Effects of Public Quality Ratings on Parents' Early Childhood Program Preferences

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Context

Federal and state governments have undertaken substantial efforts to improve early childhood program quality, which is both highly variable and predictive of child outcomes (Bassok et al., 2016; Yoshikawa et al., 2013). One common policy for quality improvement is the Quality Rating and Improvement System (QRIS), an approach which has been adopted by nearly all states. These systems encourage programs to improve through direct supports and financial incentives, but they also are intended to create market pressure for improvement by collecting and publicizing program quality information so that parents can select childcare based on quality. However, the success of public ratings in creating this market pressure requires that: (1) parents access quality ratings before selecting a program, and (2) they prioritize this information when making childcare choices. To date, we know little about how parents use public quality information when making this choice.

In 2012, Louisiana began overhauling its QRIS system, requiring that all districts centralize the enrollment process for publicly funded early childhood programs and rate programs using the Classroom Assessment Scoring System (CLASS), which rates teacher-child interactions and is more predictive of child outcomes than structural features of care (Mashburn et al., 2008). These reforms were implemented in Fall 2015, when districts opened centralized applications for 2016-17 seats and began using CLASS to rate all public programs. However, the state did not release CLASS scores to the public until Fall 2017, resulting in two application years (for 2016-17 and 2017-18 seats) in which programs received ratings, but parents could not use them when ranking their preferred programs.

Research Questions

1. Do parents prefer high-quality programs in the absence of public quality ratings?
2. How do parents' preferences shift when ratings are publicized?

Setting

This study examines applications in New Orleans, LA, which uses a centralized online application (OneApp) for Head Start and public pre-K4. Families apply for up to eight programs in rank order. The system uses a strategy-proof algorithm to match students to seats based on students' rankings and a series of program priorities.

Participants

Participants include applicants to the New Orleans OneApp who applied for early childhood seats for the 2016-17 through 2019-20 years. Roughly 4,000 applicants apply each year, the vast majority of whom are living under 200% of the federal poverty line.

Data Collection and Analysis

Programs' CLASS scores are provided by the Louisiana Department of Education (LDOE), and parents' application data are obtained through a joint agreement with LDOE and the Orleans Parish School Board.

We first use the 2016-17 and 2017-18 applications to explore parents' preferences when choosing pre-K4 and Head Start programs in the absence of public quality ratings. We use a rank-ordered logit model (Allison & Christakis, 1994) to predict the likelihood of a center's

ranking as a function of the CLASS quality score, the distance between the child's home and the center, and whether the child has a sibling enrolled in the school, as in the following equation,

$$\mu_{ij} = \beta_0 + \beta_1(CLASS_j) + \beta_2(sibling_j) + \beta_3(distance_{ij}) + \sum_n \beta_{nj} X_{ni},$$

where μ_{ij} is the utility of school j for family i, X_{ni} is a vector of family covariates, and β_1 through β_3 are the parameters of interest.

To examine the impact of the public quality ratings (listed on the 2018-19 and 2019-20 applications) on parents' demand for high-quality programs, we will estimate the same rank-ordered logit model for these years and compare the magnitudes of the CLASS coefficients for the pre- and post-public rating periods using the delta method, to determine if the effect of quality on rankings increases when quality ratings are public (Oehlert, 1992).

The individual regression models estimating parents' preferences for quality and convenience in each year are not causal, because the estimated effects could be confounded by unmeasured program characteristics that co-vary with quality and convenience measures. However, these confounding variables are likely to be constant over time and so would not impact the estimated *difference* in the effect of quality on parental choice over the pre- and post-periods. Therefore, any changes in the estimated effect of quality on parents' rankings between the pre- and post-periods can be attributed to the newly public CLASS quality ratings.

Preliminary Findings
In a preliminary analysis of parents' rankings in the year prior to public CLASS scores, we find that CLASS scores in fact negatively predict the likelihood of a high ranking on pre-K4 applications. In New Orleans schools, CLASS scores have a small negative correlation ($r = -.19$) with the widely publicized School Performance Score (SPS), which is primarily based on test achievement levels. SPS, as well as geographic proximity to and a sibling enrolled in a school, positively predict the likelihood of higher rankings on pre-K4 applications.

Conversely, for 0-3-year-olds applying to Head Start programs, we observe the opposite pattern, in which CLASS scores (which parents do not observe) positively predict the likelihood of higher program ranking. However, we are not yet able to identify geographic proximity and sibling enrollment for these applicants. In the coming months, we will receive additional parent application data, which will enable us to identify geographic proximity for all applicants and examine the effect of publicizing the CLASS scores on parents' rankings.

Conclusion
Without access to specific program quality information, New Orleans parents are using the quality information available to them, which for pre-K4 is the achievement-based School Performance Score. Parents may be erroneously assuming that high-SPS schools will have higher-quality pre-K programs, and rankings may shift in subsequent years when CLASS scores are listed on the application. However, selecting a pre-K4 in New Orleans has long-term consequences, as elementary schools with pre-K4 programs often have limited seats for new kindergartners. Even with access to pre-K4 quality information, parents may still prioritize their elementary school choice, focusing on perceived elementary quality and convenience factors. However, when selecting a Head Start program, which has no impact on elementary school access, parents are assigning higher ranks to higher-quality programs, even though they are not aware of the quality score.