



Scaling up Pre-k Statewide: Experimental Evaluation of the Policy

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Tennessee Voluntary Pre-K Study Team

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U.S. State-Funded Pre-K: Context and Cautions

1. Implemented at scale as routine organizational practice
 - Multiple, varying subunits (districts, schools) with some degree of autonomy; challenges for implementing a shared vision and consistent standards of practice.

(Contrasts with widely-cited small, intensive demonstration projects implemented by researchers.)
2. Pre-k as an education program
 - Most often administered by state departments of education.
 - Classrooms generally located in public schools.
 - Instructors licensed teachers in more than half state programs.
 - Programs primarily academic, but highly variable across states.

(Contrasts with Head Start and private center-based daycare.)



Context and Cautions, cont.

3. High expectations

- School readiness, i.e., children enter K with some early literacy and math skills and appropriate school behavior.
- Boosts long-term achievement, e.g., state achievement tests, graduation rates.
- Reduces racial/ethnic and poverty-related achievement gaps.
- Cost savings via fewer special education placements and retentions in grade.
- Social/behavioral (“non-cognitive”) effects, e.g., better behavior in school; longer term effects on employment, criminal behavior, etc.

(Much is expected from a school year of pre-k.)



Context and Cautions, cont.

4. Mixed and largely inconclusive supporting evidence
 - Most promising indications from small boutique studies conducted 50 or more years ago.
 - Clear evidence of immediate school readiness effects.
 - Inconclusive evidence about longer-term academic effects, behavioral effects, and cost savings.
 - Very limited evidence on life outcomes past graduation.

(Widespread advocacy claims that solid research evidence supports the expectation of multiple positive long-term effects from participation in a state pre-k program are exaggerated.)



TN-VPK: Typical Statewide Program

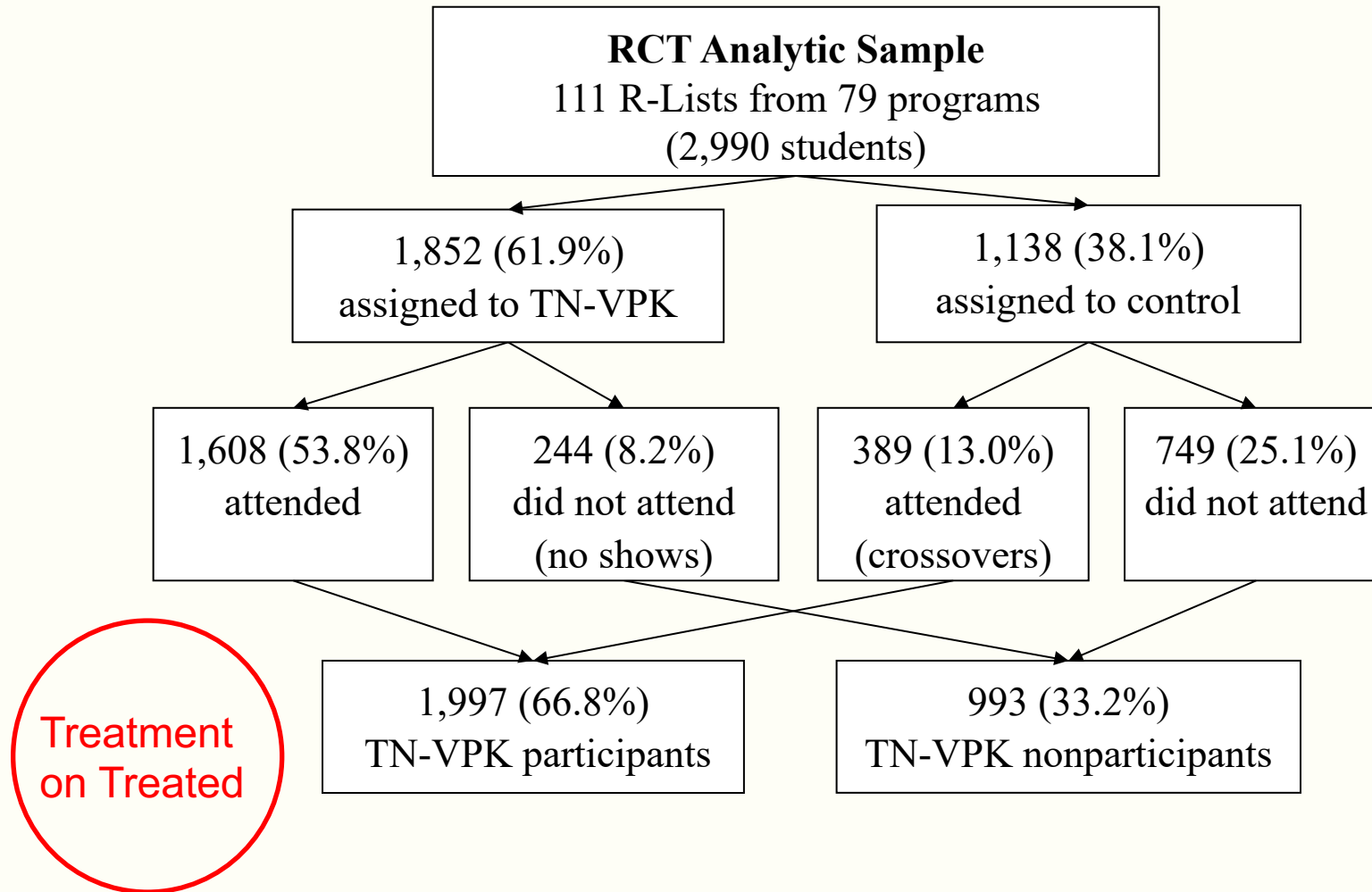
- Starting in 1998 with small pilot program, legislation created the TN Voluntary Pre-K program in 2005.
- Current program:
 - 935 pre-k classrooms in 135 of the 136 Tennessee school systems across all 95 Tennessee counties
 - Serving more than 18,000 children.
 - Targeted: FRPL eligibility
 - When adopted, met 9 of 10 NIEER Benchmarks for quality programs
 - 93% of classrooms are in public schools
 - Program not expanded since 2009



The Vanderbilt Pre-K Study

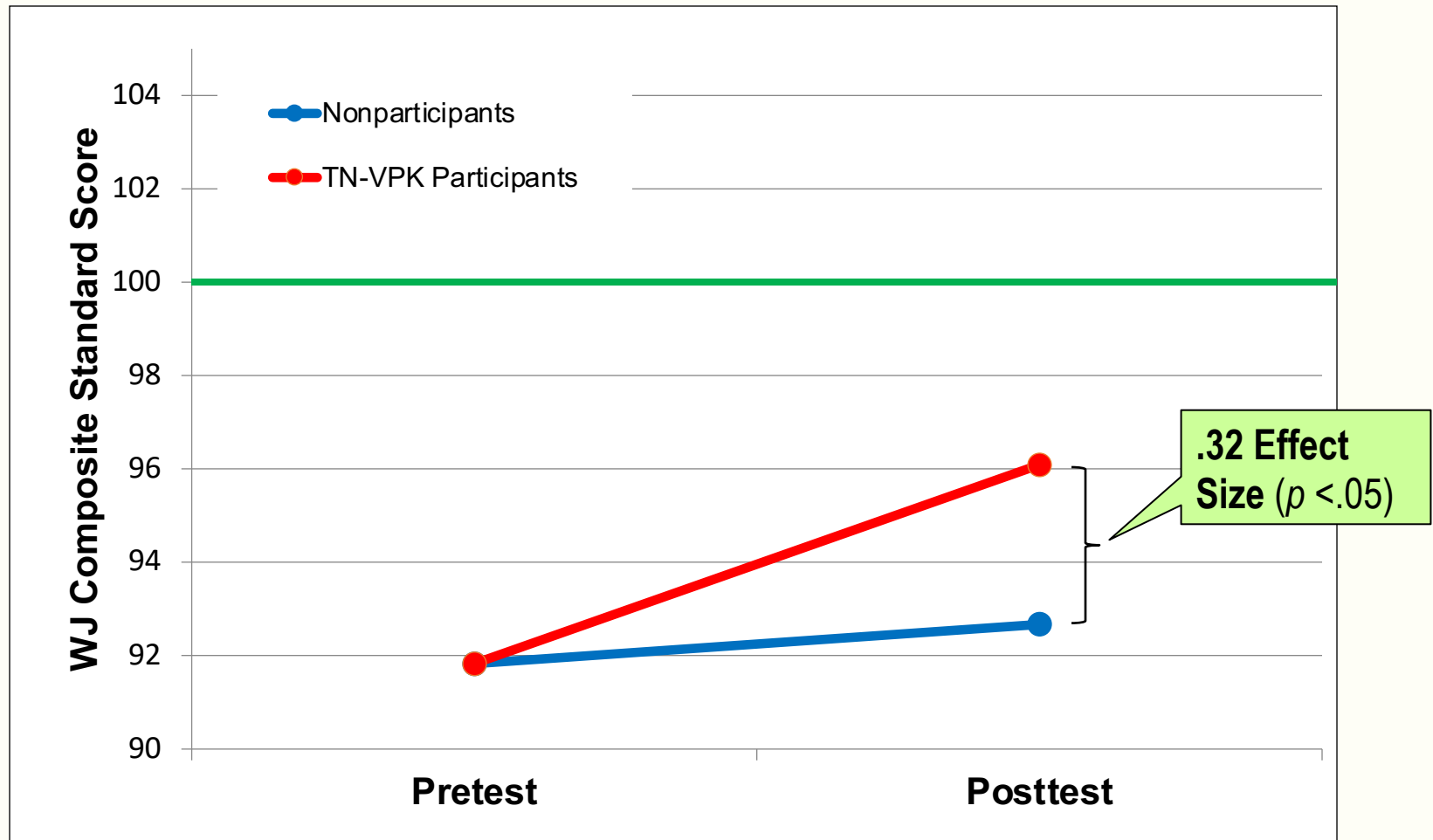
Three main components:

- Randomized control trial in oversubscribed schools-- 2 cohorts, 2990 students, 80 schools, 29 districts; tracking through the state data system through high school.
- Intensive substudy of consented children in the full sample-- assessed each year by the research team through 3rd grade; 1076 students, 58 schools, 21 districts.
- Follow up Intensive substudy of Cohort II students through middle school; one-third new consents, 725 students with their families and teachers (*see Durkin et al. presentation, Tuesday, Sept. 28, 2:15-3:45*).



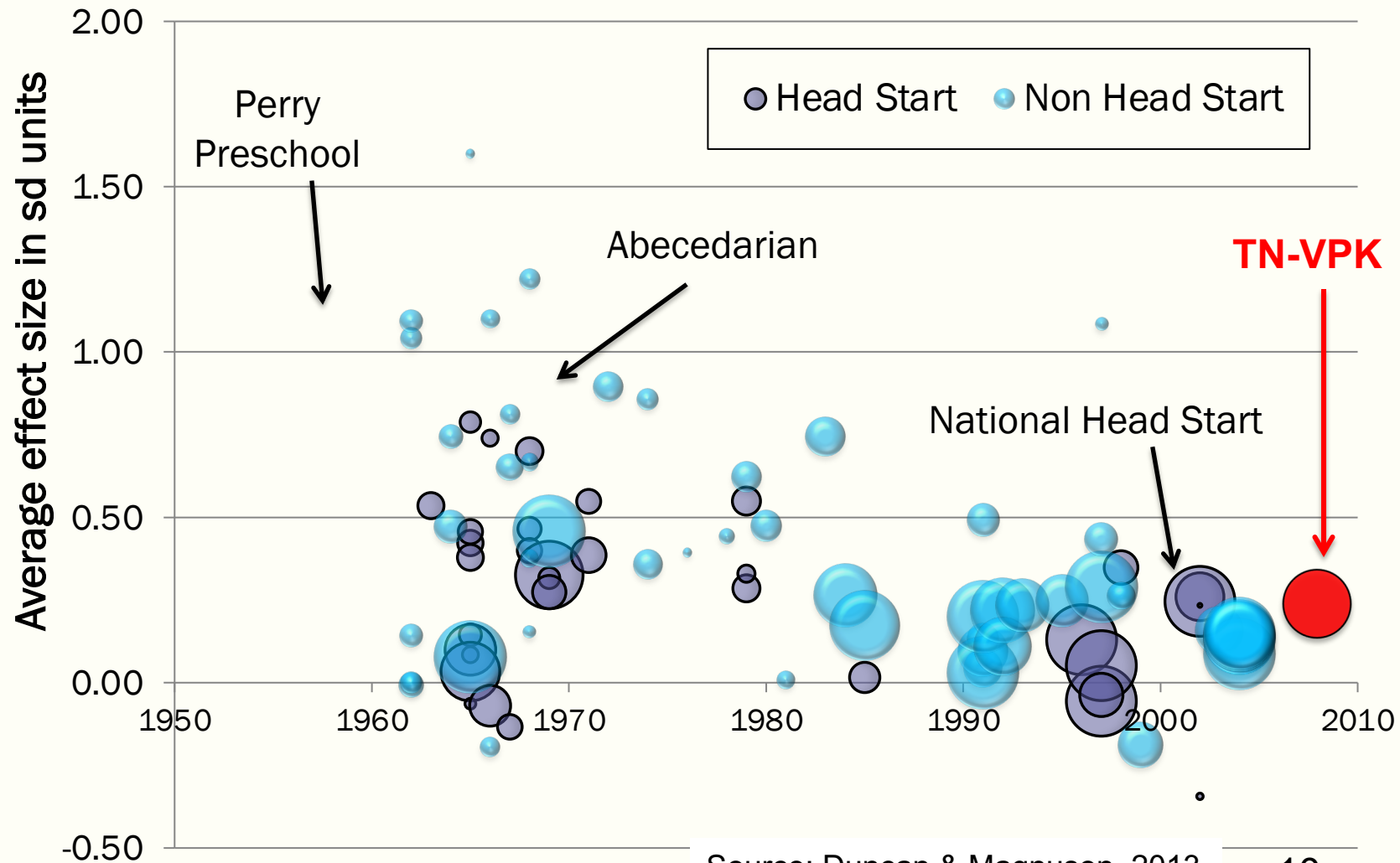


TN-VPK Effects at End of Pre-K on the Overall WJ Achievement Composite Score





Review of End of Pre-K Average Cognitive Effects

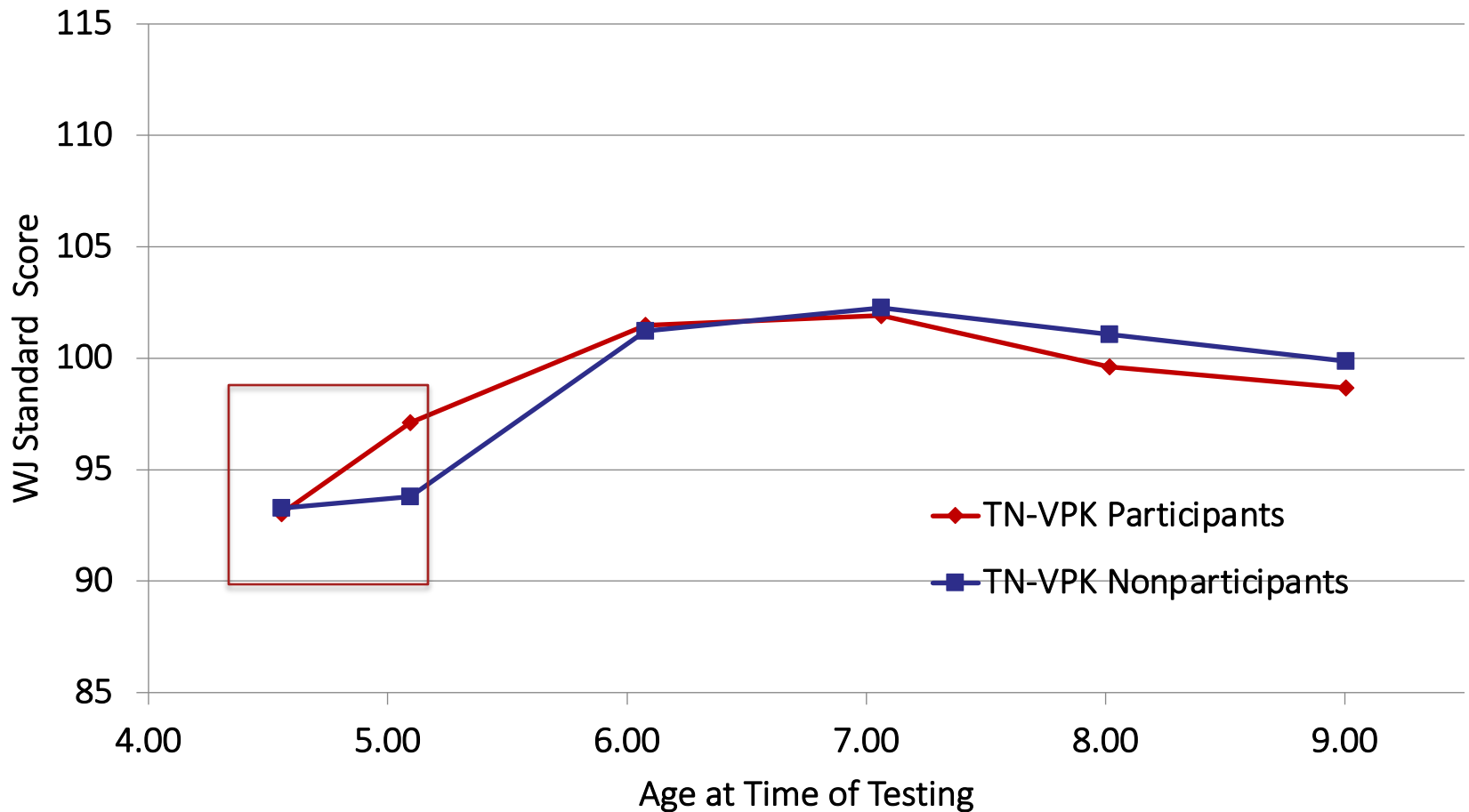


Source: Duncan & Magnuson, 2013



Overall VPK Achievement Advantage Fades

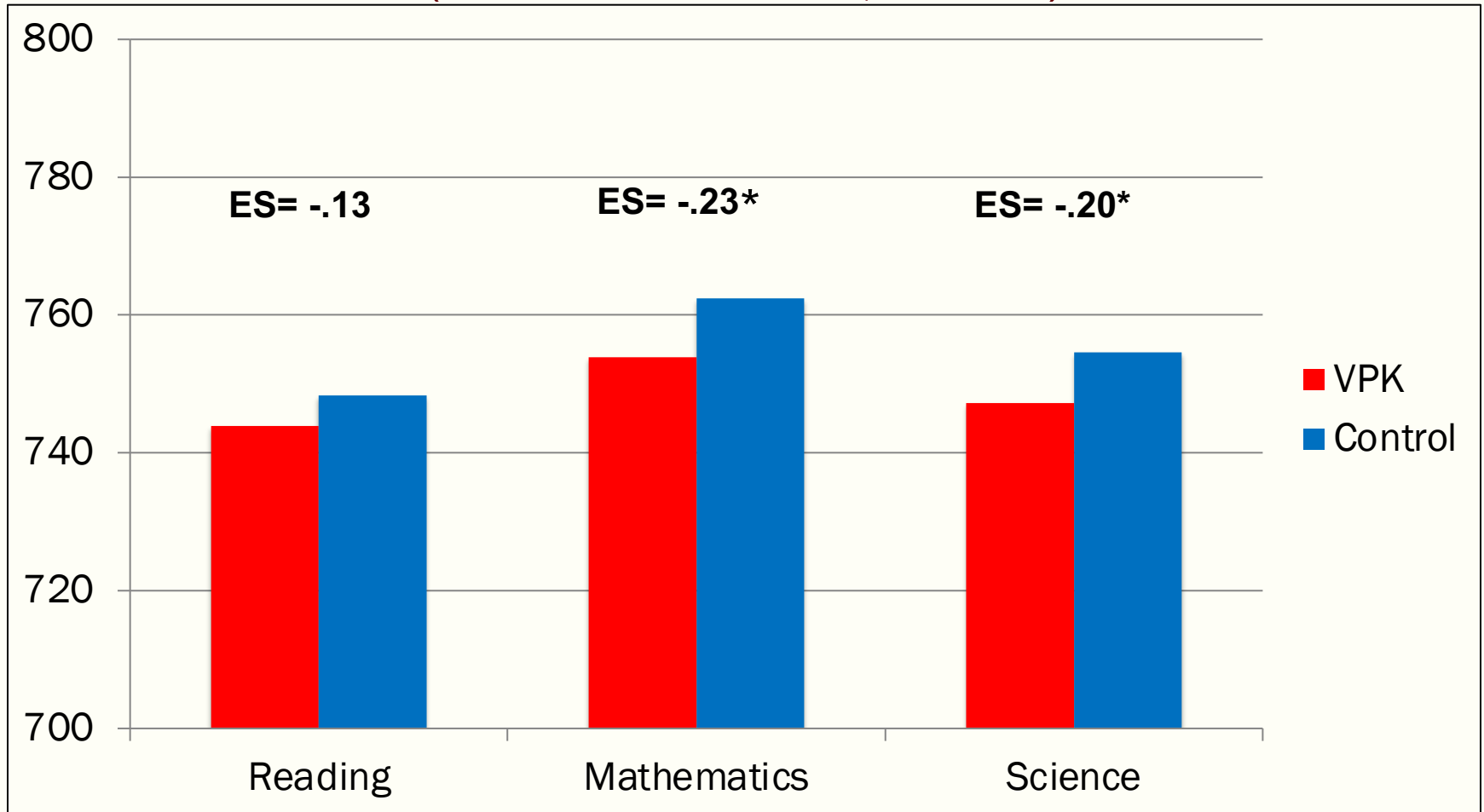
WJ Composite6 Standard Scores, ISS Sample (Pre-K through Grade 3)





3rd Grade State TCAP Scores: Full Sample

(Treatment on Treated; N=2990)

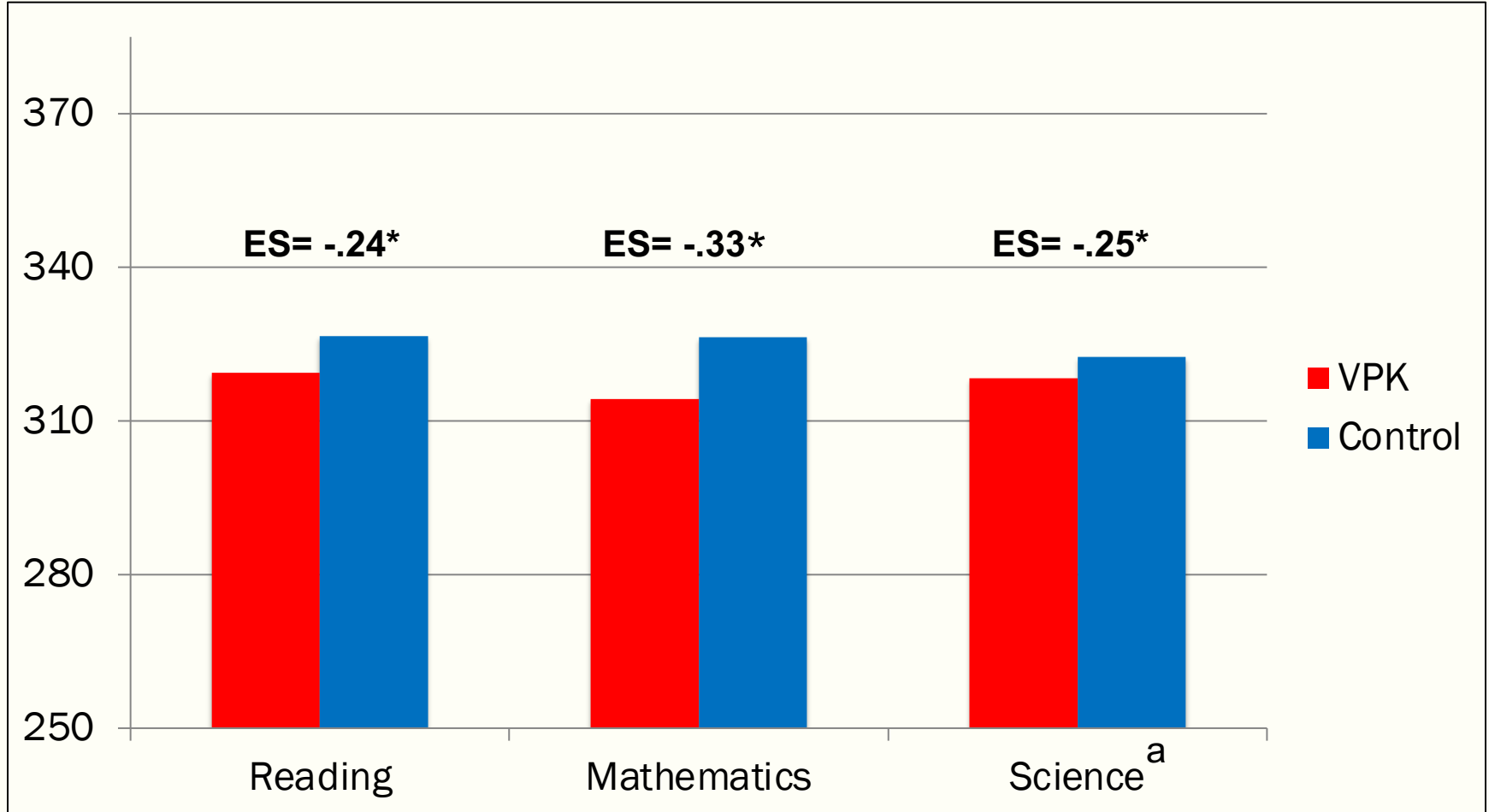


* $p < .05$



6th Grade State TNReady Scores: Full Sample

(Treatment on Treated; N=2990)

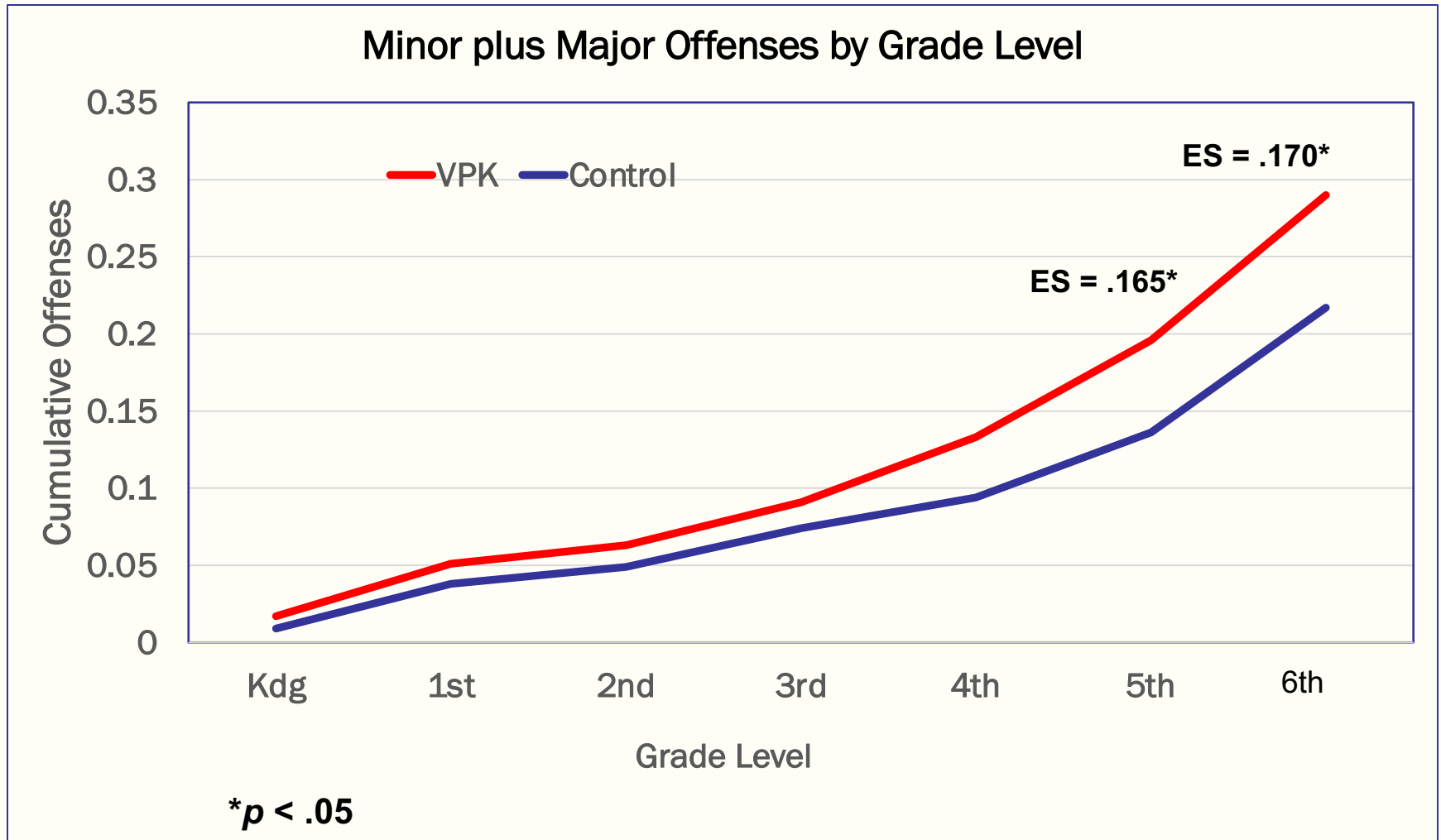


* $p < .05$

^a TCAP test; scores proportioned to TNReady scale.



Cumulative Offenses by Grade Level, Full Sample (Treatment on Treated; N=2990)





Other Outcomes

- **Grade Retention**
 - No significant difference at 6th grade
 - Non VPK children more likely retained in kindergarten
 - VPK children more likely retained in first grade
- **IEP status**
 - Beginning in kindergarten, VPK children significantly more likely to have an IEP than non VPK children
 - Difference persists through 6th grade
 - 6th grade ES = .272 ($p < .001$)



Summary

- TNVPK study remains the **only** randomized control trial of scaled up statewide prekindergarten programs
- The findings are in contrast to what was expected and what advocates promise:
 1. Achievement gap is not closed. In fact, pre-k children score significantly lower in all areas than children who did not attend
 2. Retention is not reduced by attending pre-k
 3. Unexpectedly, early introduction to formal schooling results in more referrals for IEP not fewer.
 4. Pre-k attendance results in more suspensions/expulsions particularly for school rule violations



Perhaps children do not need “school” before they go to K-12 school. Perhaps they need care.



The Path Forward

1. Attention to the kinds of academic skills being taught in pre-k
 - Constrained vs. unconstrained
 - All studies show that pre-k attendance produces immediate gains on concrete school readiness skills
 - These skills are mastered by non attenders by the end of kindergarten
 - Competencies such as working memory, attention, and language may be more important for long term school success
 - These skills require a different focus and pedagogy from the current ones



The Path Forward

2. Attention to the negative behavioral outcomes

- Many studies other than TNVPK have found negative behavioral outcomes from attending more formal care prior to school entry
- We need to talk about this.
- Perhaps the behavioral demands connected to large, same-age classes, with whole group instruction and transitions the primary experiences, do not result in the development of internal self control



Final thoughts

- States adopt policies on the basis of values
- It is critical to examine whether the implementation of the policy is achieving the desired aims
- If the policy is not achieving the desired aims, it is imperative for lawmakers to revisit the implementation but not to abandon the aims of the policy.
- Children from low income families continue to have difficulties in school with long lasting negative effects. The problem persists but the solution has not been found.



Thank you

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