

# Early Family Intervention and School Readiness: The Effects of the Family Check-Up on Positive Parenting, Language Skills, and Self-Regulation in Early Childhood



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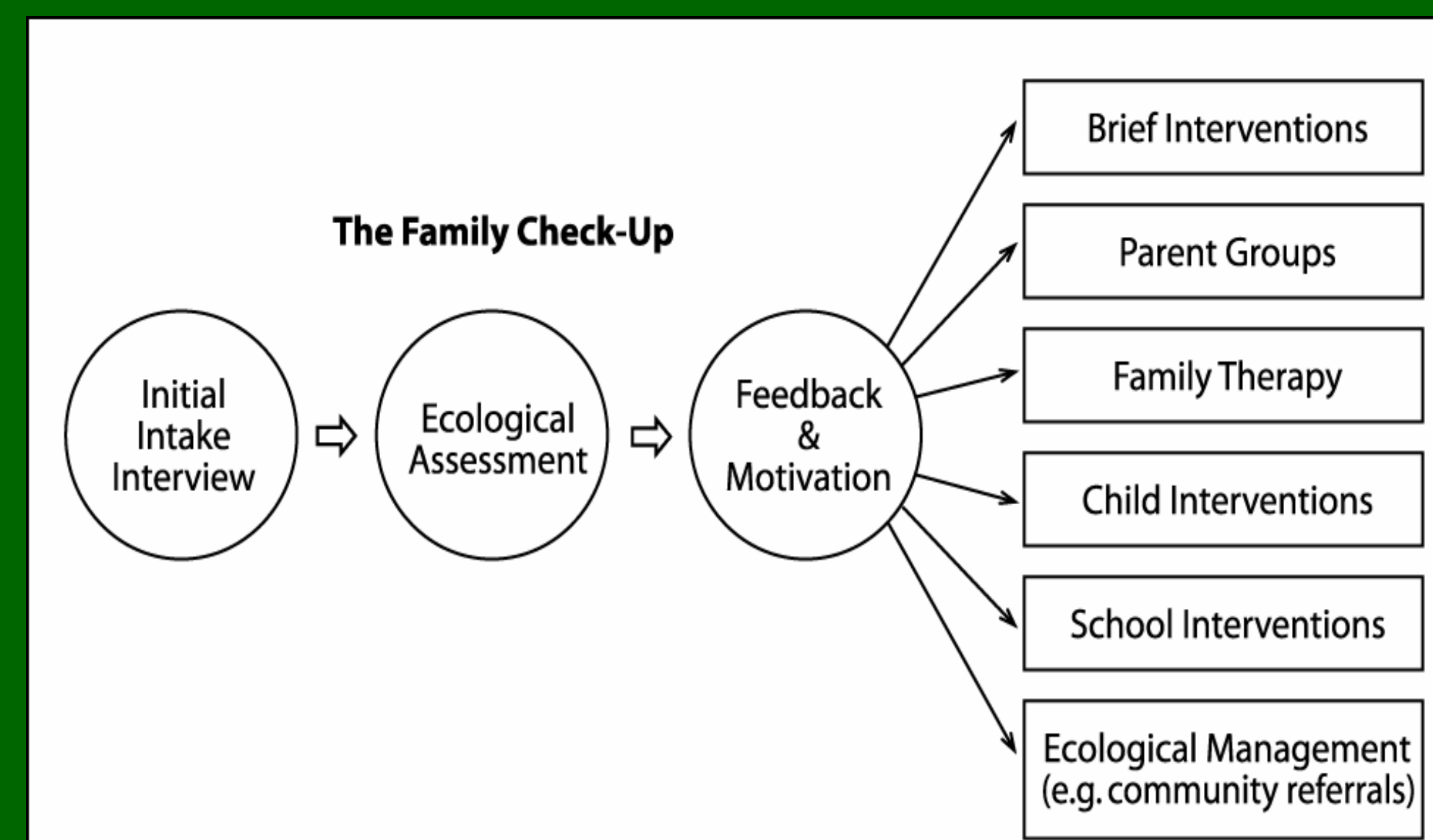
## Introduction

- Language and self-regulation are important school readiness factors, related independently and conjointly to school success
  - Negative emotionality in kindergarten predicts lower reading skills in 1<sup>st</sup> grade (Newman et al., 1998)
  - Low inhibition and low language skills interact to predict teacher-student conflict (Rudasill et al., 2006)
- Children from low-income families are at risk for starting school behind and staying behind (Lonigan & Whitehurst, 1998)
- Early interventions for at-risk/low-income families successfully reduce children's behavior problems through targeted increases in positive parenting (Dishion et al., submitted; Webster-Stratton et al., 2001)
- We know less about whether early, home-based treatments for families at risk can alter parenting practices to promote child school readiness (Brooks-Gunn & Markman, 2005).

## Research Question

- Does the Family Check-Up, an ecological, assessment-based family intervention, promote the school readiness factors of language and self-regulation in early childhood through its effects on positive parenting?

An Overview of the Ecological Strategy (Dishion & Stormshak, 2006)



## Method

### Participants

- Early Steps Multi-site Study:
  - 731 families from Women, Infants, and Children Nutritional Supplement Programs (WIC) in Pittsburgh, PA ( $N = 272$ ), Eugene, OR ( $N = 271$ ), and Charlottesville, VA ( $N = 188$ )
- Yearly assessments at 2, 3, and 4 years
- 46.6% Euro Amer, 27.6% African Amer, 13.4% Hispanic, 1.1% Native Amer, 9.8% Biracial, 1.3% "Other"
- 66.5% had annual family income < \$20,000

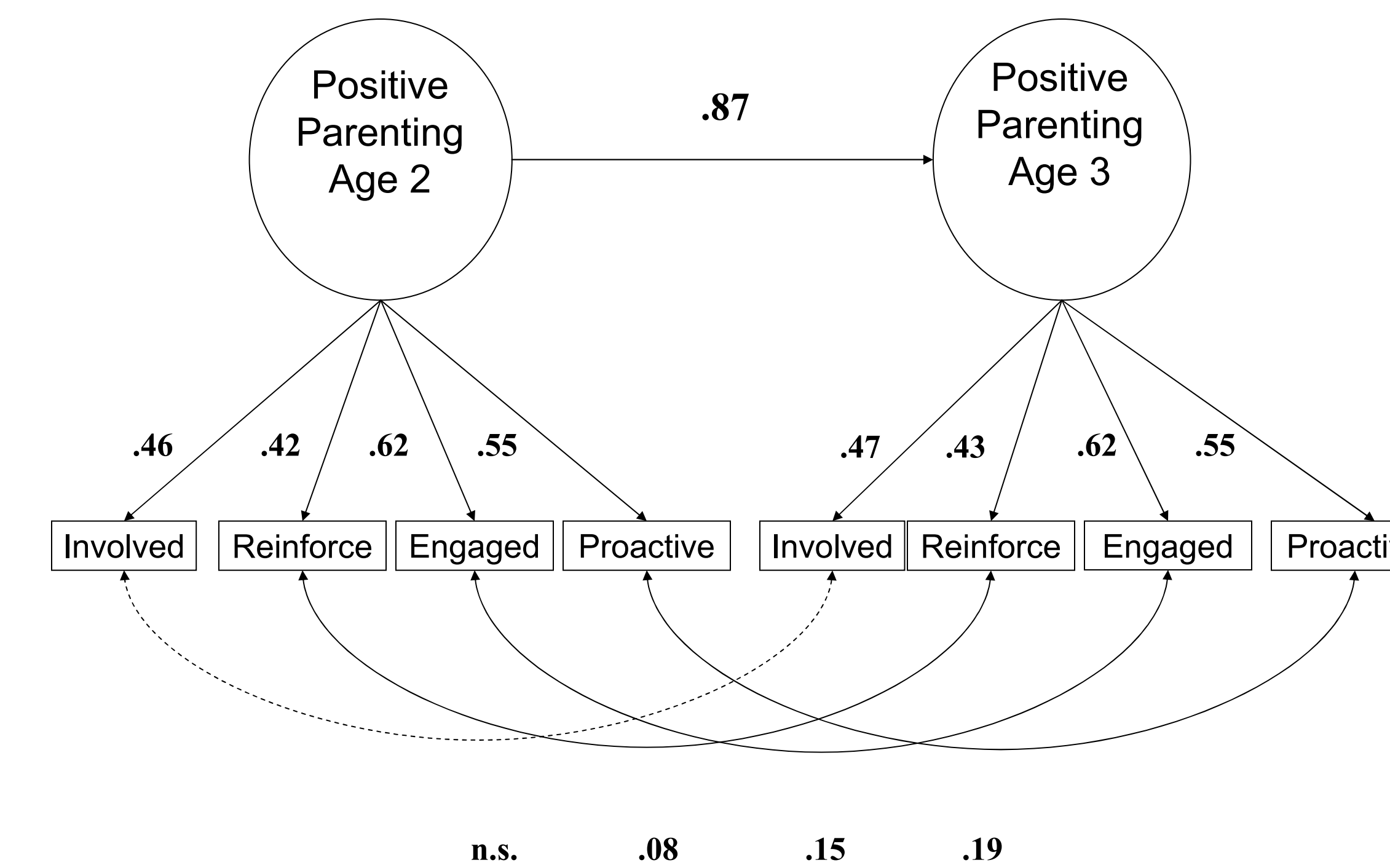
### Measures

- Positive Parenting:
  - Parent Involvement: home visitor ratings (HOME Inventory)
  - Positive Behavior Support: proportion time in videotaped home observations (Relationship Process Code)
  - Engaged Interaction: proportion time in home obs (RPC)
  - Proactive Parenting: Coder Impressions Inventory
- Language:
  - Fluharty 2 Preschool Speech and Language Test (Fluharty, 2000) General Language Quotient, child interview
- Self-regulation:
  - Child Behavior Checklist (Rothbart, 1996) inhibitory control subscale, maternal report

### Procedure

- Assessment:** 1 hour of parent-child interaction tasks in the home (e.g., free play, teaching, delay-of-gratification)
- Intervention:**
  - The FCU is a brief 3-session intervention based on motivational interviewing (Miller & Rollnick, 2002)
  - Sequence is:
    - Baseline in-home assessment
    - Randomization to treatment or control group
    - Get-to-Know-You interview with parent consultant
    - Feedback session by parent consultant
    - Follow-up, tailored treatment sessions if selected by family
- Families in the treatment group who completed all 3 sessions: 78% at age 2, 65% at age 3, 65% at age 4

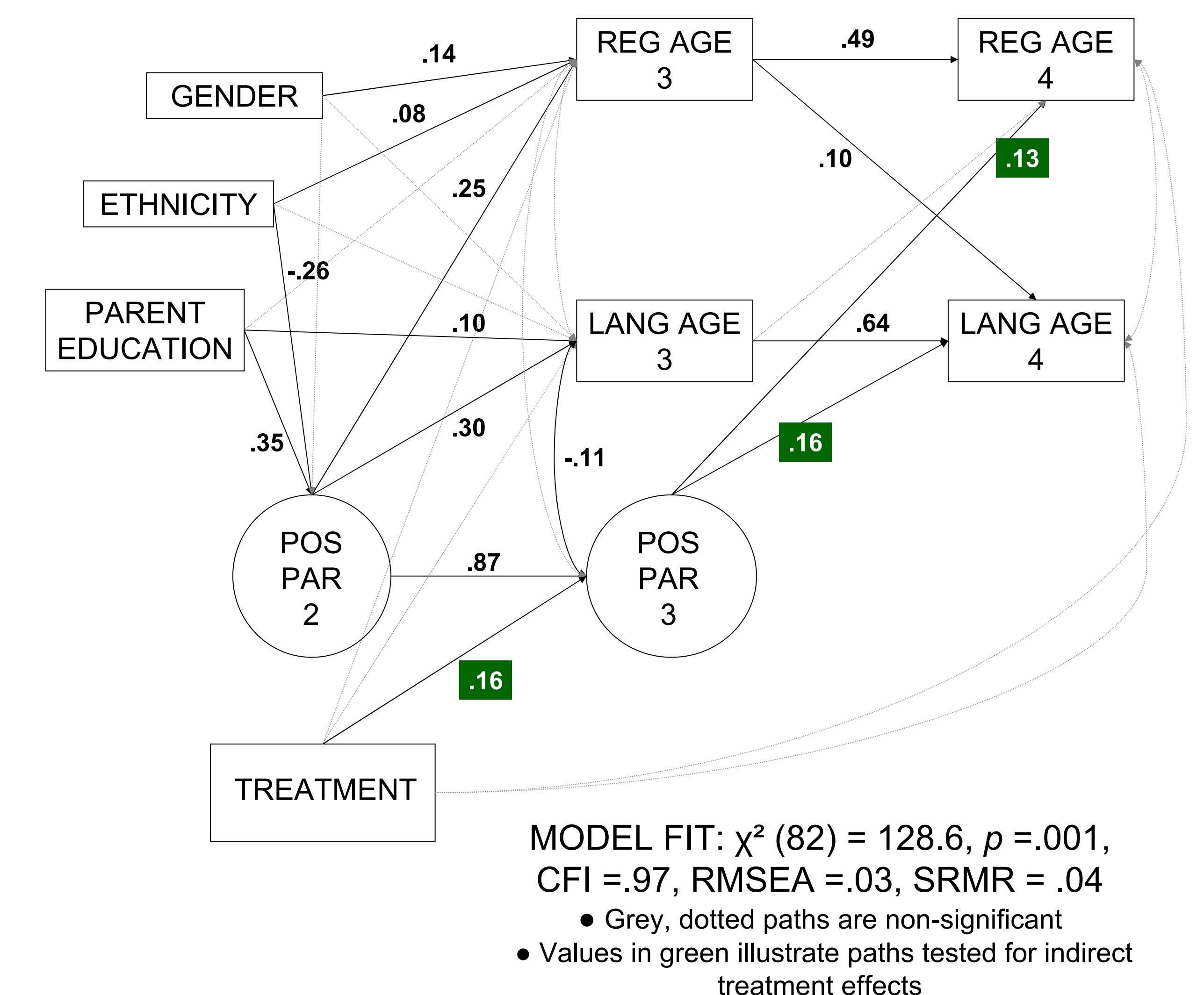
## Measurement Model of Positive Parenting



## Results

- Measurement model showed high stability of positive parenting across ages 2 and 3 with equal factor loadings
- Full model revealed a good model fit,  $\chi^2(82) = 128.6$ ,  $p = .001$ , CFI = .97, RMSEA = .03, SRMR = .04.
- Examined two indirect treatment effects: the effect on child language through positive parenting and the effect on child self-regulation through positive parenting.
- Language:** Modest indirect effect of treatment ( $B = .03$ ) such that families receiving FCU showed improvements in positive parenting from ages 2 to 3, which in turn promoted child language at age 4.
- Self-regulation:** Similarly, improvements in early positive parenting from ages 2 to 3 related to treatment promoted child self-regulation at age 4 ( $B = .02$ ).
- Controlling for gender, ethnicity, and parental education
- Accounting for stability in language and self-regulation and the time-varying relationship between them

## Family Check-Up Treatment Effects



## Conclusion

- This study supported prior work indicating that early interventions with at-risk/low-income families can impact child outcomes through their effects on positive parenting.
- Findings also suggest that the Family Check-Up, a brief, tailored, and assessment-based family intervention, fosters key facets of early school readiness in children at risk.

## Acknowledgments

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