

Public pre-k school choice: Parental transmission of resources at school entry

Introduction

To date, the youngest students in public education, pre-kindergarten (“pre-k”) students, have been largely ignored in the literature on public school choice (Hastings, et. al., 2005; Hastings et. al. 2007; Schneider, et al, 1997). In this instance, I am referring to the opportunities that exist for students, within a public school district, to enroll in any program with space available. In a number of ways, pre-k may be one of the most important points at which school choice decisions are made. First, a significant body of existing literature has established the importance of high-quality early education in improving student readiness at school entry and beyond (Barnett, 1998; Campbell, et.al., 2002; Heckman, 2011; Ramey, et.al., 2000). Second, for a majority of students, the school they enter at pre-k may serve as their school through elementary school and therefore choice at this early stage may have longer term implications (Burkam, Lee, and Dwyer, 2009).

But, much research on school choice assumes that parents and guardians (henceforth, parents) are making informed decisions about the campus in which they enroll their child (Burgess, et. al, 2015; Goldhaber, 1999). This suggests that all parents have some opportunity to access information about the educational opportunities available to their child and that parents know how to process this information when making a decision. I argue that not all families are equipped with these resources, which may translate into negative educational opportunities and outcomes for students starting as early as pre-k.

Specifically, this paper suggests that the information channels identified by Coleman as a form of social capital (1988) are reflected in the knowledge parents gain from friends, family, and the community about public pre-k opportunities available to their children. Additionally knowledge and preferences regarding what constitutes high quality early education is a form of social capital. Both pieces of capital, as described here, serve as the mechanisms through which parents translate their resources to their children, further operating through the choices parents make about the programs in which then enroll their children. In other words, parents who have the resources to make decisions and choose the best fitting program for their child are providing resources to that child by setting them up to be successful at school entry.

This study considers the ways in which social capital may be associated with student outcomes, through parental school choice beginning at the earliest point in public education, pre-kindergarten. It also evaluates the ways in which social capital may function similarly or in different ways with respect to choice for students of different sociodemographic backgrounds. The contributions of this study go beyond examining differences in educational achievement, to examining how processes associated with spatial opportunities, parental knowledge, and parents as decision makers serve as conduits through which social capital may be associated with student outcomes in both the short and long terms. Further, it addresses new questions about the ways in which school choice operates for a unique cohort of students, those who are entering public pre-k.

The primary research questions this study addresses are:

- 1) To what extent is public pre-k school choice associated with student achievement?
Does any observed relationship vary by student sociodemographic characteristics?
- 2) Are parental knowledge and preferences associated with public pre-k school choice?
- 3) To what extent do sociodemographic differences in knowledge or preferences, if any, explain variation in school choice and/or student outcomes?

Data and sample

This study merges data from two sources: administrative data from a large, ethnically-diverse, urban school district in the southern U.S and a questionnaire administered in October 2018 to parents of students enrolled in the district's pre-k program in 2018-2019. Data from the school district include student-level sociodemographic and assessment data and school-level data including school demographic characteristics. The questionnaire asks parents to report how they learned about pre-k program options in this district, how they ultimately chose a program, and what characteristics of pre-k programs they believed were important in a pre-k program.

The sample includes students who enrolled in the school district's pre-kindergarten program during the 2018-2019 school year and participated in the beginning of the year and middle of the year literacy assessments, a sample of roughly 14,000 students.

Measures

School choice. A parent is considered as having exercised choice if a public pre-k option exists in their neighborhood (demarcated by an existing elementary school zone), but they attend a program in a different neighborhood. For those students with no neighborhood public pre-k programs, they will be considered as having exercised choice if they choose a program that is not the nearest to their residence (This study will test measures of drive time and mileage when considering distance).

Parental knowledge. This study will look at two types of parental knowledge, 1) how/whether parents gained knowledge about pre-k programs, and 2) parental knowledge about important characteristics of high-quality pre-k programs.

Parental preferences. Parental preferences for public pre-k will be measured using questionnaire items asking parents to convey how they chose the program in which their child is enrolled. Supplemental analyses will consider whether there are variations in the role of parental preferences on outcomes for those students who attend a school that was not their first choice.

Sociodemographic variables. Student-level sociodemographic variables used in subgroup analyses include race/ethnicity, gender, socioeconomic status, and immigrant generation.

Student achievement. Student middle of year literacy assessments will be used to examine outcomes, controlling for literacy assessments at the beginning of the year. This will be treated as both a continuous measure and an on-track/on-grade level measure.

Control variables. In addition to the sociodemographic variables outlined above, the student-level control variables used in this analysis include: age, mobility (changing schools between test

administrations), enrolled in special education, presence of neighborhood public pre-k program, language of questionnaire administration (English or Spanish). The inclusion of school- and neighborhood-level variables will also be tested, including: racial/ethnic, socioeconomic, and immigrant composition.

Analytic plan

Using multilevel regression models, this study will begin by examining the relationship between school choice and student literacy outcomes for students enrolled in pre-kindergarten in this school district, testing both a continuous version of literacy score as well as an on-track indicator (logistic regression). Interactions between sociodemographic characteristics and the school choice indicator will provide insight into whether these processes vary by group.

Next, I utilize logistic regression to evaluate predictors of school choice, examining the role that parental knowledge and preferences play in the decision to choose a non-neighborhood school for a student. Finally, using path analysis, I compare differences in the relationship between choice and student literacy by sociodemographic groups, including race/ethnicity, immigrant generation, socioeconomic status, and gender, by first examining how group membership is associated with choice, then whether these variations predict differences in student outcomes. These models also account for variation in school and neighborhood characteristics, as residential choice may also play a role in driving school choice.

Analyses will test the inclusion of all students in one model, as well as separating those students who live in neighborhoods with no public pre-k options from students who have a neighborhood public pre-k program available. Strategies to deal with missing data will be considered, including imputation, but given the nature of these administrative data, there are often low proportions of missing variables.

Expected findings

Preliminary analyses show that nearly half of the pre-k aged students in this school district are enrolled in a program that is not in their neighborhood school. Given the size of this district, this is a significant number of students. These preliminary analyses also suggest that variation exists with respect to which students and families exercise choice, but as the questionnaire has not yet been administered, it is difficult to determine the mechanisms through which some of these differences occur.

If, as suggested in the Introduction, social capital plays a role in school choice, I would expect to see parents of different backgrounds with different levels of access to information about how to choose a program and what programs are available to them. In particular, we might see that more advantaged families may be more likely to learn about educational opportunities from their networks and understand the important features of early childhood education than less advantaged families. If these differences do occur, this may help to explain some of the between-group differences in school choice and student outcomes that exist.

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Appendix: Sample of parental questionnaire items

How did you learn about pre-k options available in ((district))?

- Friends/family
- An organization in my community
- Mail I received from the school
- Mail I received from ((district))
- Had a previous child who attended this school
- Other (please specify): _____
- I did not learn about ((district's)) pre-k programs

(For families not attending their first choice school)
What was the primary reason you ultimately chose ((school))?

- Distance from where we live
- Distance from where I/other guardian works
- Distance from other caregiver/relative
- Availability of space
- Programs offered (ex. language programs)
- Near public transportation
- Quality of the program
- Other (please specify)): _____

(Following a question about preference of pre-k programs for child)

Why was ((school)) your first choice for your child?

- Distance from where we live
- Distance from where I/other guardian works
- Distance from other caregiver/relative
- Availability of space
- Programs offered (ex. language programs)
- Near public transportation
- Quality of the program
- Other (please specify)): _____

How important do you think the following characteristics are in a pre-k program?

(Not important at all, Slightly important, Fairly important, Very important)

- Small class size
- Low student-to-teacher ratio
- Availability of programs in English
- Availability of programs in language other than English
- Health screening services
- Dental screening services
- Highly trained teachers
- Highly trained teachers' aides
- Length of day (full-day/part-day)
- Please list any other factors you think are important: _____