

THE EFFECTS OF OKLAHOMA'S UNIVERSAL PRE-KINDERGARTEN PROGRAM ON SCHOOL READINESS

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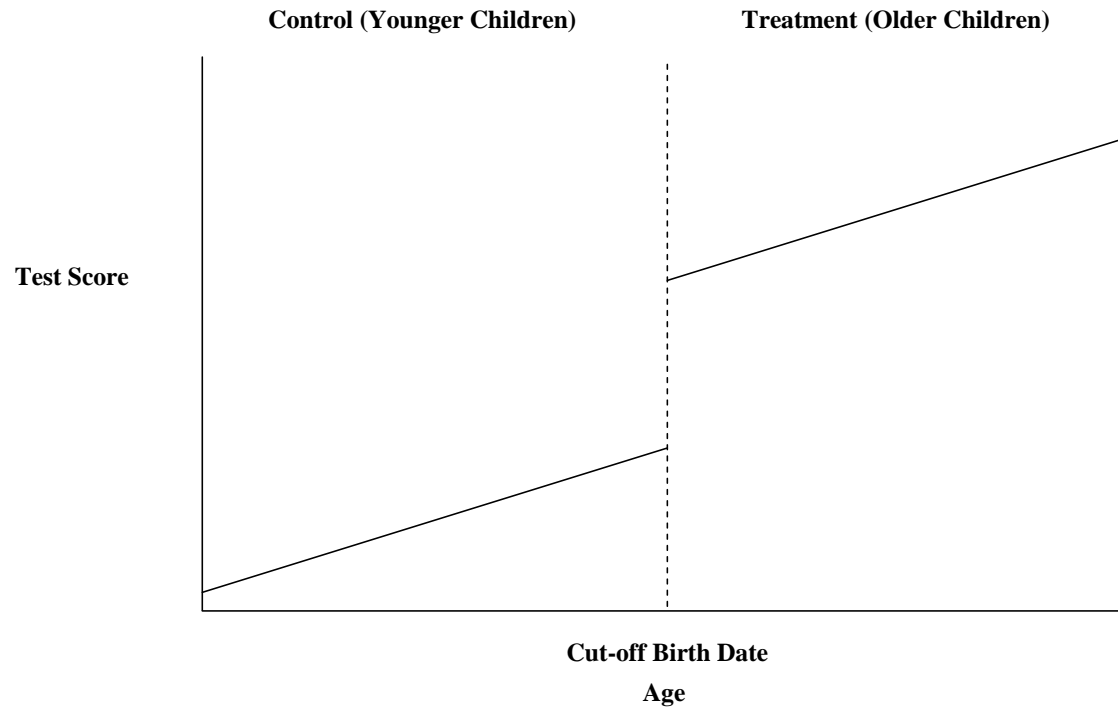
Center for Research on Children in the U.S.

(CROCUS)

Georgetown University

Regression Discontinuity Design with Effective Treatment

Figure 1



Sample Sizes

Tulsa Public Schools:

- Pre-K Entrants: 1,492
- Pre-K Alums: 1,264

Tulsa Head Start:

- Entrants: 483
- Alums: 327

Figure S1: **Preschool programs strengthen reading, writing, and math skills.** Tulsa Public Schools (TPS) Pre-K and CAP of Tulsa County Head Start, Program Impacts in Monthly Equivalents

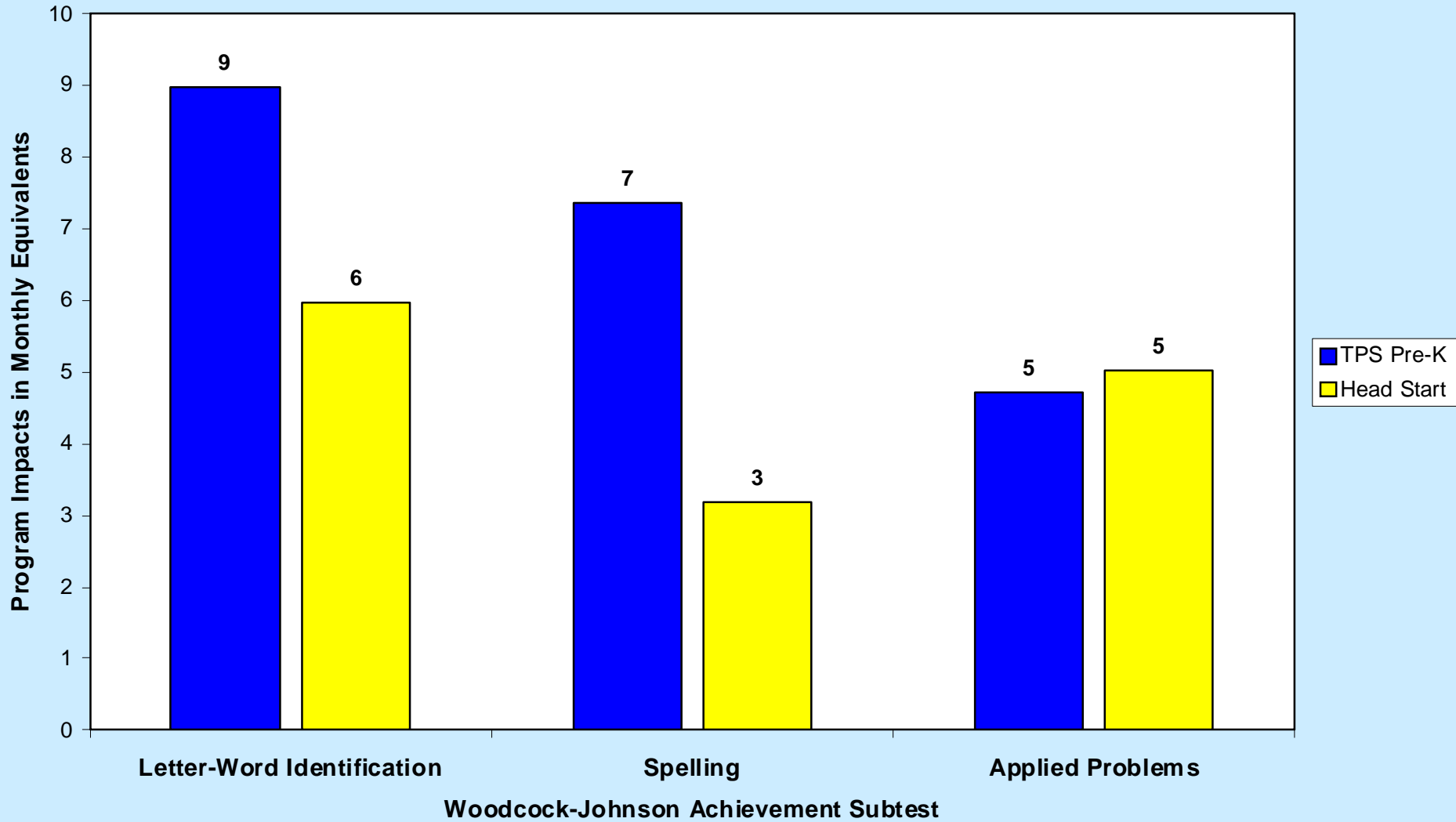


Figure S2: Differences in program impact between TPS and CAP Head Start remain after controlling for free-lunch eligibility, race/ethnicity, and full-day status. Effect sizes for Free-Lunch-Eligible, Full-Day Students by Race, Tulsa Public Schools (TPS) Pre-K and CAP of Tulsa County Head Start.

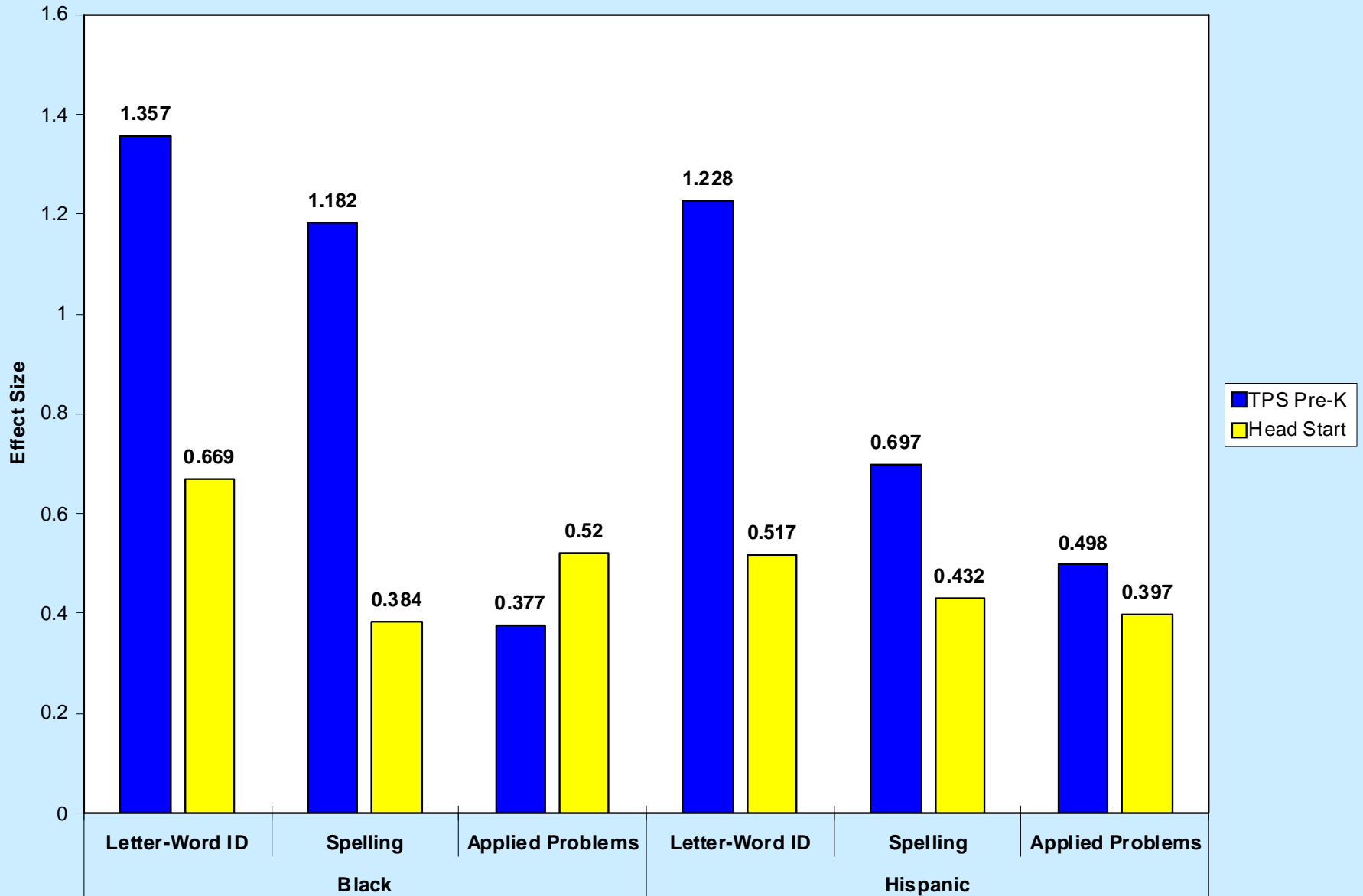


Figure S3: **Public school and Head Start teachers differ in how they spend classroom time.** Differences in classroom time allocation, Tulsa Public Schools (TPS) Pre-K and CAP of Tulsa County Head Start teachers.

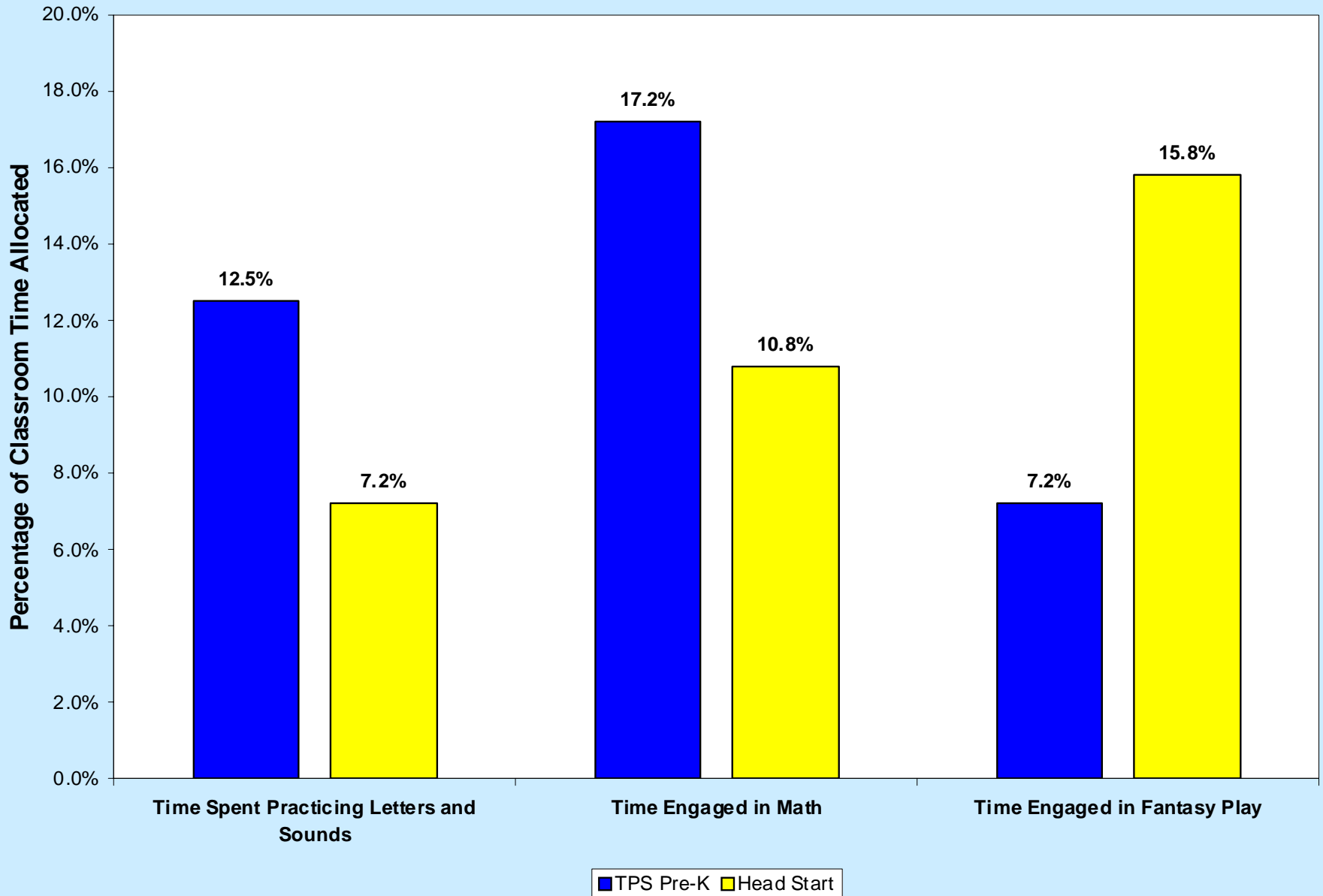
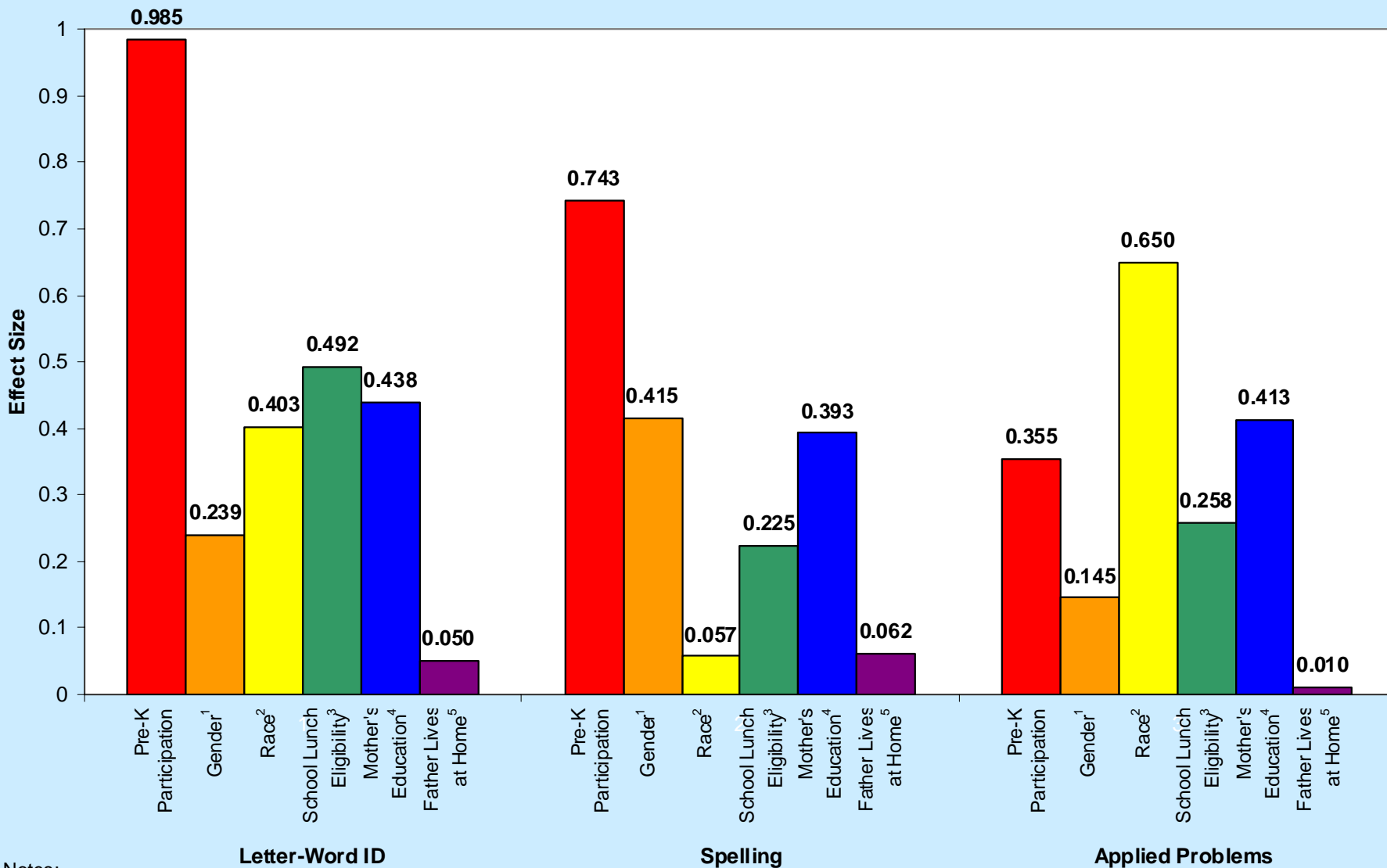


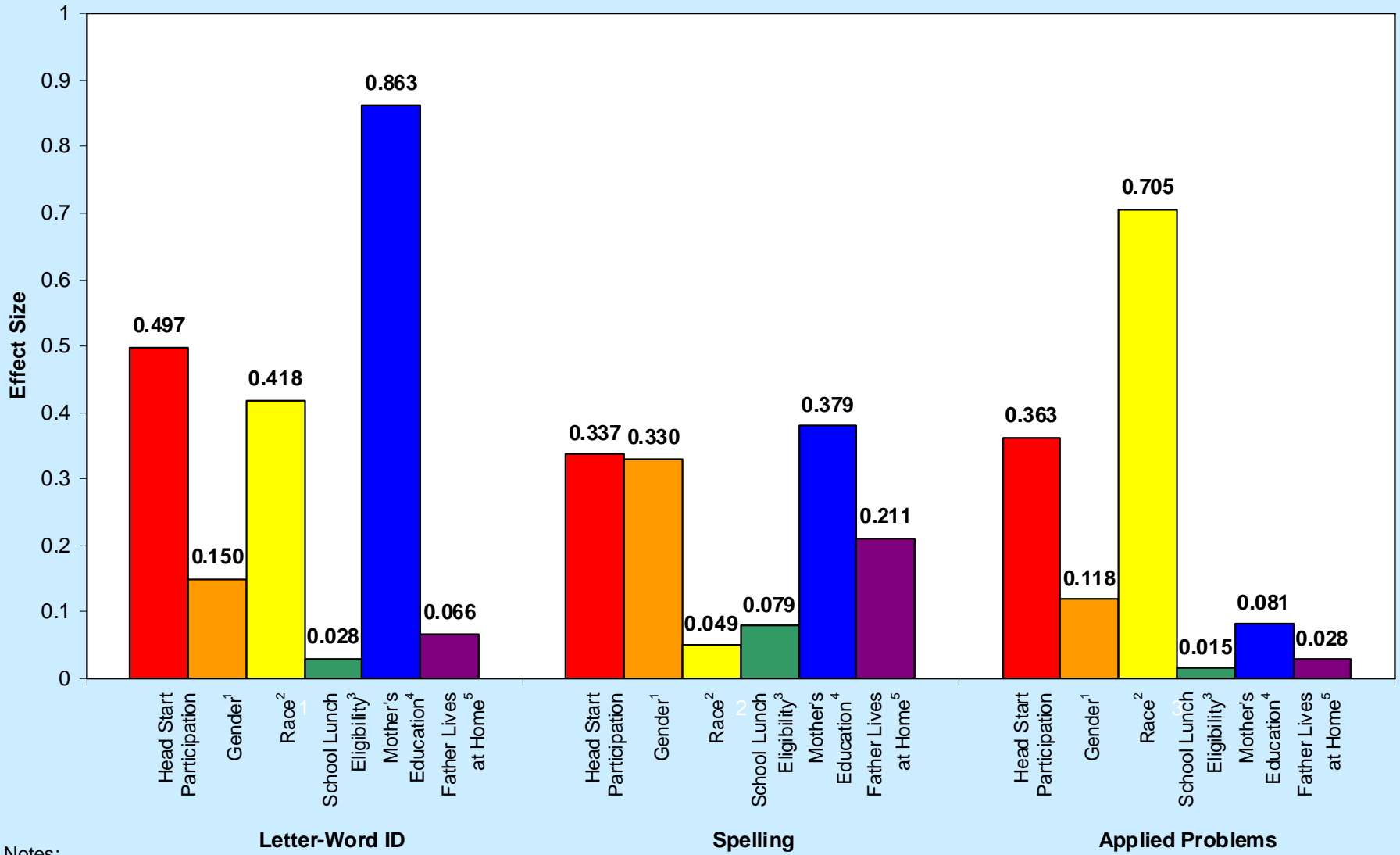
Figure S4: Participation in the Tulsa Public Schools pre-K program is a more powerful predictor of pre-reading and pre-writing scores than key demographic variables. Relative Impacts of Tulsa Public Schools (TPS) Pre-K Participation, Demographic Characteristics.



Notes:

1. Effect of female, with male as comparison category
2. Effect of Hispanic, with white as comparison category
3. Effect of free lunch eligibility, with paid lunch as comparison category
4. Effect of mother's college education, with no high school degree as comparison category
5. Effect of biological father living at home, with no as comparison category

Figure S5: Participation in the CAP of Tulsa County Head Start program is a more powerful predictor of pre-math scores than key demographic variables. Relative Impacts of CAP Head Start Participation, Demographic Characteristics.



Notes:

1. Effect of female, with male as comparison category
2. Effect of Hispanic, with white as comparison category
3. Effect of free lunch eligibility, with paid lunch as comparison category
4. Effect of mother's college education, with no high school degree as comparison category
5. Effect of biological father living at home, with no as comparison category

Comparison of Treatment Effect by Method

Method	Woodcock-Johnson Test		
	Letter-World Association	Spelling	Applied Problems
Regression discontinuity design	3.595***	2.123***	1.844***
Propensity score matching	2.646***	1.066***	1.310***
Ordinary least squares (OLS) regression	2.422***	1.044***	1.558***

*** $p < .01$

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