

Baltimore City Public Schools: Assessing Kindergarten Readiness

Matt Park & Daphne Tang


A dark blue, diagonal graphic element that starts from the bottom left corner and extends towards the top right, creating a sense of movement and depth.

Background

- Discrepancies in kindergarten readiness influence academic success
- Personal interests from Johns Hopkins Tutorial Project

Business Question:

How should Baltimore City allocate resources to improve kindergarten readiness for its public schools?

A dark blue diagonal gradient bar that starts from the bottom left and extends towards the top right, covering the lower half of the slide.

Data

Dataset:

- Baltimore City Public Schools Kindergarten Readiness Assessment

Why We Chose It:

- Statewide data, exhaustive, and standardized

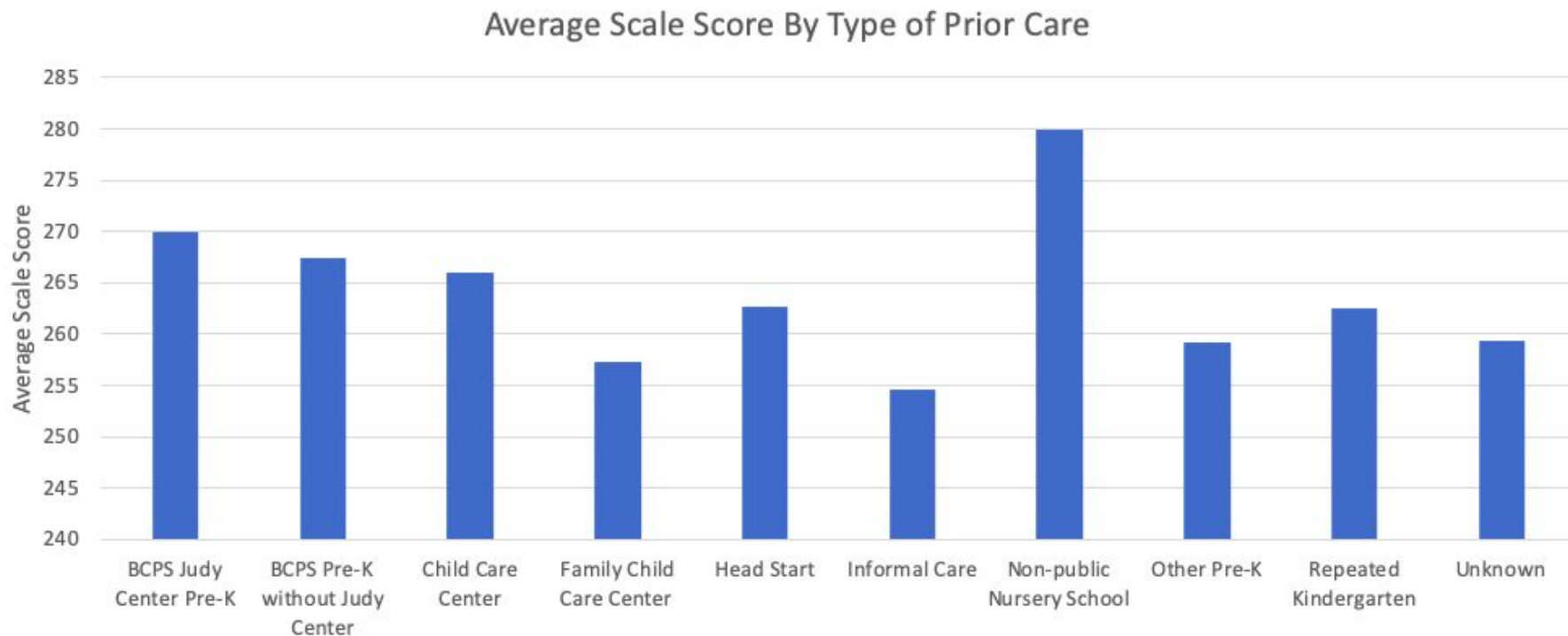
Key Variables:

- Test Takers With Overall Score
- Average Scale Score
- Average Language and Literacy Score, Average Math Score, Average Physical Development Score, Average Social Foundations Score
- Percent Emerging Readiness, Percent Approaching Readiness, Percent Demonstrating Readiness
- All students
- Economic Disadvantaged
- English Learners
- Gender
- Race
- Prior Care

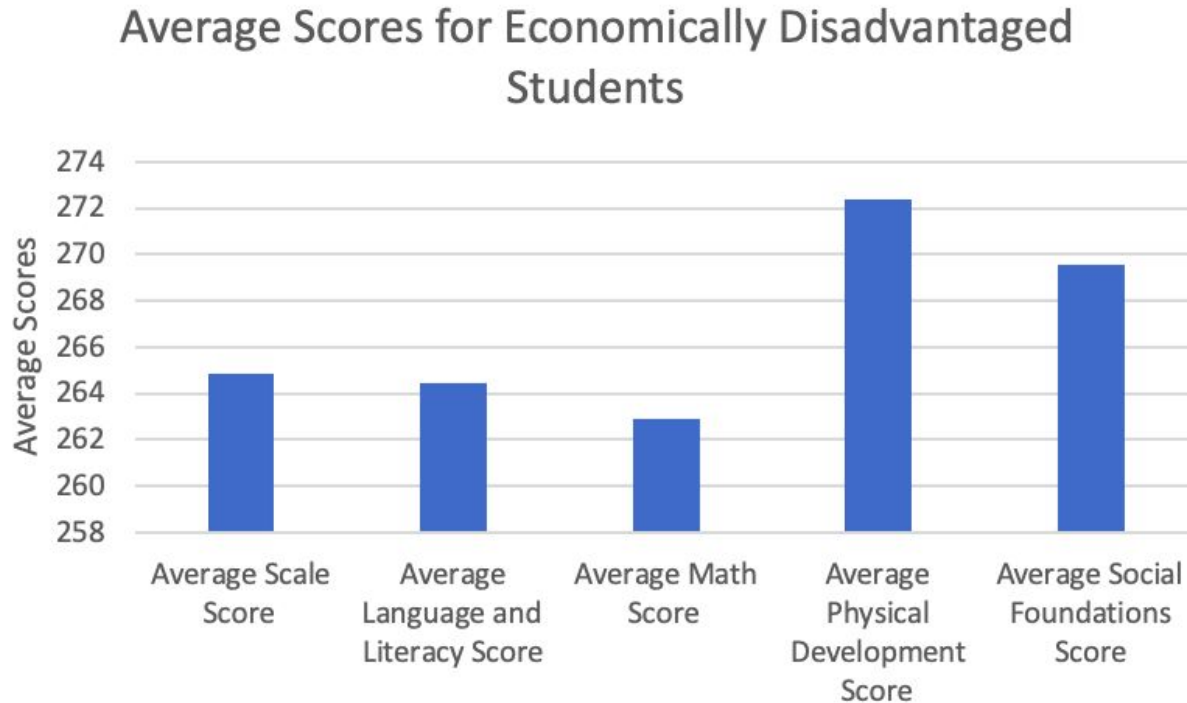
Data Questions

1. How prepared are kindergarten students who enter Baltimore City Public Schools in math, language and literacy, physical development, and social foundations? How do results differ from students who are economically disadvantaged, non-native English speakers, and have different types of prior care?
2. How can we group Baltimore City Schools based on the readiness of their kindergarten students?

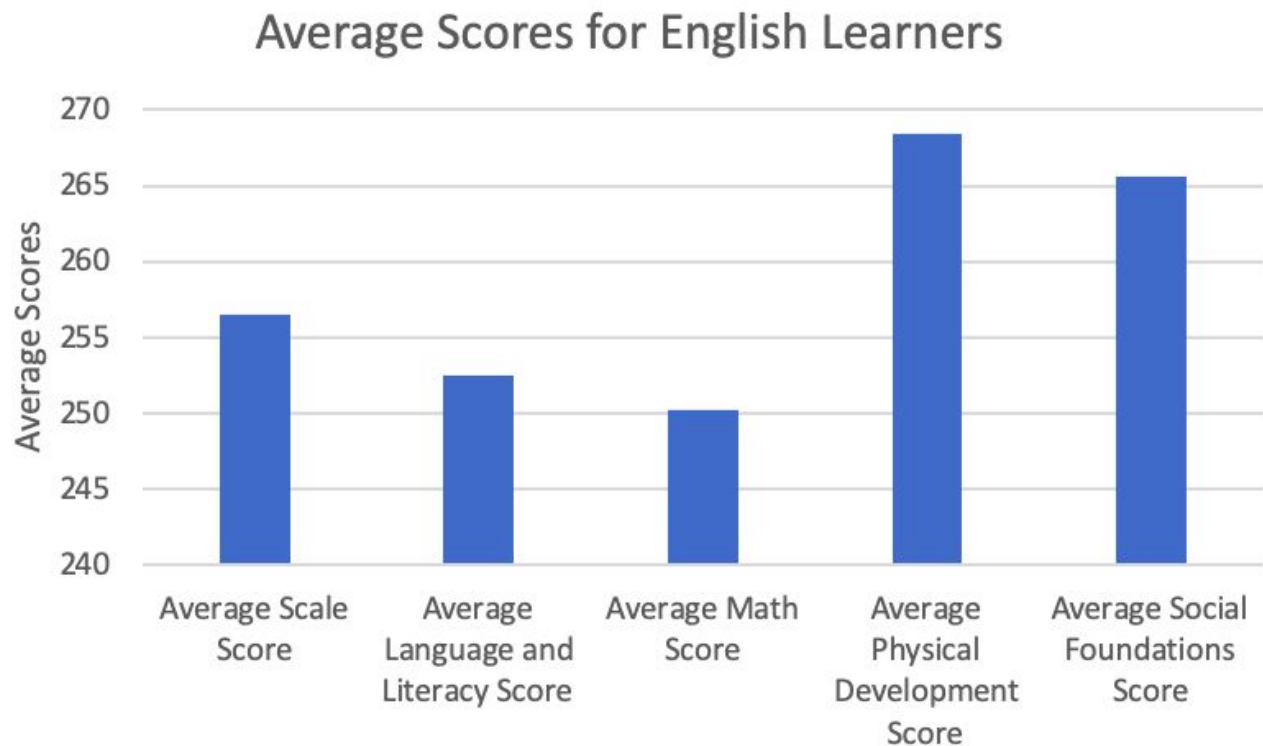
Pivot Tables Graph: Scores By Prior Care



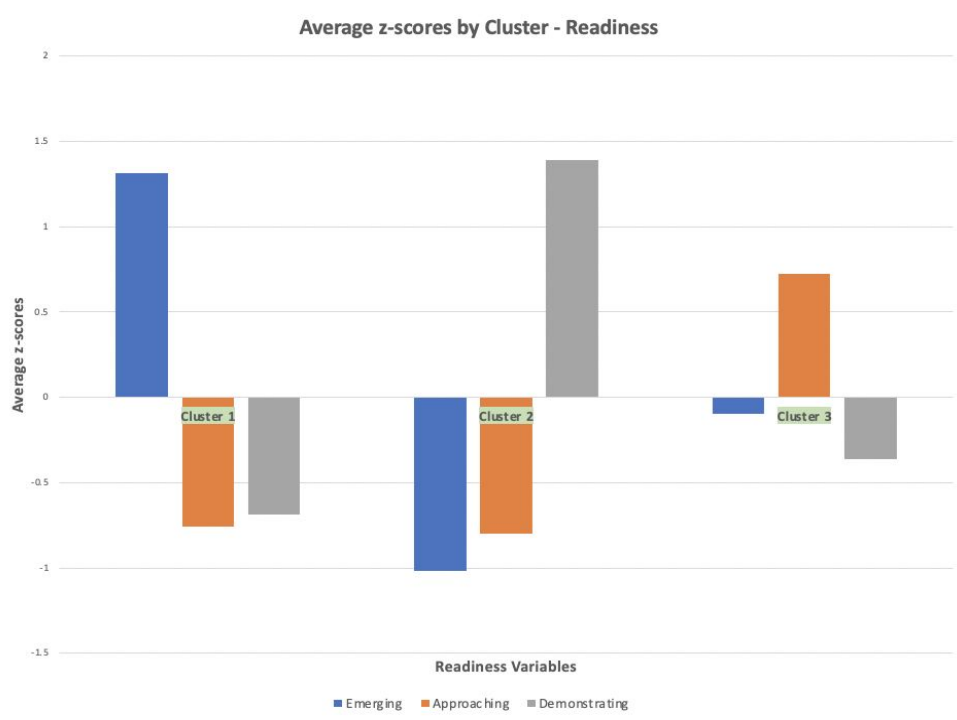
Pivot Tables Graph: Scores For Economically Disadvantaged Students



Pivot Tables Graph: Scores for English Learners



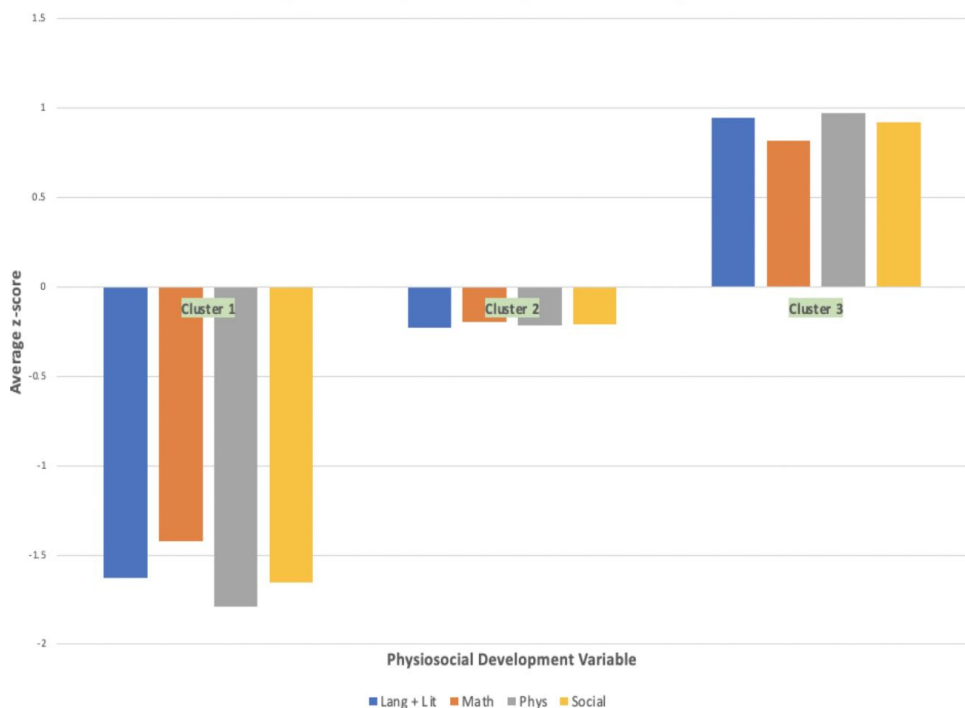
Cluster Data Analysis and Implications



- **Cluster 1 "Low Readiness" (Count: 26)**
 - Anchored to Westport Academy
 - High in emerging readiness, below average in approaching and demonstrating readiness
- **Cluster 2 "High Readiness" (Count: 28)**
 - Anchored to Woodhome Elementary/Middle School
 - High in demonstrating readiness, below average emerging and approaching readiness
- **Cluster 3 "Medium Readiness" (Count: 58)**
 - Anchored to Garrett Heights Elementary/Middle School
 - Above average approaching readiness, slightly above average emerging readiness, below average demonstrating readiness

Cluster Data Analysis and Implications

Average z-scores by Cluster - Physiosocial Development



- **Cluster 1 "Low Academic, Physical, Social Development" (Count: 12)**
 - Anchored to Guilford Elementary/Middle School
 - Well below average in language/literacy, math, physical development, and social foundations scores
- **Cluster 2 "Medium Academic, Physical, Social Development" (Count: 63)**
 - Anchored to Furman Templeton Preparatory Academy
 - Slightly below average in language/literacy, math, physical development, and social foundations scores
- **Cluster 3 "High Academic, Physical, Social Development" (Count: 36)**
 - Anchored to Dorothy I. Height Elementary School
 - Above average in language/literacy, math, physical development, and social foundations scores

Data for Further Analysis

Geospatial

Longitudinal and latitudinal data to map clusters and identify zones

Quality

Educational quality in prior care programs influences readiness

Time

Trends over time to identify changes in readiness

Thank you!