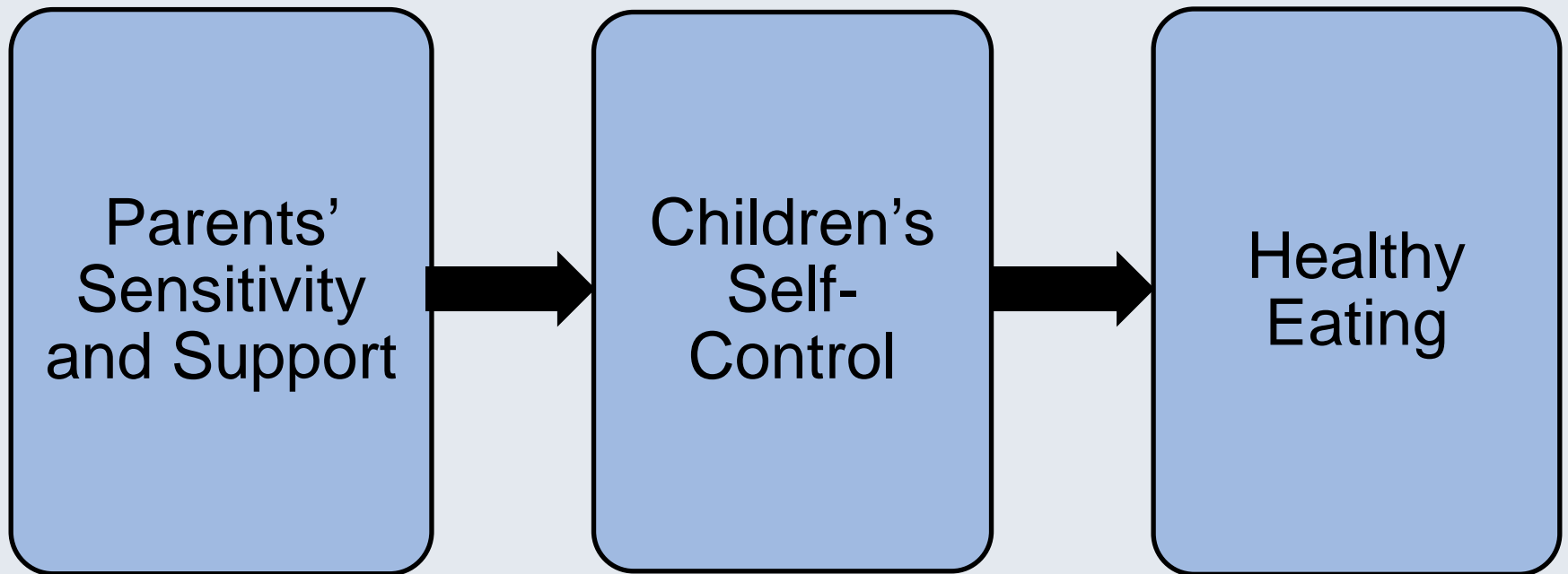


Parents' sensitivity and support predict children's self-control and healthy eating

(Bibok et al., 2009 ; Hoffman et al., 2006; Hughes & Ensor, 2009; Hustedt & Raver, 2002; Kermani & Brenner, 2000; Pratt et al., 1988; Robinson et al., 2009)



Intervention Logic Model





Curriculum

- 10 user-friendly scripted snack preparation lessons
- Home visitors coach parents to coach children (e.g., PCIT)



Spinach Quesadillas



What do you need?

Flour tortillas, preferably whole wheat
Small package of cheddar cheese
Package of frozen whole-leaf spinach

1. Cut four slices of cheese per tortilla.
2. Lay cheese slices in a row in middle of tortilla.
3. Defrost four bunches of spinach in microwave for 30 seconds.
4. Use paper towel or fork to mash excess liquid from spinach.
5. Lay spinach on cheese.
6. Put quesadilla in microwave for 45 seconds.
7. Fold over 2-inch piece of tortilla; flip that double piece of tortilla over and over until you have a flat roll.
8. Cut quesadilla into four pieces.

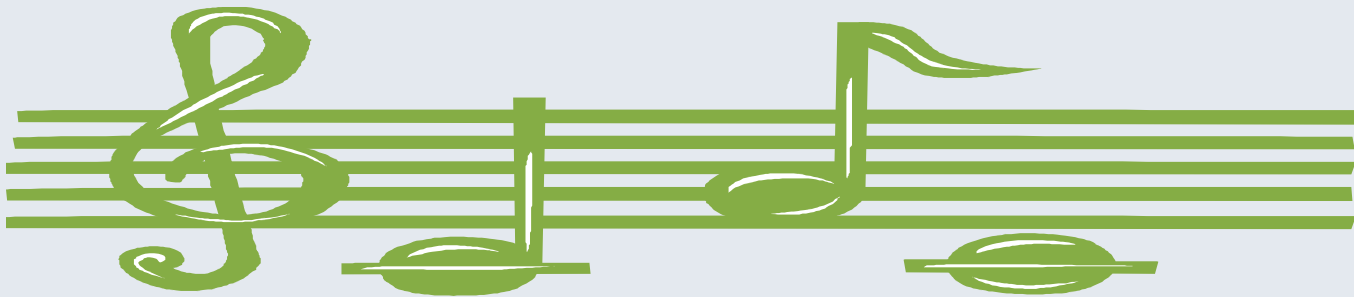


Give child choice to add sunflower seeds or oats next.	<p><i>Now, ask your child whether she/he wants to add the sunflower seeds or the oats next.</i></p> <p><i>Ask your child again whether she/he wants to go first or second.</i></p> <p><i>Count the scoops with your child as you go.</i></p> <p><i>All of this turn-taking is really good for your child.</i></p>
Let child choose between peanut butter and honey.	<p><i>Now show your child the peanut butter and the honey. Ask her/him which one you should add next.</i></p>
Add the peanut butter or honey.	<p><i>For the peanut butter and honey, it is important to work as a team with your child. Have her/him hold the measuring scoop steady, and you can spoon the peanut butter or pour the honey into it.</i></p> <p><i>Then your child can pour the peanut butter or honey into the mixing bowl and you can take over and scrape out any of the ingredient that is remaining.</i></p> <p><i>This part can get a little messy and sticky, even for adults. It is helpful to have a wet paper towel or dishrag close by to wipe your hands on. I know it's hard for a lot of parents to let their children get so messy. However, working with such messy ingredients really teaches children to pay attention and to control their bodies. And, your child will really love you for giving her/him the chance to do such a big girl/boy job.</i></p>
Stir the ingredients together.	<p><i>Children really enjoy stirring things. Tell her/him you will work as a team and take turns stirring these ingredients. Tell your child that you will each be a "stirrer" and a "holder." The stirrer will slowly and carefully mix the ingredients together, and the holder will help hold the bowl in place. Ask her/him if she/he would like to be the stirrer or holder first.</i></p>

The Waiting Song

(Tune of Frere Jacques)

I am waiting, I am waiting,
For my turn, for my turn.
I am very patient, I am very patient.
I can wait, I can wait.





Each lesson provides parents:

- New information
- Coaching/practice in sensitively supporting children's learning
 - Expose child to language
 - Give choices
 - Praise effort





Advantages of program:

- Lessons require sustained, focused self-control, regardless of skill level
- Children more likely to try food they prepare





Advantages of program:

- Parents have not cooked with toddlers
- Parents/toddlers work as team
- Parents have to prepare food anyway
- Food already associated with nurturing

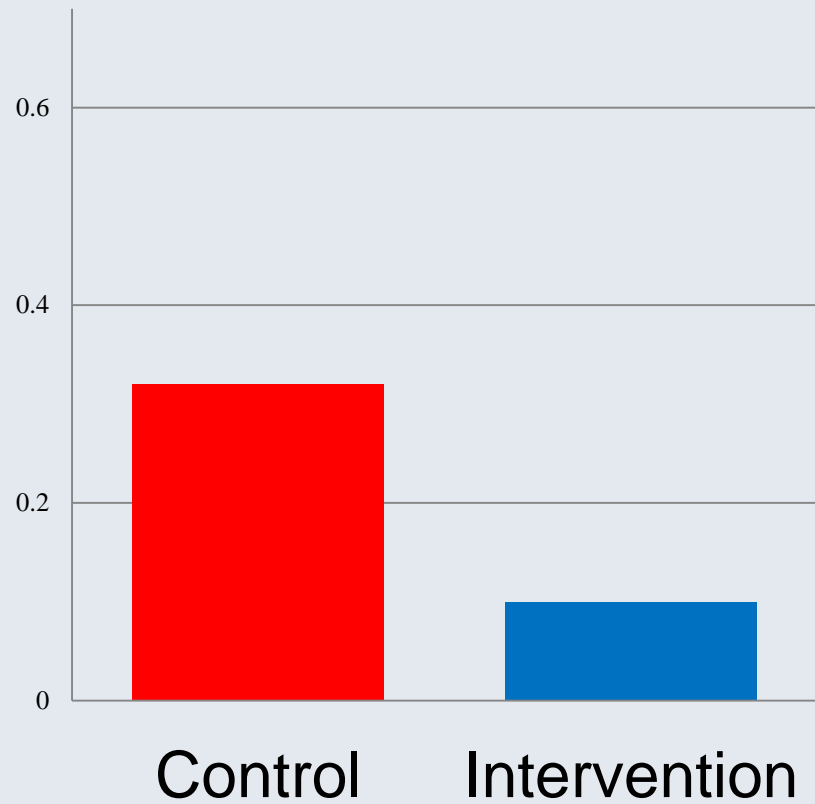
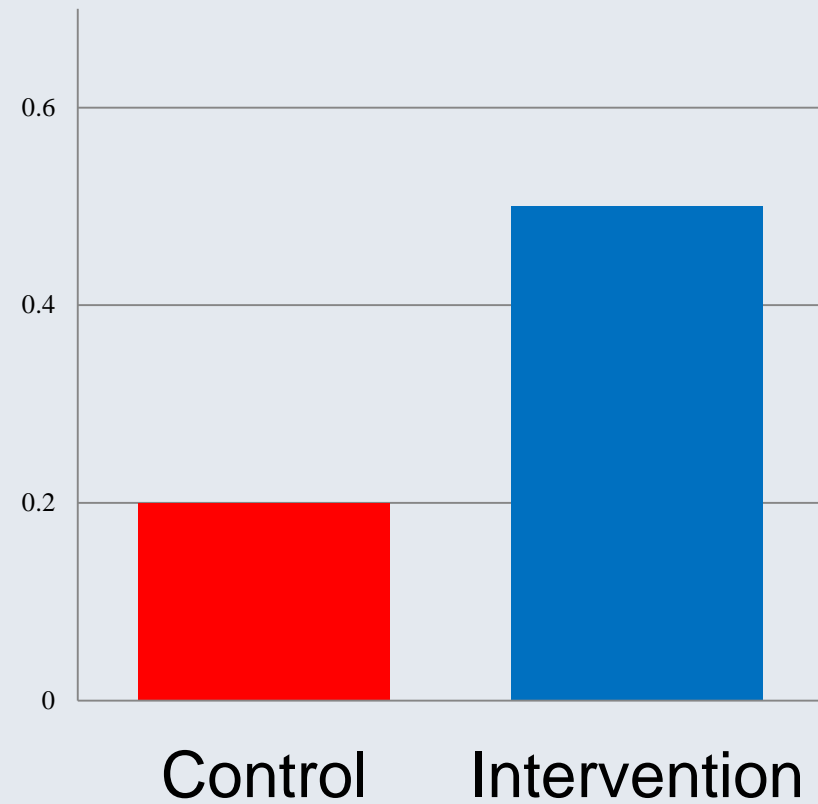


Study Design

- 74 families
- 52% Black and/or Latino
- 70% of parents overweight; 40% obese
- 36% of toddlers overweight; 17% obese
- Randomly assigned to intervention or home visits “as usual”

Sensitive
parenting
Observer rating
 $d = .30$

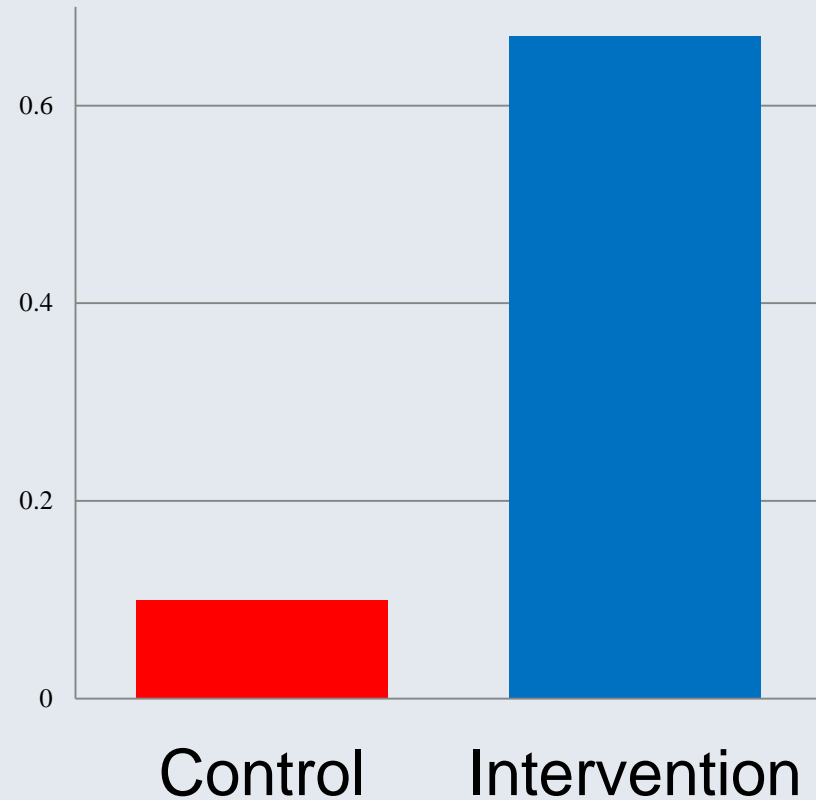
Harsh/critical
parenting
Observer rating
 $d = (-.22)$



Child
self-control

Direct assessment

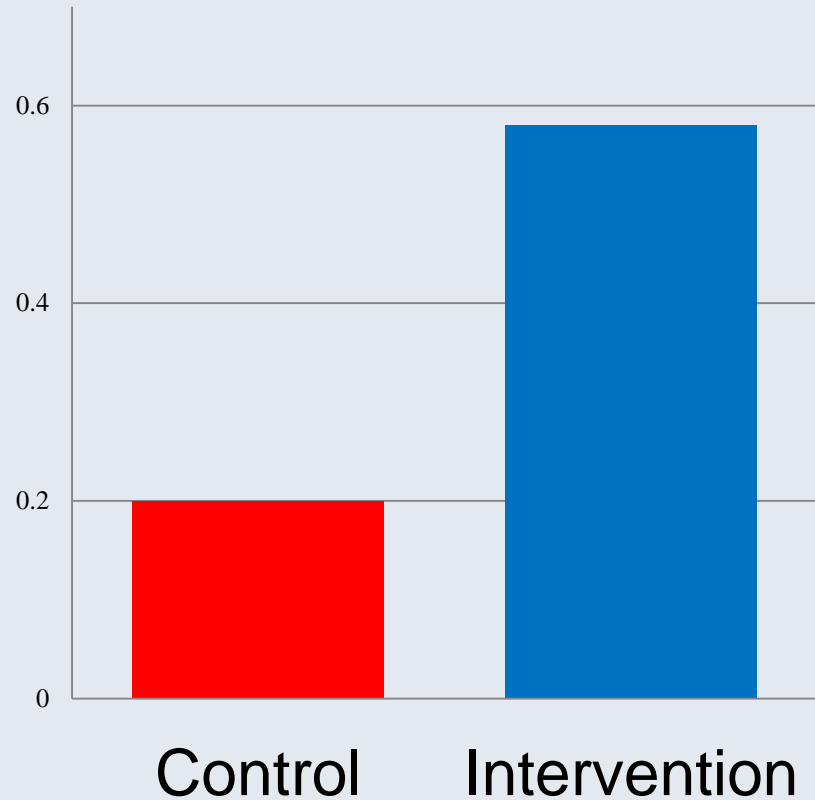
$d = .59$



Compliant and
positive behavior

Observer rating

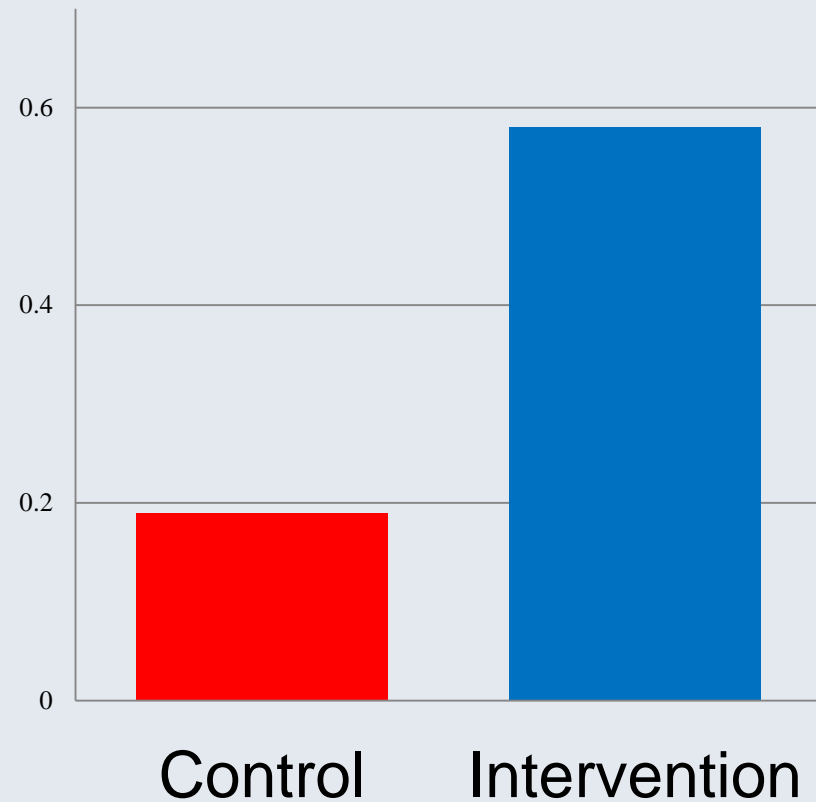
$d = .38$



Child ate
fruit

24-hour food log

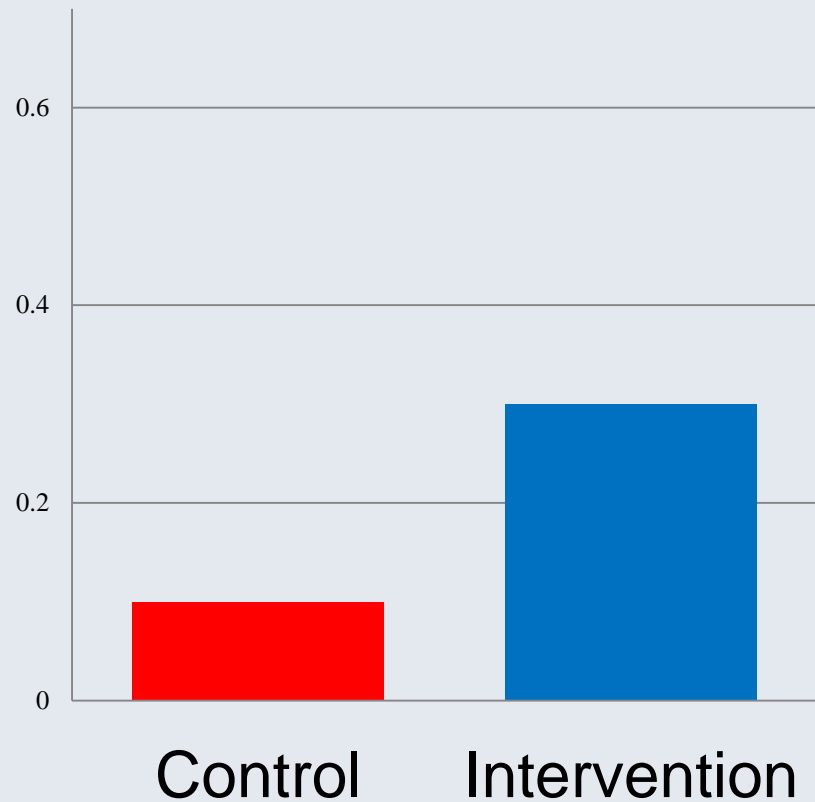
$d = .39$



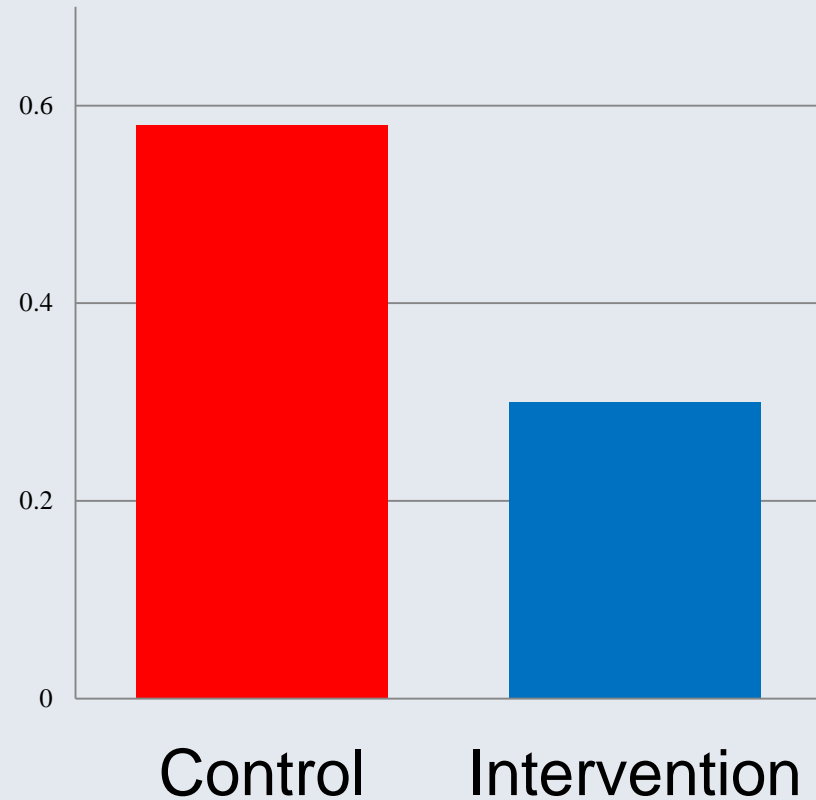
Child ate
vegetables

24-hour food log

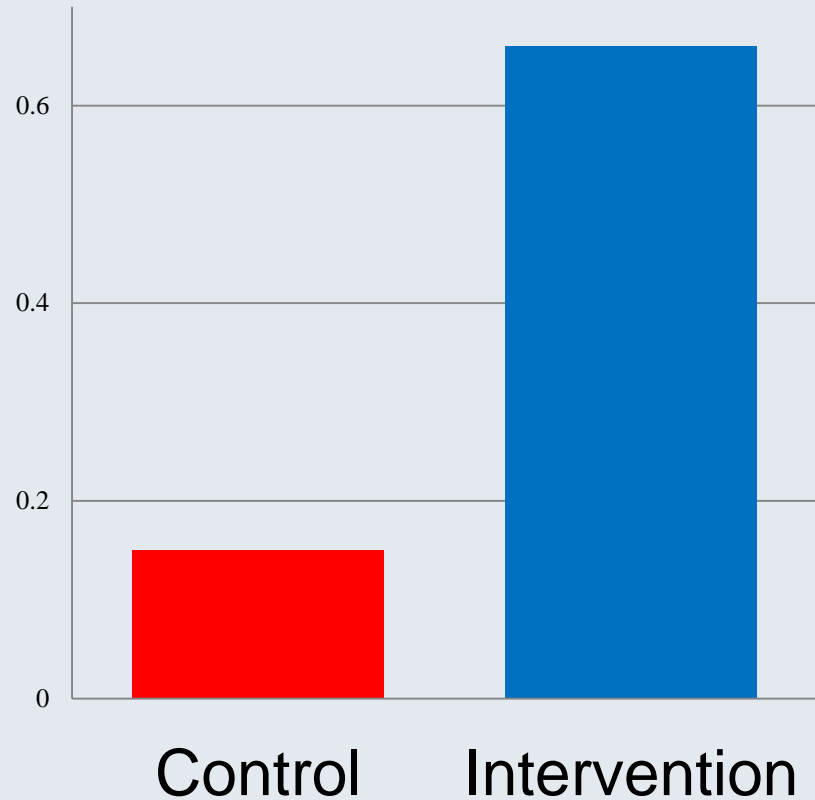
$d = .20$



Child ate
sweets/junk food
24-hour food log
 $d = (-.28)$



Overweight/obese
to normal BMI
Direct assessment
 $d = .51$



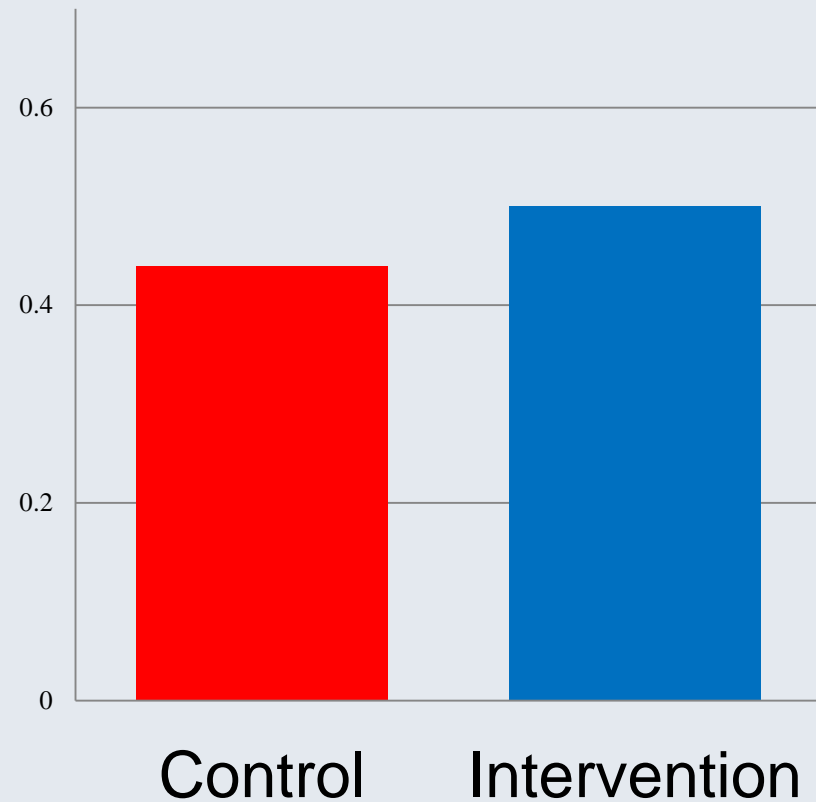
Implementation and Fidelity Ratings (4-point scale)

	Home Visitor Ratings	Parent Ratings
The home visitor was able to complete this lesson as planned.	3.59	NA
The parent was open to suggestions about new ways of interacting with the child.	3.66	NA
The parent gave the child many compliments for effort.	3.42	3.81
The parent gave the child many choices during the lesson.	3.33	3.68
The parent exposed the child to rich language during the lesson.	3.44	3.71
The parent and the child did a good job of working as a team.	3.66	3.76
The parent and child seemed to enjoy the lesson.	3.74	3.86

Parent-home
visitor relationship

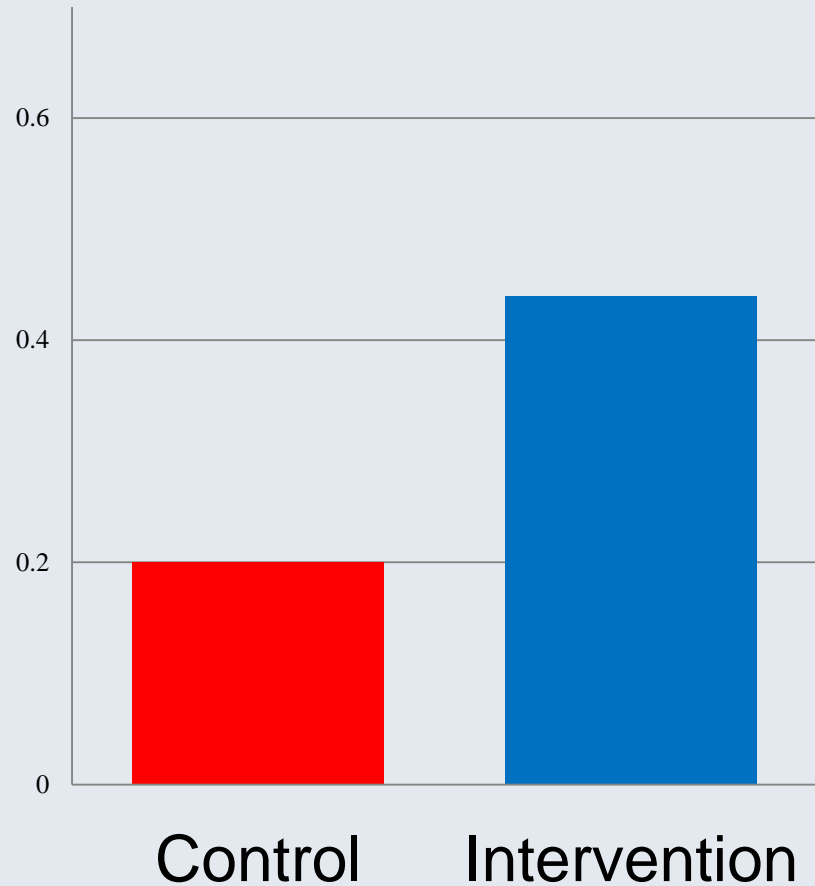
Parent report

$d = .06$



Working alliance
Home visitor report

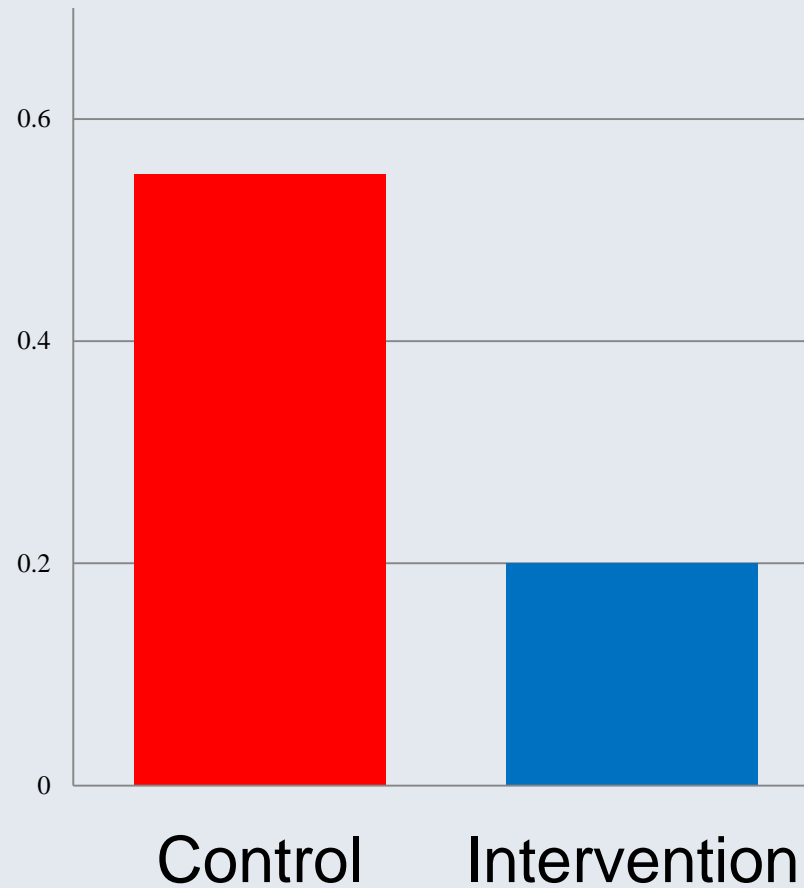
$d = .24$



Parent depression

Parent report

$$d = (-.35)$$



Promoting Healthy Development addresses Home Visiting Research Network priorities:

- Priority 1: Strengthen home visiting effectiveness
- Priority 3: Promote successful adoption of innovations
- Priority 5: Promote fidelity in implementing innovations
- Priority 6: Build a stable, competent workforce
- Priority 7: Promote family engagement in home visiting
- Priority 10: Build research infrastructure



Questions?
Comments?