



Patterns of Enrollment, Migration, and Classroom Experiences Across 3- and 4-year-old Publicly Funded Preschool



GEORGETOWN UNIVERSITY



CDSP

CHILD DEVELOPMENT &
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THE TULSA SEED STUDY: SCHOOL EXPERIENCES AND EARLY DEVELOPMENT



- Started in fall 2016 with 3-year-olds
- Following through 4th grade (2023)
- Designed to answer pressing questions about **what children experience prior to Pre-k** and **sustaining the boost from Pre-k**
- Intense focus on measurement of **executive function** and **classroom features** that support its development

ENROLLMENT AND MIGRATION: RESEARCH QUESTIONS



- **Q1:** What were the patterns of enrollment migration across the 3- and 4-year old years in the Tulsa SEED sample?
- **Q2:** What predicts exiting Head Start for Tulsa Public Schools after Y1?

WHY TULSA? UNIQUE FEATURES OF STUDY CONTEXT

- Large and diverse urban population
- Universal, high-penetration (~75%) year-old pre-k since 1998
- Slots available for 18% of low-income year-old children

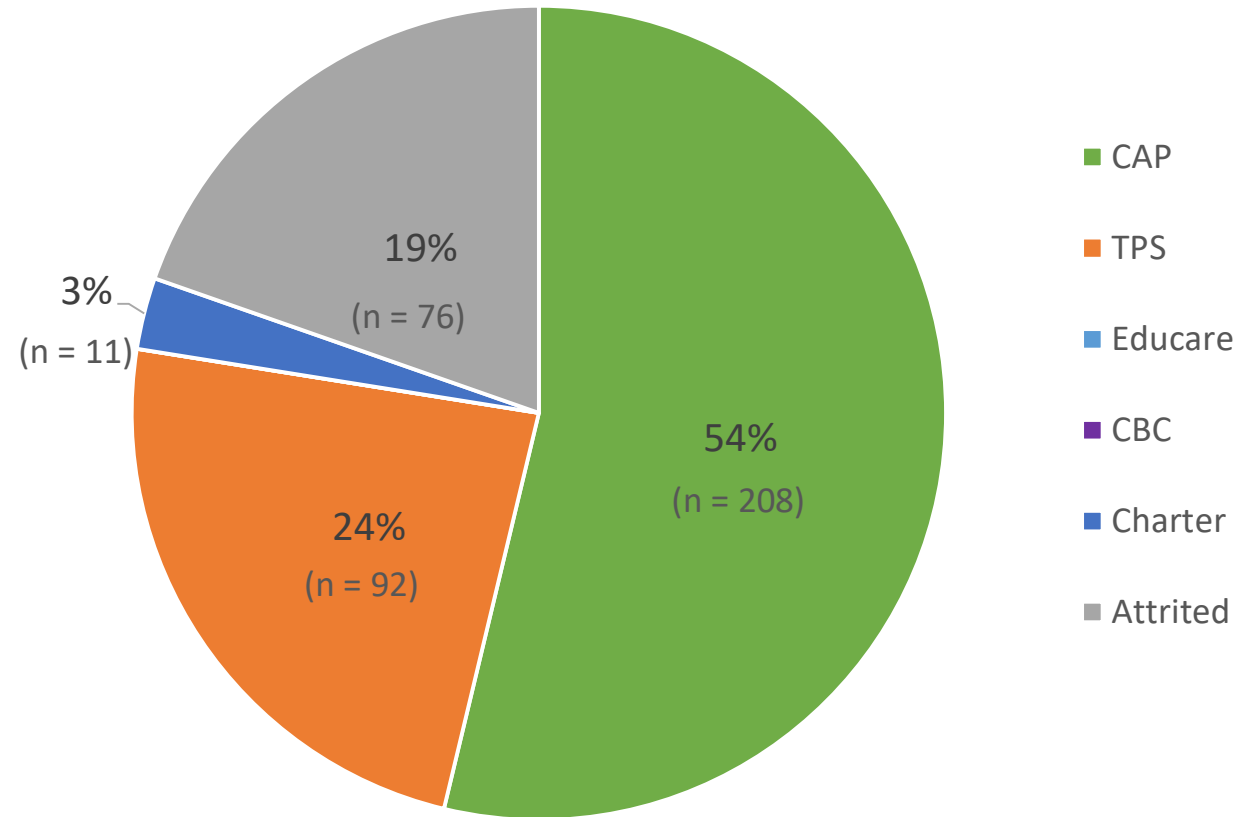
4-

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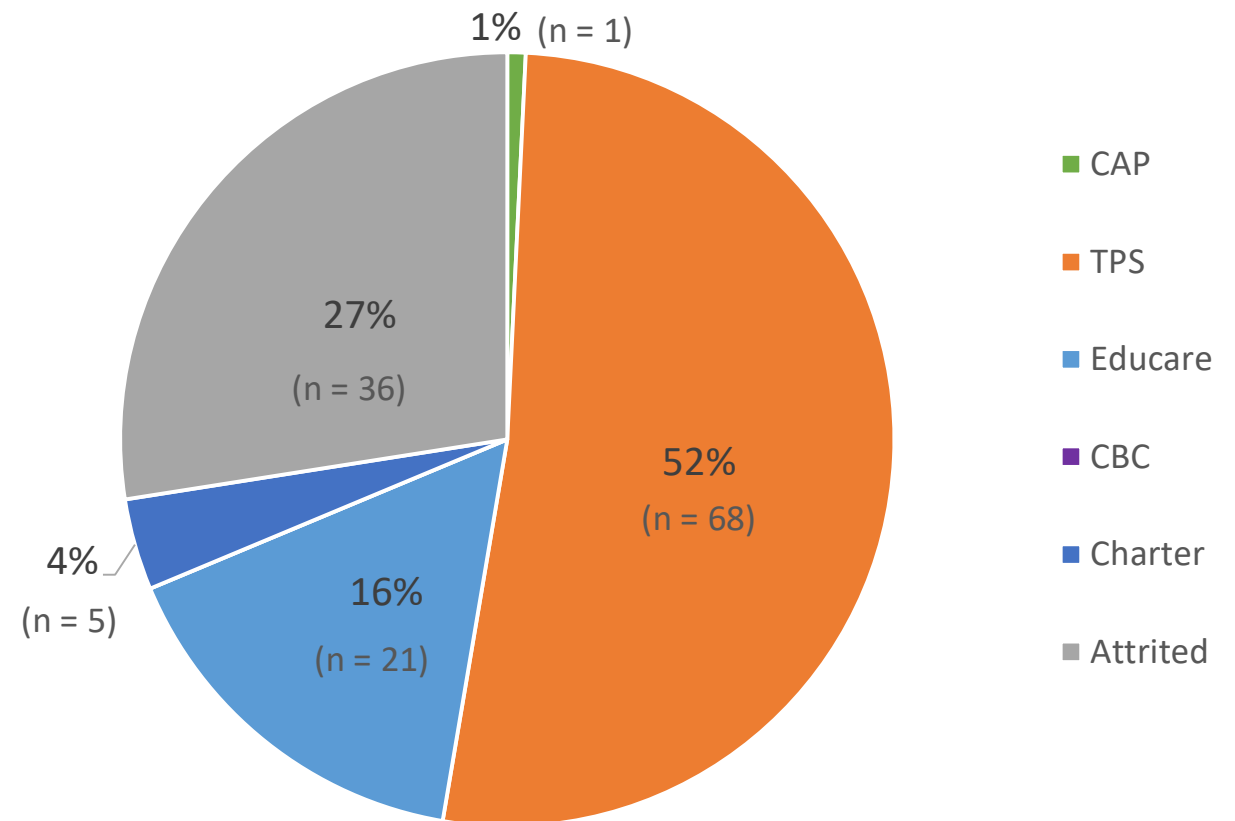
RESEARCH Q1: MIGRATION PATTERNS – WHERE DID THEY GO?

CAP Y1 n = 387



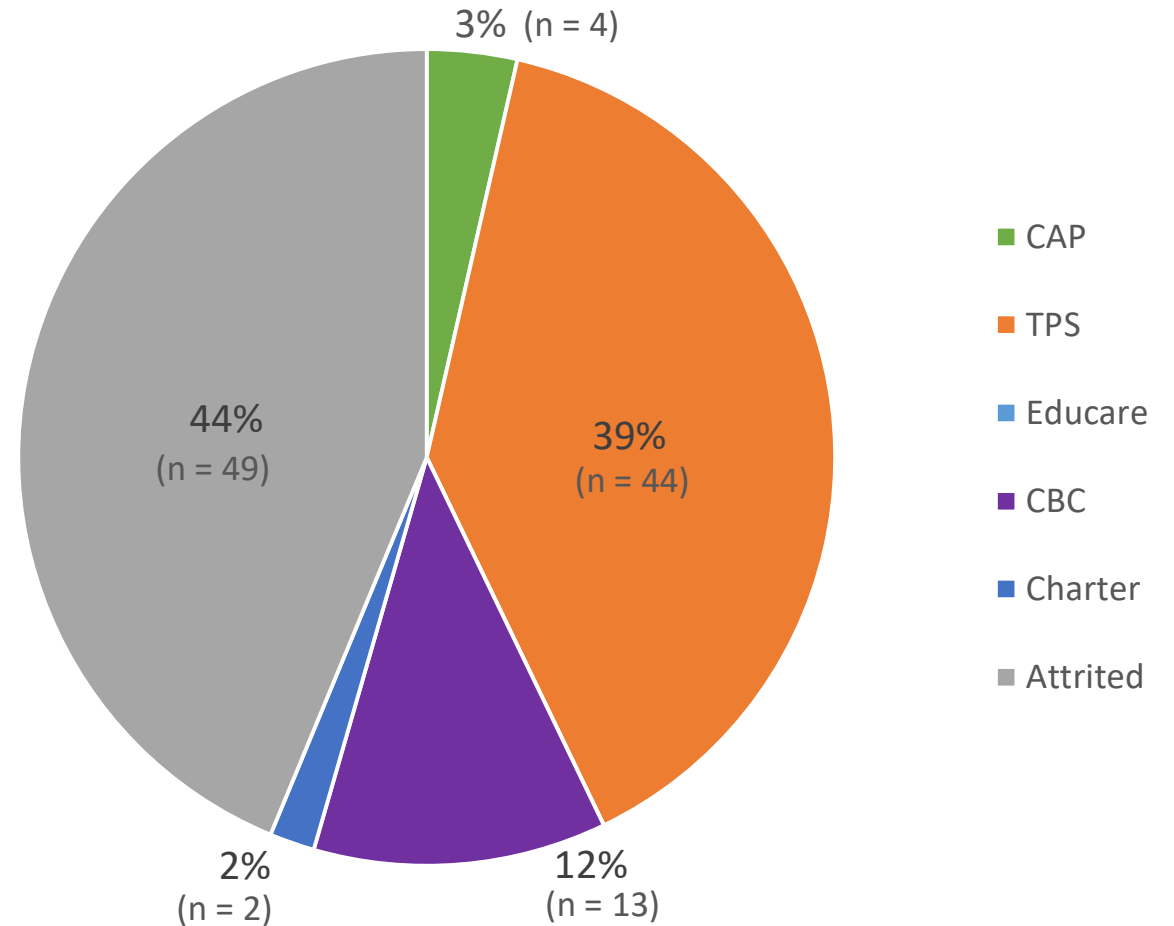
RESEARCH Q1: MIGRATION PATTERNS – WHERE DID THEY GO?

EducareY1 n = 131



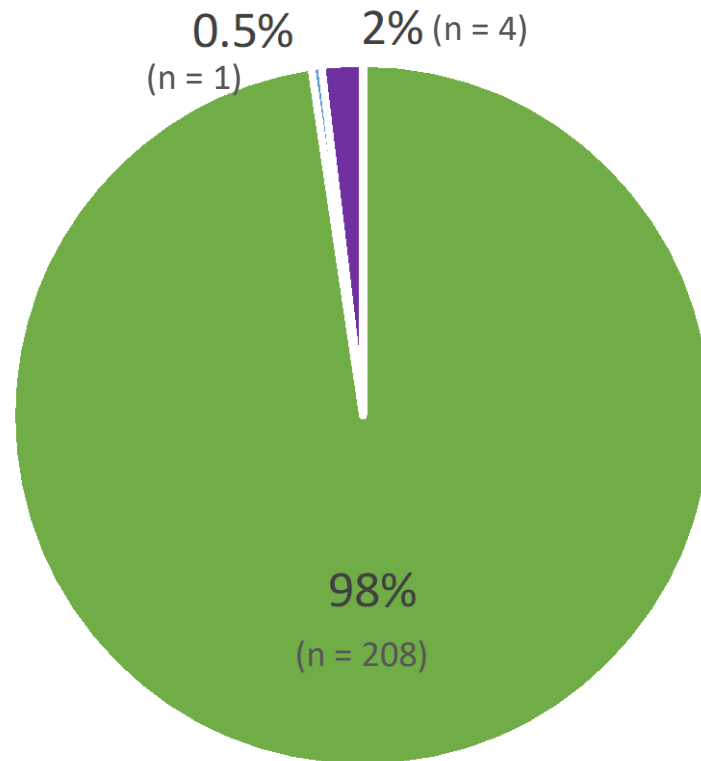
RESEARCH Q1: MIGRATION PATTERNS – WHERE DID THEY GO?

CBC Y1 n = 113

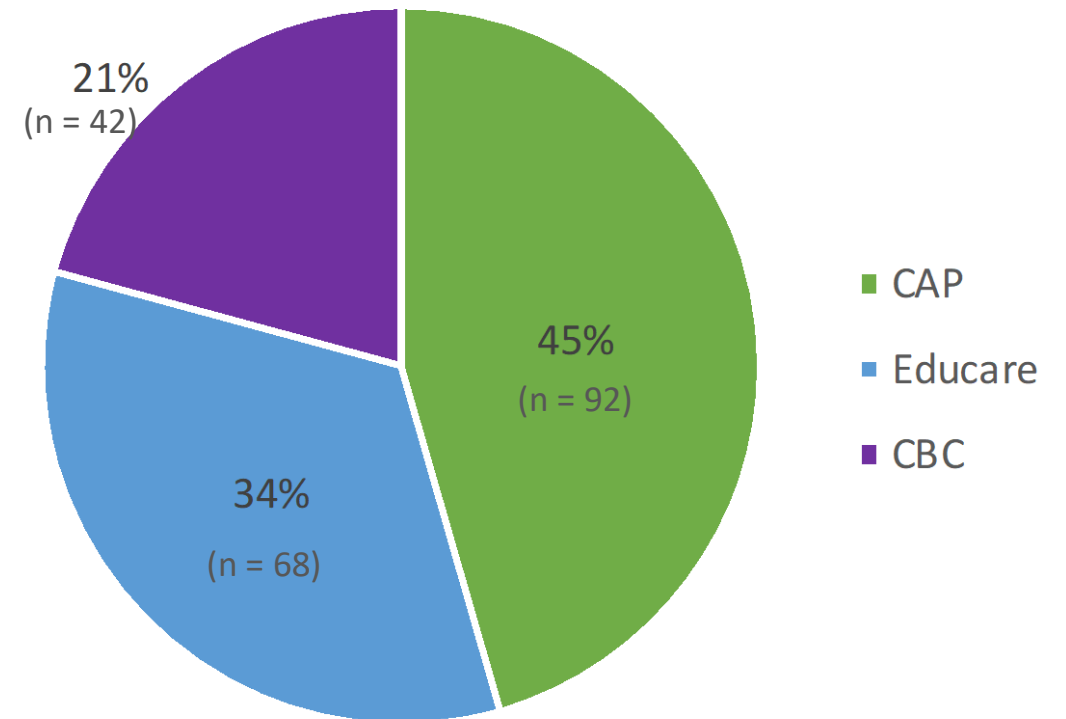


RESEARCH Q1: MIGRATION PATTERNS – WHERE DID THEY COME FROM?

CAP (N = 213)



TPS (N = 202)



- CAP
- Educare
- CBC

RESEARCH Q2: PREDICTORS OF EXITING HEAD START FOR TPS (ANALYTIC MODEL)

- Logistic regression model (n = 132)
 - DV = 0 if remained in CAP (n= 109)
 - DV = 1 if switched to TPS (n = 23)
- Robust standard errors controlling for clustering within classrooms (n = 22)

$$E(\textit{leaving CAP for TPS}) = \alpha + \beta(\textit{cognitive skills in the spring}) + \beta(\textit{behavioral skills in the spring}) + \beta(\textit{classrooms processes}) + \beta(\textit{parental values}) + \beta(\textit{child demographics}) + e$$

DEMOGRAPHICS

The following demographic information came from a survey completed by the parent in the spring of the three-year-old year.

1. Parent Education

- Less than high school (n = 46)
- High School (n = 41)
- More than high school (n = 25)

2. Child Race

- Black (n = 35)
- White (n = 43)
- Hispanic (n = 37)
- Other (n = 17)

3. Gender

- Male (n = 73)
- Female (n = 59)

DEMOGRAPHIC DESCRIPTIVES AND CHI-SQUARE TESTS

Parent Education (chi2 = 2.48, ns)

More Than High School



High School



No High School



Gender (chi2 = 0.63, ns)

Male



Female



Race (chi2 = 2.52, ns)

Other Race



Hispanic



Black



White



0.00

0.10

0.20

0.30

0.40

0.50

0.60

N (Proportion)

■ Left for TPS

■ Stayed in Cap

CHILD OUTCOMES

The following child assessment data were collected in the spring of the three-year-old year:

Cognitive Skills

Woodcock-Johnson Tests of Achievement

1. Applied Problems Subtest (math)
2. Letter-word Identification Subtest

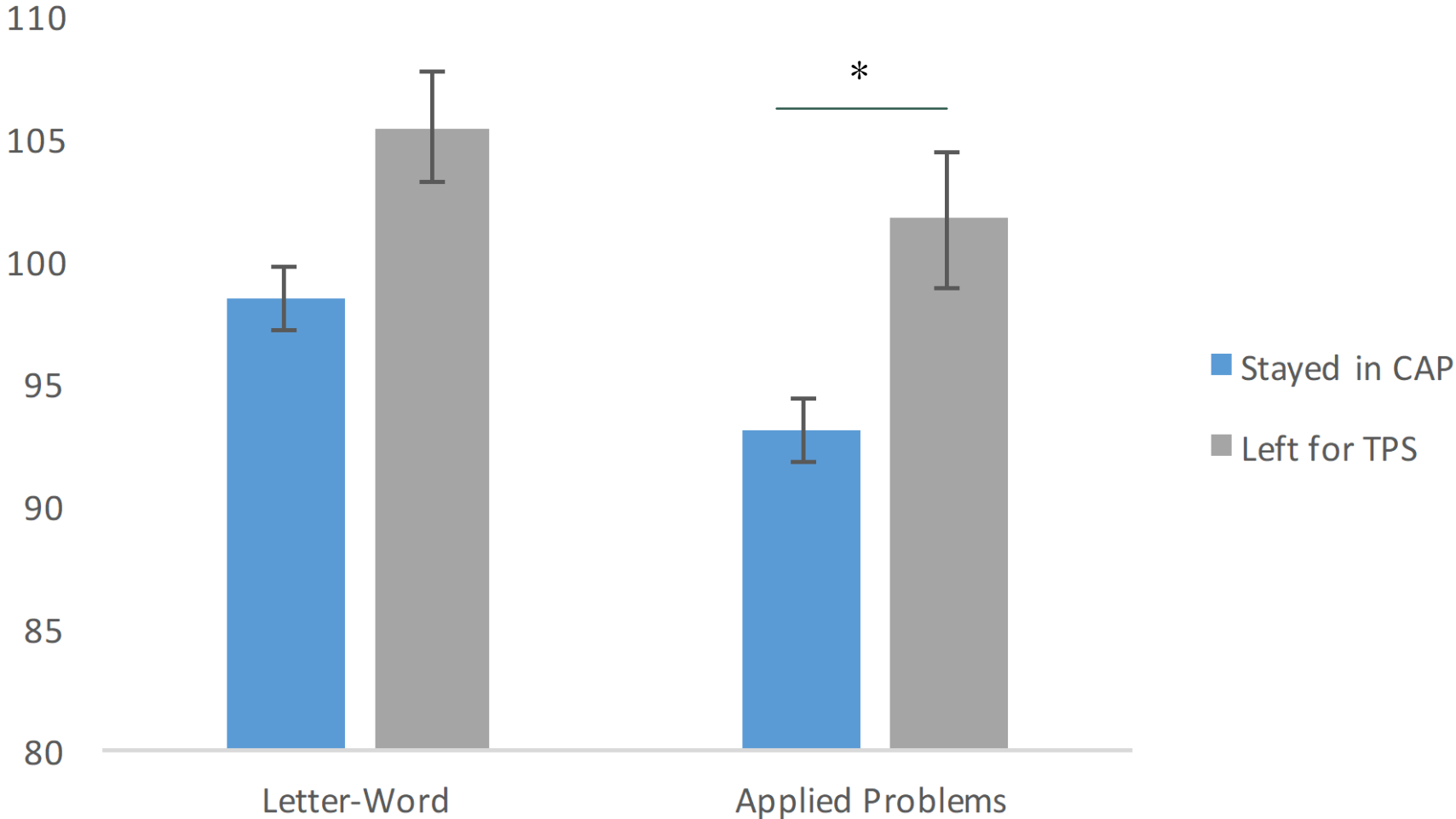
Behavioral Skills

Teacher Observation of Classroom Adaptation (TOCA)

1. Concentration Problems Subscale, $\alpha = .95$
2. Behavior Problems Subscale, $\alpha = .94$
3. Prosocial Behavior Subscale, $\alpha = .88$

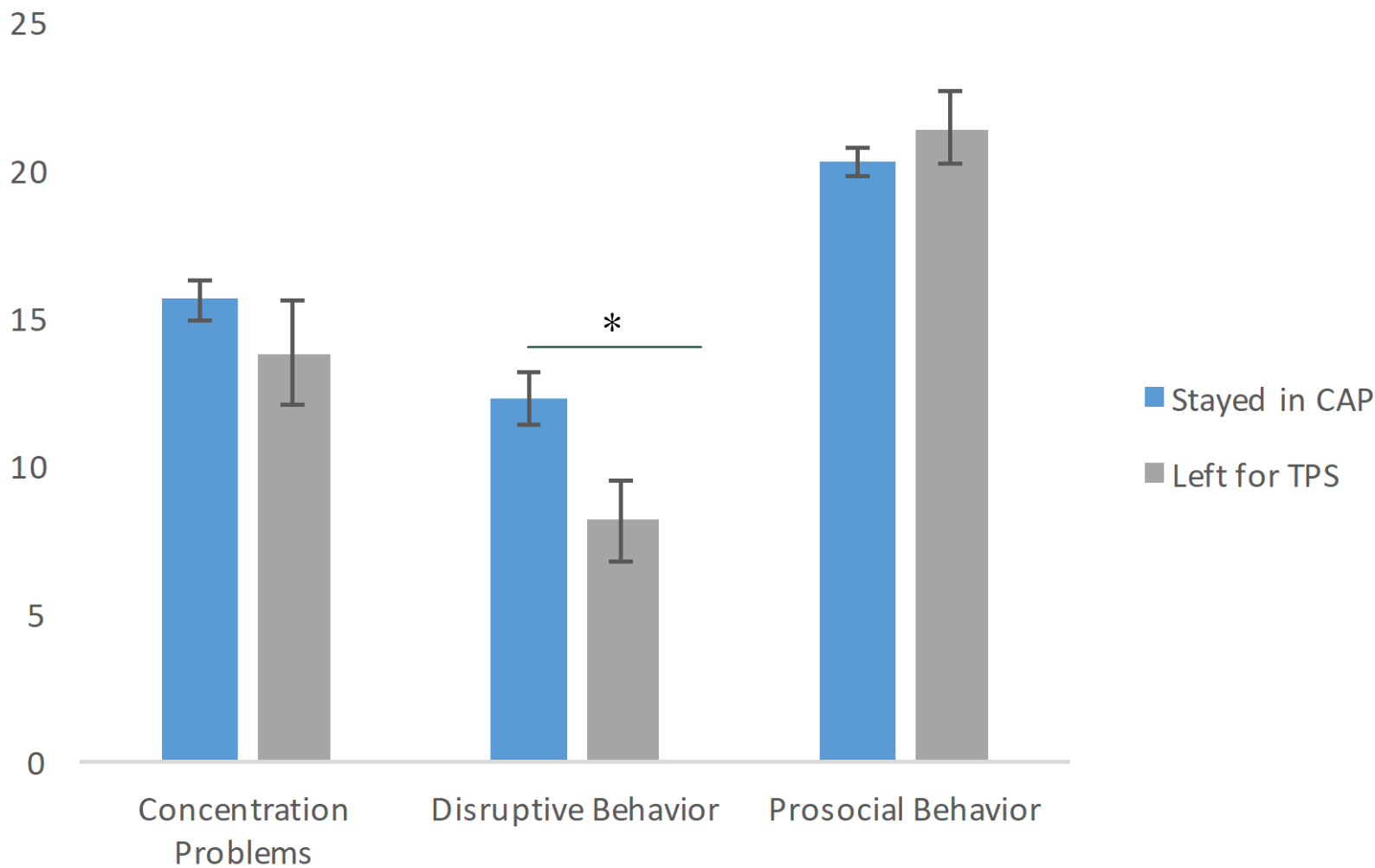
COGNITIVE DESCRIPTIVES AND T-TESTS

Woodcock-Johnson Tests of Achievement



BEHAVIORAL DESCRIPTIVES AND T-TESTS

Teacher Observation of Classroom Adaptation



CLASSROOM PROCESSES

The following classroom observations were collected in the spring of the three-year-old year:

Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA)

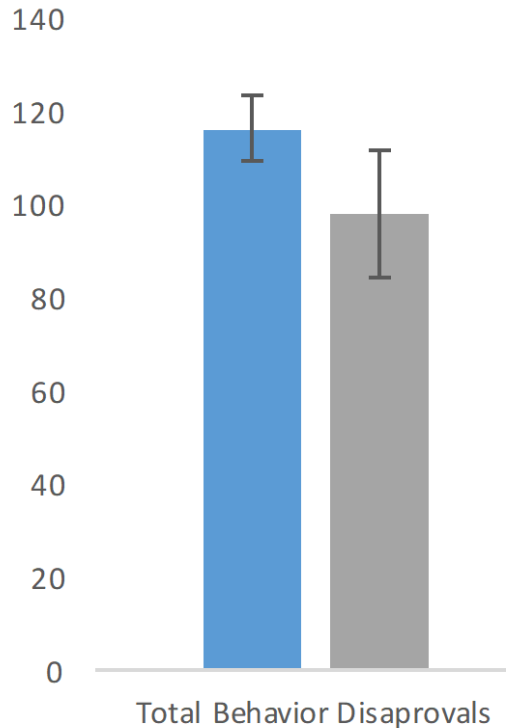
1. Supports for English Language Acquisition, $\alpha = .84$
2. Supports for Home language, $\alpha = .81$

The Narrative Record (Farran et al.)

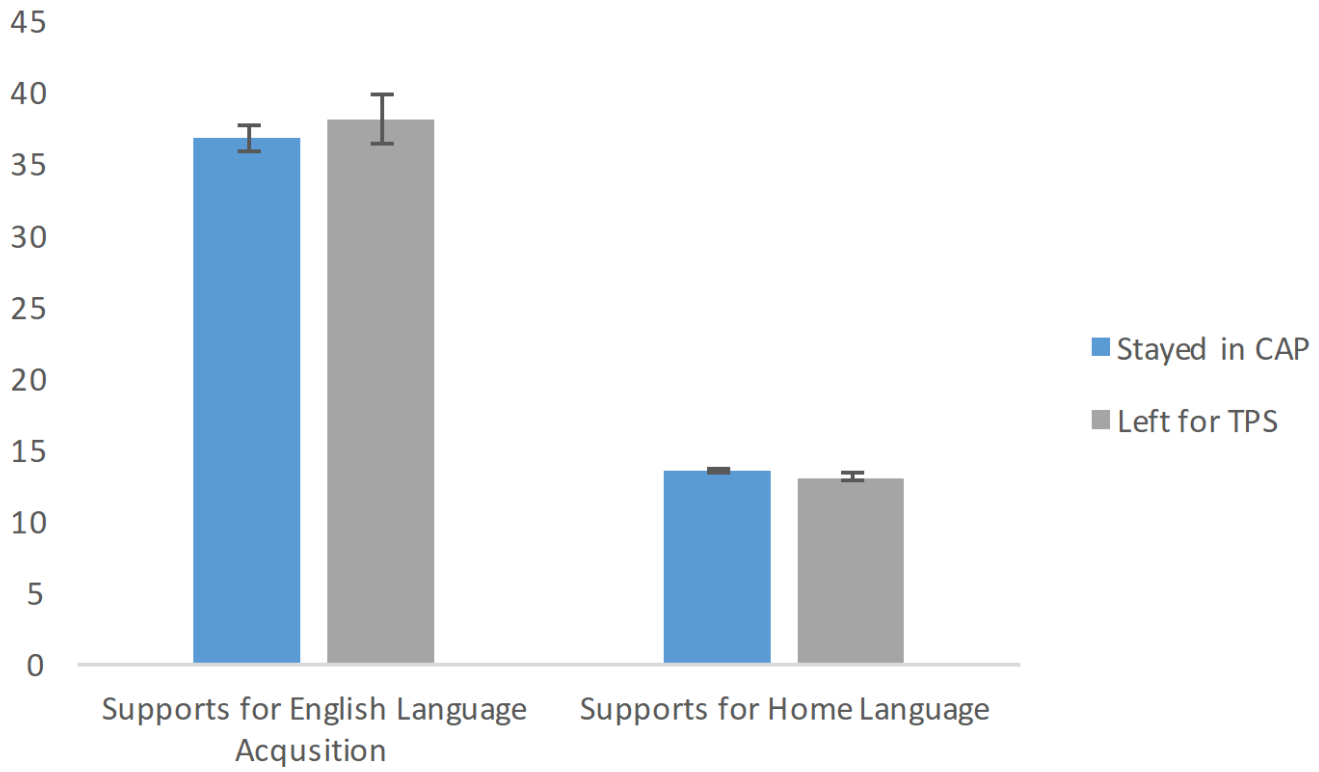
1. Total number of behavior disapprovals

CLASSROOM PROCESSES DESCRIPTIVES AND T-TESTS

Narrative Record



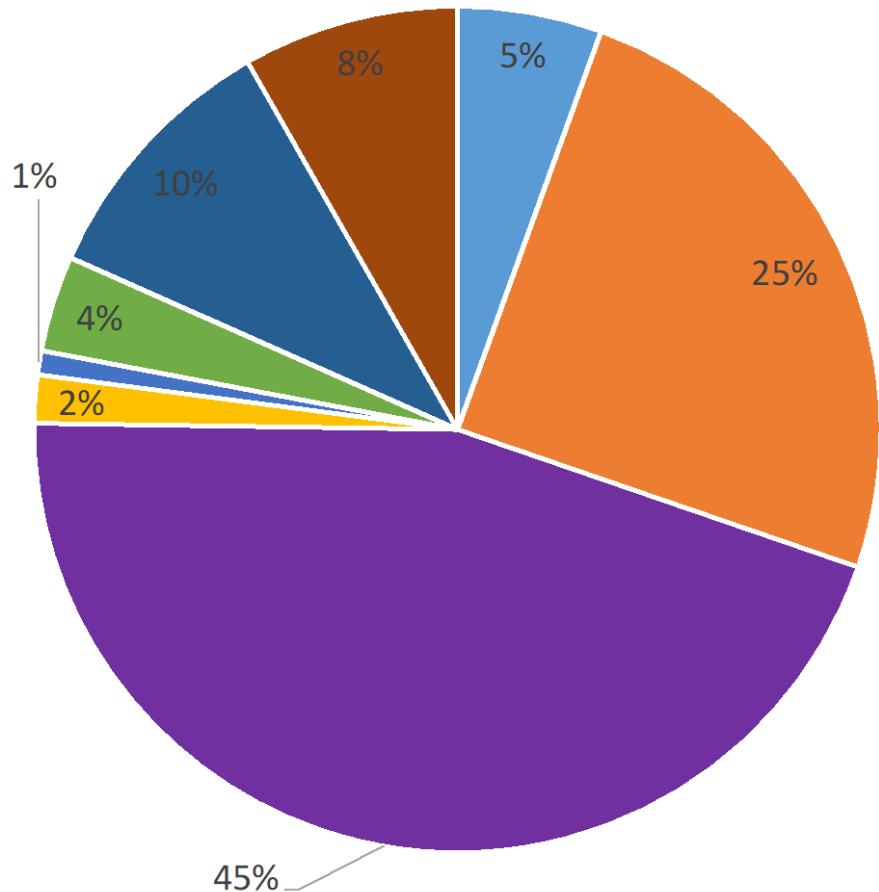
Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA)



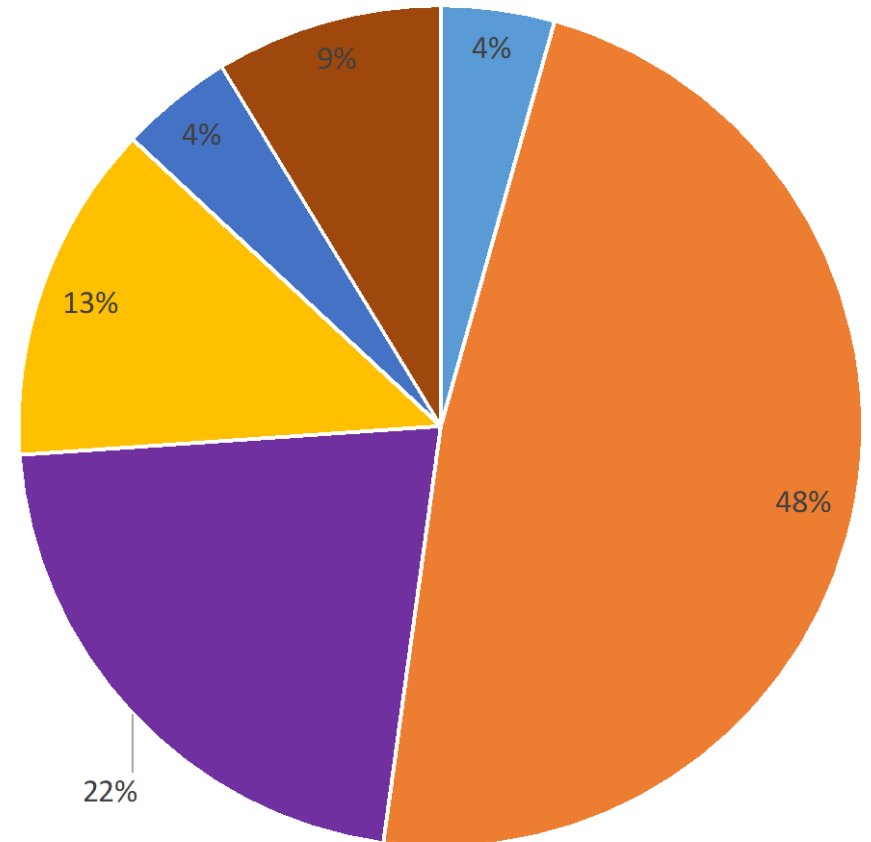
PARENTAL VALUES

Information on why parents chose a particular ECE center was collected through a survey sent home to parents in the spring of the 4-year-old year:

CAP (N = 109)

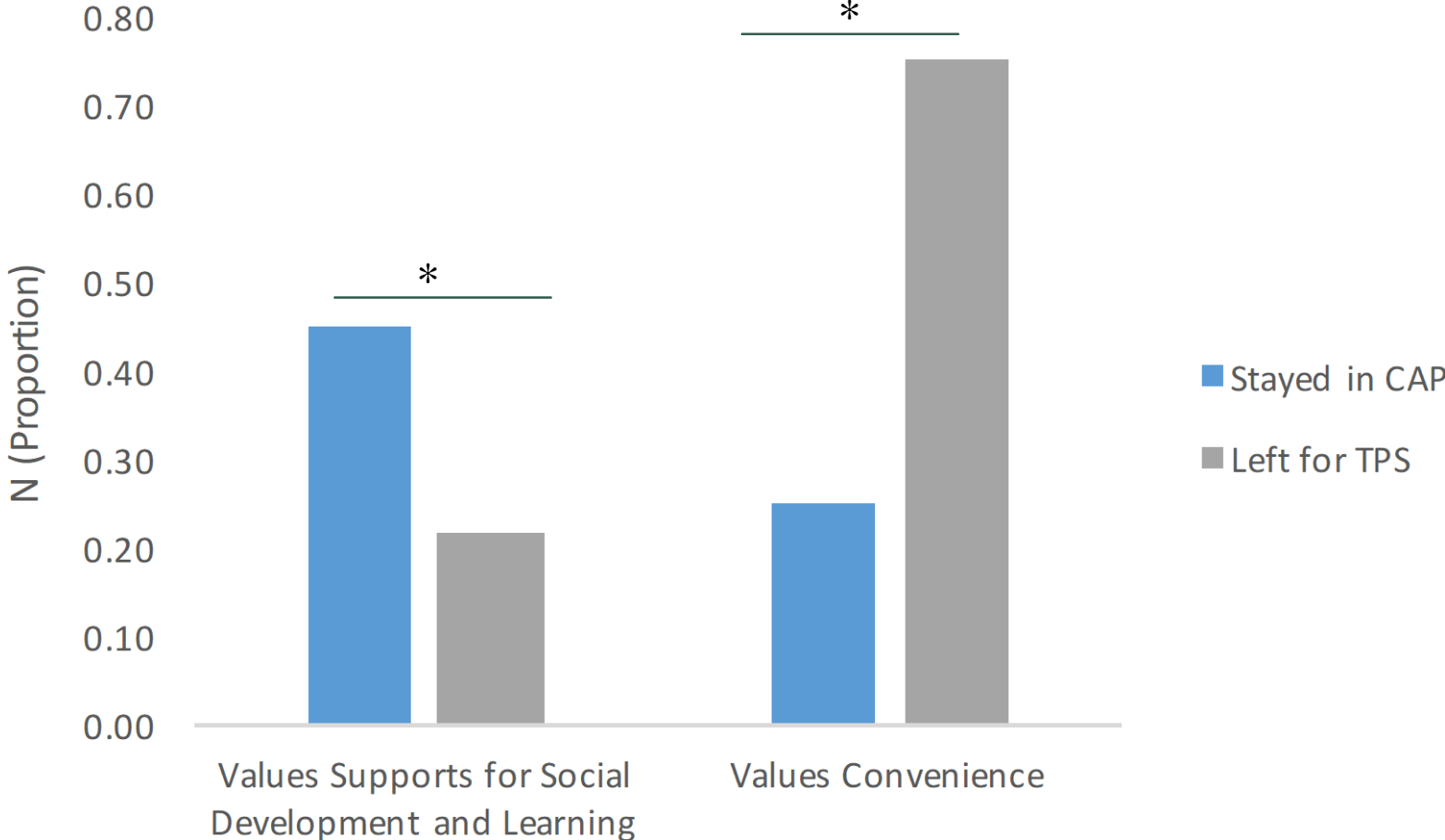


TPS (N = 23)

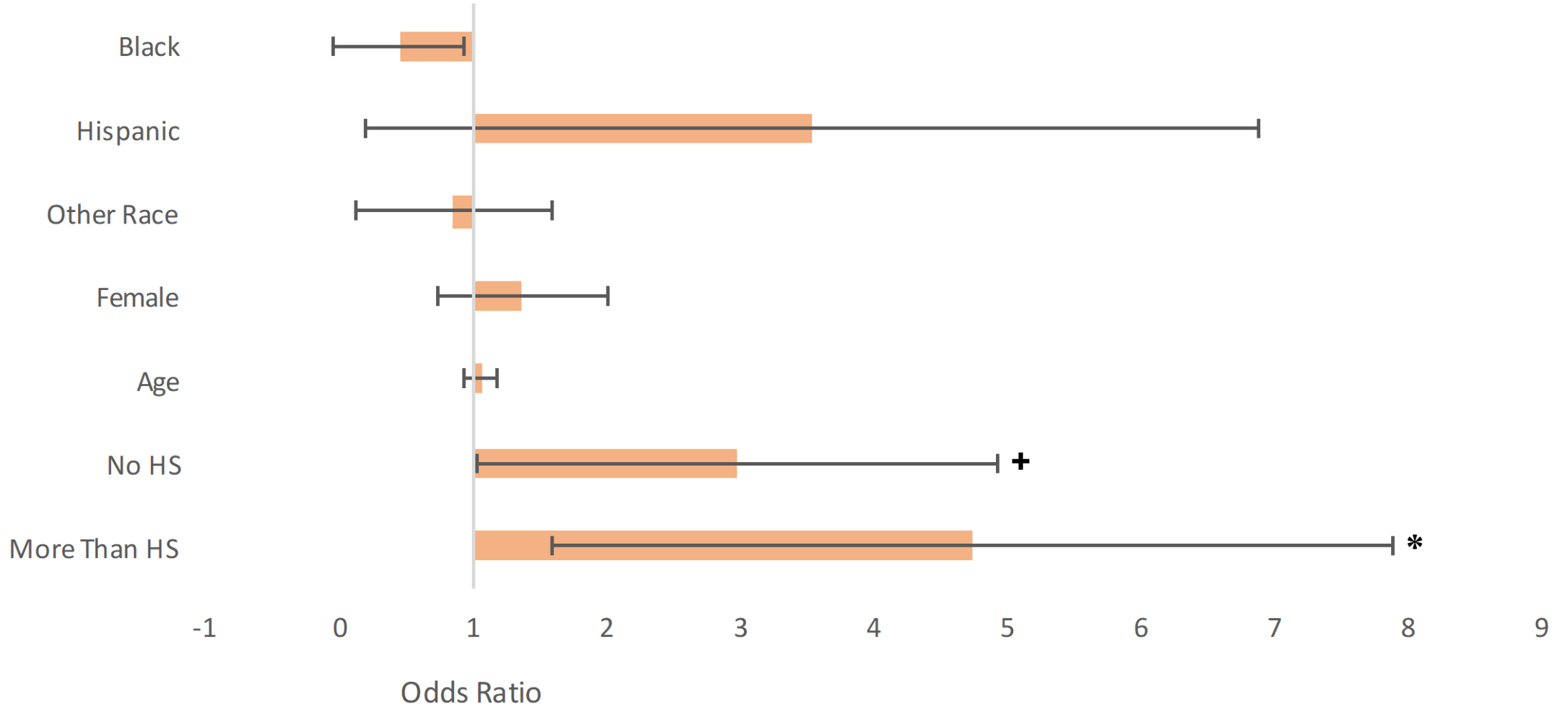


- It was the only program that had room for my child
- Convenience
- It offered the strongest support for my child's social development and learning
- It offered the strongest support for my family's culture, language and values
- Had room for all of my children who need child care
- Just had the 'best feeling' about it
- A friend recommended it strongly
- Other

PARENTAL VALUES DESCRIPTIVES AND CHI-SQUARE

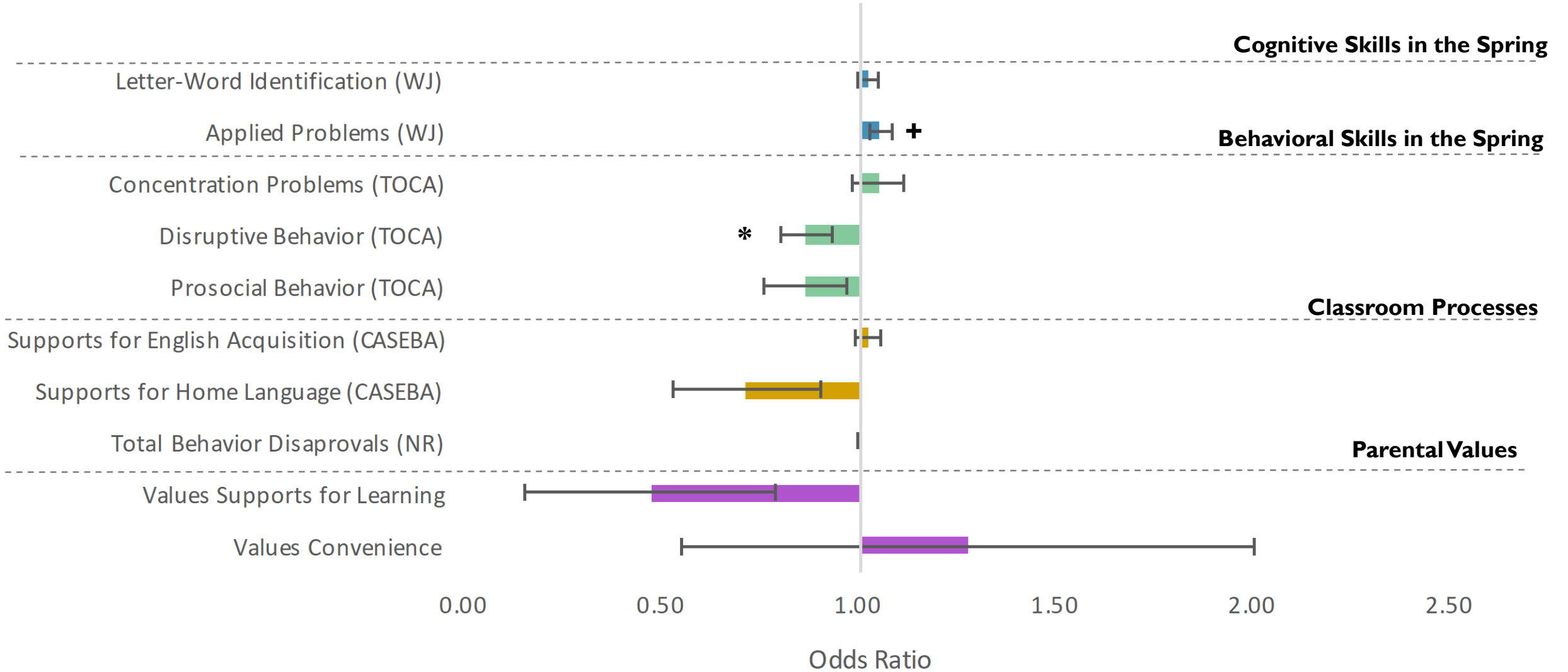


LOGISTIC REGRESSION RESULTS: DEMOGRAPHICS



N = 132
Pseudo R2 = 0.24

LOGISTIC REGRESSION RESULTS



Pseudo R² = 0.24

CONCLUSIONS

➤ **Research Question #1**

- HS retains about half of its three year-olds
- TPS pre-K has a much more diverse group of children in terms of prior ECE experience

➤ **Research Question #2**

- In terms of demographics, only parent education seems to matter among variables included.
- Kids who display higher math scores are more likely to leave for TPS.
- Kids who display more behavior problems are more likely to stay in CAP.
- Parents who value supports for social development and learning are more likely to stay in CAP.
- Parents who value convenience are more likely to leave for TPS.

LIMITATIONS

- Not designed as a study to examine parent choice of care arrangements
 - Did not collect on key variables such as:
 - whether sibling in TPS elementary school
 - maternal employment intensity and schedule,
 - role of social networks
- Missing data
- Unable to look at patterns of migration for Educare and CBC kids.
- Only examined primary/observed ECE settings

IMPLICATIONS AND NEXT STEPS

- Implications for teachers in HS vs. TPS 4-year old classrooms of apparent sorting and mix of children
- Implications for parent selection processes – searching for “best” educational experiences for 4-year olds?
- Implications of what is NOT predictive of migration
- Multiple imputation to address missing data
- Associations of 3-4 year old care patterns and kindergarten readiness

Tulsa SEED Study

STUDY OF SCHOOL EXPERIENCES AND EARLY DEVELOPMENT
GEORGETOWN UNIVERSITY & UNIVERSITY OF OKLAHOMA-TULSA

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The Tulsa SEED Study Team is led by PIs Drs. Anna Johnson and Deborah Phillips at Georgetown University, Dr. Diane Horm at University of Oklahoma-Tulsa, and Dr. Gigi Luk at McGill University. The Team also includes: Sherri Castle, April Dericks, Jane Hutchison, Dr. Anne Martin, Anne Partika, and Owen Schochet.

