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Are there differences in parents' preferences and search processes across preschool types? Evidence from Louisiana



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ABSTRACT

A rising proportion of four-year-olds now attend formal, or center-based, early childhood education (ECE) programs. Formal settings, such as Head Start, public preschool, and subsidized child care centers vary significantly in regulation, funding, and service provision. As these differences may have substantial implications for child development and family well-being, understanding how parents search for and select formal programs is critical. Using data from a sample of low-income families with four-year-olds enrolled in publicly-funded programs, we examine whether parents' preferences for ECE and their search processes vary across formal ECE program types. We find little evidence of differences in preferences across preschool types but do find significant differences in parents' search processes. Parents with children in subsidized child care consider more options, consider their search more difficult, and are less likely to call their child's program their "first choice.\(\text{Mplications}\) for policy and future research are discussed.

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1. Introduction

Most four-year-olds in the United States regularly experience non-parental care, and a rising proportion of these children are enrolled in 'formal' or center-based early childhood education (ECE) programs (Magnuson & Waldfogel, 2016). The formal sector includes a diverse set of ECE programs including federally-funded Head Start programs, state-funded preschool, as well as for-profit, not-for-profit, and faith-based child care programs, some of which receive public funds through parents' use of child care subsidies. Each of these program types provides center-based classroom experiences for preschool-aged children, they differ with respect to their funding levels, regulatory structures, workforce characteristics, and service provision (Bassok, Fitzpatrick, Greenberg, & Loeb, 2016; Henry, Gordon, & Rickman, 2006), and these differences may have important implications for children and families.

Although there is substantial variation in quality *within* program types, particularly by state and locality, recent research suggests that, on average, Head Start and state-funded preschool are of higher quality than private child care centers receiving public subsidies that low-income children might otherwise attend (Bassok et al., 2016; Dowsett, Huston, & Imes, 2008). For example, using

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nationally representative data, Johnson, Ryan, and Brooks-Gunn (2012) show that even after controlling for an extensive set of family characteristics, subsidy-eligible children who enrolled in Head Start or state-funded preschool experienced substantially higher quality care than those who attended private child care centers funded in part by child care subsidies. One explanation for this pattern is that in many states Head Start and state preschool are subject to more stringent quality regulations than child care centers. For instance, because the educational credentials required to work in Head Start and state preschool exceed those typically required in licensed child care settings, teachers in those settings are more likely to hold bachelor's degrees than are child care workers in private settings (Whitebook, Phillips, & Howes, 2014).

Services provided to families also vary across program types. For example, Head Start programs provide extensive services for low-income children with special needs, and in many states, they provide services for families including health services, parenting supports, and work training. Such services may mean that Head Start is more effective than other preschool types in influencing both family and child outcomes. Indeed, research suggests that Head Start programs impact maternal educational attainment as well as parenting practices relative to the families of children in non-Head Start settings (Gelber & Isen, 2013; Sabol & Chase-Lansdale, 2015; Schanzenbach & Bauer, 2016).

Finally, formal ECE types differ with respect to practical features that may be salient to parents, including their eligibility criteria,

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capacity, price, transportation provision, and length of day. Head Start and public preschool programs are generally free to all eligible families. Child care centers receiving public subsidies, on the other hand, typically rely on program fees and subsidies provided to low-income families, which may be linked to employment requirements. These differences may have important consequences for families, particularly low-income families that are more likely to be constrained by cost and logistical factors (Child Care Aware of America, 2015; Mattingly, Schaefer, & Carson, 2016).

Because the type of ECE program a child experiences may have important implications for their own developmental trajectory and their family's well-being, it is important to understand how families end up in one type of center-based program versus another. While a number of studies have explored which families select into the formal ECE sector and which select home-based options (e.g., Fuller, Holloway, & Liang, 1996; Liang, Fuller, & Singer, 2000), we have very little evidence about the selection processes that lead families into different types of center-based ECE settings. Given the high rates of participation in formal settings among four-year-olds, there is a need to understand not only which children attend formal settings, but also how they sort into different types of settings. This is the gap the current paper aims to fill.

Using data from a large survey of low-income Louisiana parents whose four-year-old children were enrolled in formal ECE settings that receive some type of public funds, the present study provides the first descriptive evidence about differences in parents' preferences and search processes across three major formal program types used by low-income four-year-olds-Head Start, publiclyfunded preschool, and private center-based child care settings that receive funding, in part, from child care subsidies. Although there are significant differences across states in how the early childhood landscape is organized and regulated, and the current study is focused specifically on a single state, results from this descriptive study provide hypothesis-generating information as to why similar families enroll their children in different program types and how parents are currently navigating the fragmented formal ECE market. Implications for policies, including interventions designed to influence parents' ECE choices, are discussed.

2. Background

We begin by describing the three primary types of publiclyfunded formal ECE programs used by low-income children, highlighting key differences across preschool types and findings from studies that have assessed the impacts of each program type. We then summarize the existing evidence on parents' preferences and search for an early childhood program. We cite a variety of research studies, many of which use national data across multiple program types, but acknowledge that these on-average estimates may mask important heterogeneity and are not specific to the Louisiana context that is the focus of the current work.

The formal ECE sector has expanded substantially over the past 50 years. From 1968 to 2000, enrollment rates in formal ECE for four-year-olds increased from 23% to 68% (Bainbridge, Meyers, Tanaka, & Waldfogel, 2005), a proportion that has remained relatively stable (70%) through 2013 (Magnuson & Waldfogel, 2016). Increasing public provision of formal ECE for low-income children has facilitated this expansion. For example, Head Start enrollment increased from about 450,000 children in the 1980s to more than 925,000 in 2014 (Office of Head Start, 2016). The program served about 9% of four-year-olds in 2015 (Barnett & Friedman-Krauss, 2016). State preschool programs have also experienced a substantial period of growth. Programs now exist in 43 states and serve nearly 30% of four-year-olds, a doubling of enrollment since 2002 (Barnett & Friedman-Krauss, 2016). Even with this expansion, how-

ever, about 30% of four-year-olds attend non-public formal ECE programs, such as licensed private child care centers, which in most contexts, face less stringent regulations. Among low-income four-year-olds, public programs such as Head Start and public preschool account for most formal ECE enrollment. Still, these public programs fail to serve the majority of eligible children (Barnett et al., 2010; HHS-ACF, 2010).

2.1. Head Start

Head Start is a federally funded anti-poverty program that provides free ECE for low-income three- to five-year-old children as well as comprehensive services for their families, including health, nutrition, social, and employment support services. Head Start programs operate under stringent regulations requiring them to continuously monitor and improve program quality in order to maintain funding (Currie & Neidell, 2007; Walters, 2015).

Head Start is targeted; the program prioritizes access for children in families with an annual income at or below the federal poverty level. Nonetheless, roughly 85% of Head Start programs are estimated to be oversubscribed (HHS-ACF, 2010), and recent evidence suggests that only 40% of eligible children are served by Head Start programs nationwide (Barnett & Friedman-Krauss, 2016; Schmit, 2013). Additionally, hours of operation are often limited and inflexible, with over half of the programs providing half-day ECE, which may pose significant problems for working parents (Barnett & Friedman-Krauss, 2016). In Louisiana, the context for the current study, Head Start programs serve about 12% of four-year-olds (Barnett et al., 2015; Louisiana Department of Education, 2016; Louisiana Policy Institute for Children, 2014).

2.2. State-funded public preschool

State-funded preschool programs aim to promote school readiness at kindergarten entry. Public preschool programs, which are offered in both public schools and community organizations, often mirror lower elementary school settings, dedicating a large portion of program time to academically focused content (Pianta & Howes, 2009). Lead teachers in most programs are required to hold bachelor's degrees and to undertake specialized training in early childhood education (Barnett, 2003; Barnett et al., 2017; Whitebook et al., 2014).

Public preschool programs vary significantly across states in terms of access, duration, and quality. For example, 33 state programs require families to meet income-based eligibility criteria. Public preschool programs are generally, but not always, free, both in Louisiana and nationwide. Thirty-eight state programs operate during the academic year only, and 23 state programs provide only part-day ECE. In some states, state-funded preschool programs may be colocated in settings including Head Start programs or private child-care settings, and at times, funding sources are blended to build cohesion across types of ECE. In Louisiana, the Cecil J. Picard LA 4 Early Childhood Program (LA4) is the primary provider of fullday (six-hour) state-funded preschool, serving 26% of low-income four-year-olds statewide in public school settings. LA4 meets 9 of the 10 minimum quality standards set by the National Institute for Early Education Research (NIEER) (Barnett et al., 2017). In Louisiana, state-funded preschool is generally operated independently from Head Start and private child care.

2.3. Center-based child care

As defined in the current study, child care centers are privately operated, regulated through licensing standards (which in Louisiana and most other states are less stringent than those governing public preschool and Head Start programs), and funded

on the basis of variable tuition payments. Both, services provided and overall quality, vary significantly across child care centers. In some communities private centers may be well resourced with strict quality standards; some centers may pursue accreditations ensuring quality. Other centers, and in particular centers serving low-income children and families, may only respond to mandatory licensing requirements.

Families may find child care centers meet their practical needs, as they often provide longer, more flexible hours of operation, operate year-round, and may still provide services when children are sick. Low-income families, those with an annual income at or below 85% of the state median income by family size, are eligible for publicly-funded child care subsidies from the Child Care and Development Block Grant (CCDBG), but subsidies often fail to reach eligible children or cover the full cost of ECE. Low-income Louisiana parents may receive subsidies through the Child Care Assistance Program (CCAP), a program administered by the Louisiana Department of Education (Louisiana Policy Institute for Children, 2014). In the present study, we look exclusively at private child care centers receiving at least some public dollars through parents' use of such subsidies.

2.4. Differential impacts of ECE programs across program types

A large body of research has examined the effects of Head Start and specific state preschool programs. These studies generally demonstrate that both Head Start and state preschool programs yield immediate benefits for children (Fitzpatrick, 2008; Gormley & Gayer, 2005; HHS-ACF, 2010; Ladd, Muschkin, & Dodge, 2014; Phillips, Gormley, & Anderson, 2016; Weiland & Yoshikawa, 2013; Wong, Cook, Barnett, & Jung, 2008). Evidence on the longer-term impact of these programs is more mixed. Some studies find benefits through elementary school (Fitzpatrick, 2008; Ladd et al., 2014; Phillips et al., 2016), and into adulthood (Crocker, Thomas, & Currie, 2002; Ludwig & Miller, 2005; Schanzenbach & Bauer, 2016); others show rapid fade-out (HHS-ACF, 2010; Lipsey, 2015).

Typically, studies compare a particular program (e.g., Head Start) to a "business as usual" condition, which includes a wide variety of program alternatives (e.g., state-funded preschools, private child care centers, and home-based settings). To date, there has been relatively little research explicitly comparing the impacts of one type of formal care arrangement relative to another (e.g., the effect of Head Start relative to child care programs receiving state subsidies). This is, in large part, due to methodological challenges related to identifying confounding factors that may drive observed differences in outcomes across program types.

The few studies that have explicitly compared program types find that on average children in public preschool programs perform better on assessments of academic skills than do comparable peers in private, center-based child care programs. For example, using nationally representative data, Bassok and colleagues (2016) find that children in public preschool programs achieve higher mathematics and reading scores than students in private center-based child care programs. Several recent studies show that while public preschool students demonstrate stronger cognitive gains than Head Start participants, Head Start attendance is associated with improved social skill development and child health outcomes relative to public preschool (Gormley, Phillips, Adelstein, & Shaw, 2010; Henry et al., 2006; Zhai, Brooks-Gunn, & Waldfogel, 2011).

In contrast, recent analyses of data from the Head Start Impact Study show that program impacts are heterogeneous, and that the benefits are concentrated among those children who, in the absence of Head Start, would likely have attended family child care homes (Feller, Grindal, Miratrix, & Page, 2016; Walters, 2015). These studies raise the possibility that Head Start may not yield a meaningful advantage over other formal ECE options. However, our under-

standing of the relative merits of each ECE program type is currently underdeveloped.

2.5. Parents' choices within the formal sector

Previous research on parents' preferences and search for ECE has focused on the following two aims: (1) describing parents' preferences and search for ECE programs broadly across all ECE types and (2) understanding which parents select formal programs for their children (rather than informal or home-based programs). The first body of work finds that nearly all parents are seeking a warm environment where their child's development will be supported (Barbarin et al., 2006; Rose & Elicker, 2008). At the same time, nearly all parents choose programs quickly and do little comparison shopping (Anderson, Ramsburg, & Scott, 2005; Forry, Tout, Rothenberg, Sandstrom, & Vesely, 2013; Layzer, Goodson, & Brown-Lyons, 2007). The second finds African-American children are more likely than white children to enroll in formal ECE programs and Hispanic children are least likely to enroll (Fuller et al., 1996; Liang et al., 2000; Magnuson & Waldfogel, 2005; Meyers & Jordan, 2006). Parent education and income positively correlate with formal ECE enrollment, though very-low income, less educated parents often enroll their children in Head Start (Coley, Votruba-Drzal, Collins, & Miller, 2014; Fuller et al., 1996; Huston, Chang, & Gennetian, 2002). The existing literature fails to address how parents make choices within the diverse, expanding formal ECE sector.

2.5.1. Program preferences

Survey-based studies indicate that parents consistently indicate that "quality," defined as supportive learning environments, warm student–teacher relationships, and high levels of teacher education, is important to them when selecting ECE programs (Barbarin et al., 2006; Cryer & Burchinal, 1997; Robert Wood Johnson Foundation (RWJ), 2016). This self-reported preference for quality has been documented across many surveys, and patterns are comparable across socioeconomic and racial groups (e.g., Forry et al., 2013; Meyers & Jordan, 2006; Sandstrom & Chaudry, 2012).

Parents also seek programs that operate during their work hours, are affordable, and are conveniently located (Barbarin et al., 2006; RWJ, 2016; Rose & Elicker, 2008; Sandstrom & Chaudry, 2012). These factors are most salient for low-income, working families who experience more constraints in terms of both affordability and nonstandard employment schedules (Kim & Fram, 2009). For instance, Rose and Elicker (2008) find that low- and middle-income mothers rated practical and convenience factors more highly than high-income mothers.

Parents' stated preferences differ across respondents who use formal versus informal ECE options (Early & Burchinal, 2001; Peyton, Jacobs, O'Brien, & Roy, 2001). For example, Coley et al. (2014) show that parents with stronger preferences for provision of sick care, location, affordability, small numbers of children in the ECE setting, and provider language were more likely to enroll their children in informal settings (e.g., noncenter, home-based settings), whereas parent preferences for provider training were associated with the use of formal ECE. Although these associations may reflect parents' after-the-fact justifications for their choices, they do provide suggestive evidence that parents' choices between formal and informal ECE settings reflect differences in preferences or needs. To date, however, no research links parent care preferences to their care selections within formal program types.

2.5.2. Search for programs

Research on *how* parents find ECE suggests that a parent's search is limited, that they lack information about the availability and quality of existing options, and that they rely primarily on family and friends for information (Chase & Valorose, 2010; Chaudry et al.,

2011; Forry, Isner, Daneri, & Tout, 2014; RWJ, 2016). For example, Layzer and colleagues (2007) reveal that 41% of parents finished their search after one day. Anderson and colleagues (2005) report that 75% of their sample of low-income parents considered only one ECE arrangement. There may be several reasons why parents' searches are, on average, so brief. The stress of parents' daily lives may preclude a lengthy search, or there may be very few options in their choice set that have slots available and are viewed as affordable. Indeed, data from a recent, nationally representative sample of parents with children under age five reveal that 66% of parents report having access to "just a few" program options or just one option (RWJ, 2016).

This widely held perception that options are unavailable may reflect a true lack of programs that meet families' needs in some communities. However, it may also be that parents lack important *information* about available programs. Research suggests that parents tend to turn to informal networks for information (Iruka & Carver, 2006; Layzer et al., 2007; Pungello & Kurtz-Costes, 1999), while only a small proportion use community referral services (Chase & Valorose, 2010; Pungello & Kurtz-Costes, 1999). Again, no studies we are aware of explore differences in search processes across formal ECE types; moreover, the aforementioned studies focus broadly on 0–5-year-olds, and as such may mask important patterns present among 4-year-olds, specifically.

2.6. Present study

Despite substantial differences between program types within the formal sector, there have been no prior studies that explore whether parents' preferences and search for ECE systematically differ across formal program types. This is significant because understanding the reasons families select into different programs has important implications for the design of policies. The present study seeks to understand how low-income parents of four-year-olds in Louisiana navigate the fragmented formal sector in making their ECE decisions. Specifically, we ask:

- 1. What are low-income families in Louisiana looking for in formal ECE settings for their four-year-olds?
- 2. How do parents identify and select ECE programs?
- 3. Do parental preferences and search processes differ across types of formal ECE settings?

The study uses data from Louisiana, a state working to improve access to high-quality programs and facilitate simplified selection processes for parents by unifying program standards across ECE types and providing coordinated enrollment and information initiatives (Appel, Alario, Thompson, Carter, & Kleckley, 2012). As more states attempt to consolidate the fragmented ECE landscape and provide information to help parents navigate ECE choices, it is important to examine parents' stated ECE preferences and reported search processes. Systematic differences in preferences or search across formal ECE program types may provide important lessons to shape policies aimed at improving access to high-quality ECE for all children. Moreover, a clearer understanding of parent sorting across formal programs types may inform discussions on the relative effects of different program types. Though the present study is conducted in a specific policy context with specific sector distinctions unique to the state, this analysis provides descriptive information around the role of preferences and search in parents' selection of varying types of ECE programs.

3. Method

3.1. Data and sample

Data were collected during the 2014-15 school year as part of a researcher-practitioner partnership with the Louisiana Department of Education (LDOE), which included a large study examining efforts to improve quality and reduce fragmentation across publicly funded, formal ECE settings in Louisiana. The study focused on parishes that were participating in the pilot phase of Louisiana's early childhood reform efforts. In partnership with LDOE, five Louisiana parishes were selected among the 13 pilot parishes in order to capture regional diversity and include both urban and rural communities. Within parishes, all ECE programs were eligible if they (1) were participating in the "pilot year" for a state early childhood reform (which included all Head Start and public preschool programs and a portion of center-based child care programs that accepted subsidies); (2) included classrooms that primarily served four-year-old children; and (3) included classrooms primarily serving typically developing children (e.g., self-contained and reverse mainstream classrooms were excluded).

We selected 80 programs across five parishes, with probability of selection in each parish proportional to the total number of programs in that parish relative to the total number of programs across all five parishes. All programs that received some public funding were eligible, including Head Start, state preschool, and private child care centers that received publicly-funded child care subsidies. Once a program was selected, one classroom serving primarily typically-developing four-year-olds was randomly selected to participate. All parents were invited to respond to surveys, which were available both on paper and online. Classroom teachers sent home up to three copies of the paper surveys and received small incentives if most parents in their classroom returned a survey. All parents received a children's book with the survey and were entered into a lottery for a participation incentive if they returned study materials.

Response rates were moderate to high. Of the 1677 parents receiving the survey, 1303 parent respondents completed and returned surveys (78% overall response rate, ranging from 67 to 85% across parishes). To ensure comparability across our analyses, we focused on a fixed sample of parents who had data available for all measures considered in the study (that is, preferences and search), resulting in a final sample of 858 parents. However, we also ran specification checks, in which we replicated our analyses leveraging all parents who answered a specific item. In these analyses (available upon request), sample sizes ranged from 979 to 1144, and results mirrored the fixed sample results closely.

3.2. Measures

3.2.1. Parent preferences

The parent survey asked "When selecting child care/preschool for your child, how important were the following," and included eleven program features: (1) has warm and nurturing teachers; (2) provides a safe and clean environment; (3) teaches children letters, numbers, and other academic skills; (4) teaches children how to get along well with others; (5) is free or inexpensive; (6) accepts Child Care Assistance Program; (7) provides transportation; (8) also serves my other children; (9) is in a convenient location; (10) offers convenient hours; and (11) offers services for children with special needs. Each of these 11 features contributed unique information regarding parents' considerations when choosing an ECE program, and together the items were designed to align with key aspects of quality discussed in the developmental and policy literature, including process quality (e.g., warm teachers), structural quality (e.g., a clean and safe environment), cost (e.g.,

Table 1Program characteristics, overall and by type.

| | Overall | Head Start | Preschool | Child care | Differences |
|---------------------------------|---------|------------|-----------|------------|-------------|
| Operating waitlist | 77.78 | 100.00 | 75.56 | 50.00 | АВ |
| Charging parents tuition | 16.00 | 0.00 | 8.70 | 72.72 | ВС |
| Offering full-day care | 44.00 | 72,20 | 21.28 | 100.00 | A C |
| Providing summer care | 31.94 | 56.25 | 11.11 | 81.82 | A C |
| Providing transportation | 68.92 | 33.33 | 97.78 | 9.10 | A C |
| Providing dev. assessments | 84.06 | 88.89 | 87.50 | 63.64 | |
| Offering special needs services | 78.87 | 70.59 | 93.18 | 30.00 | ABC |
| Class size | 18.55 | 18.94 | 18.71 | 17.18 | |
| | (2.29) | (1.98) | (1.94) | (3.60) | |
| Teachers with BA or more | 84.84 | 75.71 | 93.23 | 44.03 | ВС |
| | (25.77) | (25.31) | (16.49) | (36.71) | |
| Average CLASS score | 4.79 | 4.69 | 4.81 | 4.83 | |
| | (0.65) | (0.65) | (0.67) | (0.64) | |
| Share of programs by type | , , , | 22.50 | 63.75 | 13.75 | |

Notes: Standard deviations for quality variables reported in parentheses. N = 80. The differences column indicates significant mean differences at the 0.05 level across program type. Differences between Head Start and preschool are indicated by the letter A; differences between Head Start and child care are indicated by the letter B; and differences between preschool and child care are indicated by the letter C.

affordability), convenience, (e.g., transportation), and children's developmental outcomes (e.g., academic skills, access to special education services). Parents answered on a 4-point scale from "not important," to "extremely important." Each of the 11 items was recoded into dichotomous variables such that "1" indicates that parents responded that a given preference was "extremely important" and "0" otherwise.

3.2.2. Search

We explored parents' search for ECE using three sets of survey items that addressed the following: (1) the information parents used to guide their search, (2) the extent to which parents engaged in comparison shopping, and (3) parents' perceptions of the search process. First, parents were asked to identify the source of information that was most important in finding their child's ECE program: friends and family, public schools, media advertisements, referral agencies, or other. Responses were coded as indicator variables with a value of "1" for each individual response and "0" otherwise.

Second, parents answered 3 items regarding their comparison shopping. Parents reported whether they visited their chosen program, whether they considered other program(s), and whether they visited other program(s) ("1" indicates that they did consider other programs or visit another program, "0" indicates they did not). Finally, parents reported on two items designed to capture the difficulty of the search process. Parents rated the ease of their search process ("1" indicates the search process was easy, that is "not difficult at all" to "not very difficult," "0" indicates parents indicated the search was "very difficult") and indicated whether their child's program was their top choice.

3.2.3. Program type

We compared preferences and search processes across the three primary types of formal ECE programs that exist in Louisiana: Head Start, defined as programs that receive federal Head Start funds; state-funded preschool programs; and child care programs, defined as privately operated, licensed Type III programs, which include for-profit, non-profit, religious, or independent centers that accept public subsidies. Programs were classified into program types based on state records; 26% of the sample attended a Head Start program, 63% a state preschool program, and 11% were enrolled in a child care program. Sample representation by program type broadly reflects statewide enrollment; 22% of publicly funded four-year-olds in Louisiana were enrolled in Head Start programs in 2014–2015, compared to 69% and 3% in state preschool and child care, respectively (Louisiana Department of Education, 2015).

3.2.4. Program characteristics

To assess differences across program types in measures of class-room quality, program structure, or service provision, we provide information from director surveys and ratings from third-party observers (see Table 1). Directors reported whether programs operate a waitlist, charge tuition, offer "full-day" care (e.g., at least eight hours each day), operate during the summer, provide transportation, offer developmental assessments, and/or provide special needs services. We also include data collected by our research team such as average classroom sizes of sampled classrooms, the percentage of teachers with at least a BA, and scores from a widely used, well-validated observational measure of teacher-child interactions, the Classroom Assessment Scoring System (Pianta, La Paro, & Hamre, 2008).

3.2.5. Covariates

We used child and family demographic information to assess whether families differ systematically across programs and to test whether differences across programs in preferences and search are explained, in part, by these characteristics. Child covariates included child race (White, Black, Hispanic, other race), gender, and age in years. Family covariates included a 7-category measure of family income (\$15,000 or less, \$15,001-\$25,000, \$25,001-\$35,000, \$35,001-\$45,000, \$45,001-\$55,000, \$55,001-\$65,000, and missing income); a 3-category measure of parental education (high school diploma or less, some college, and college degree or more); an indicator for whether a non-English language was spoken in the home; and an indicator for single-parent household.

Table 2 presents sample characteristics. Forty-one percent of parents attained a high school diploma or less. Forty-six percent of families had incomes under \$15,000, and 44% led single-parent households. As expected, about half the children in this sample were female, and the average age was roughly four years (4.39). Sixty-eight percent of children were Black, 21% were White, 4% were Hispanic, and 8% identified as another race. Table 2 also disaggregates sample characteristics across program types; we discuss these patterns below.

3.3. Analytic strategy

We used linear probability models (LPMs) to examine the relationship between program type and parents' preferences. We ran two models for each outcome. The first (model 1) predicted each outcome based *only* on program type. This model provided the "raw" mean differences in ECE preferences and search across

Table 2Sample covariates.

| | Overall | Head Start | Preschool | Child care | Differences |
|------------------------------|---------|------------|-----------|------------|-------------|
| Parent education | | | | | |
| HS or less | 41.26 | 49.55 | 40.19 | 28.13 | ABC |
| Some college | 46.39 | 45.95 | 45.56 | 52.08 | |
| 4-year degree | 12.35 | 4.50 | 14.26 | 19.79 | A B |
| Family income | | | | | |
| \$15,000 or less | 45.92 | 63,96 | 39.63 | 39.58 | A B |
| \$15,001-\$25,000 | 17.95 | 23.42 | 16.48 | 13.54 | A B |
| \$25,001-\$35,000 | 11.19 | 6.31 | 12.22 | 16.67 | A B |
| \$35,001-\$45,000 | 5.36 | 1.35 | 6.48 | 8.33 | A B |
| \$45,001-\$55,000 | 7.58 | 0.90 | 10.74 | 5.21 | A B |
| \$55,001-\$65,000 | 6.76 | 0.90 | 9.63 | 4.17 | A B |
| Missing income data | 5.24 | 3.15 | 4.81 | 12.50 | B C |
| Non-English language in home | 12.23 | 16,22 | 10.56 | 12.50 | A |
| Single-parent household | 44.06 | 51.80 | 39.81 | 50.00 | A |
| Focal child characteristics | | | | | |
| Female | 49.30 | 57.66 | 47.04 | 42.71 | A B |
| Age | 4.39 | 4.22 | 4.46 | 4.37 | A B |
| | (0.61) | (0.49) | (0.67) | (0.36) | |
| Race | | | | | |
| White | 21.10 | 2.25 | 30.19 | 13.54 | ABC |
| Black | 67.72 | 86.94 | 58.89 | 72.92 | A B C |
| Hispanic | 3.61 | 7.66 | 1.85 | 4.17 | A |
| Other | 7.58 | 3.15 | 9.07 | 9.38 | A B |
| Enrollment by type | | 25.87 | 62.94 | 11.19 | |

Notes: Standard deviations for age reported in parentheses. *N* = 858. The row missing income data indicates that the family did not report income data. The differences column indicates significant mean differences at the 0.05 level across program type. Differences between Head Start and preschool are indicated by the letter A; differences between Head Start and child care are indicated by the letter B; and differences between preschool and child care are indicated by the letter C.

program types. To account for systematic sorting by family demographic characteristics across formal program types, in model 2 we added the vector of child and family covariates described above. All standard errors were clustered at the program-level. Findings were not sensitive to the use of logistic regression models as compared to LPMs.

4. Results

4.1. Program and family characteristics, by program type

Table 1 presents characteristics for the 80 sampled programs, overall and by program type. The majority of teachers held BAs (85%), which is a requirement for public preschools. Most programs operated a waitlist (78%), and very few charged parents tuition (16%). Less than half offered full-day (44%) or summer (32%) care options, and 69% offered transportation. Finally, 84% and 79% of the programs offered developmental assessments and services for children with special needs, respectively.

Differences in these characteristics across program types were consistent with patterns reported in earlier studies. For example, teachers in preschool (93%) and Head Start (76%) programs were far more likely to hold BAs than those in child care centers (44%) (Barnett, 2003; Whitebook et al., 2014). It is worth noting, however, that mean differences across sectors can mask substantial within-program variation, and that in particular, the variation in child care centers for both class size and teacher education was about one and a half times that of Head Start and preschool programs.

There were meaningful differences in structural features and services offered to children and families across program types. No Head Start programs received payment from parents, while 9% of state preschool programs and 73% of child care centers reported that some parents paid for care. Child care centers were more likely to provide full day care and summer care (100% and 82%, respectively) relative to Head Start (72% and 56%) and state preschool programs (21% and 11%). State preschool programs (98%) were also far more likely than Head Start (33%) and child care (9%) centers

to provide transportation, likely reflecting their location in public schools. Finally, preschools were most likely to provide special needs services (93%), followed by Head Start (71%), and child care centers (30%).

Table 2 presents demographic characteristics across formal care types and highlights statistically significant differences in family and child characteristics. For instance, Head Start parents had disproportionately low levels of education, with 50% of parents earning a high school diploma or less and just 5% earning a BA or more. In contrast, 14 percent of preschool parents and 20 percent of child care parents held a BA or more. As expected, families in Head Start, which is targeted toward the most vulnerable children, had lower earnings and were more likely to lead single-parent households than families of children attending other formal care. Families with children enrolled in state preschool were the highest earning in the sample.¹

Enrolled children's characteristics also differ significantly across program type. For example, children in Head Start were more likely to be female (57%) than children in preschool (47%) and child care centers (43%). Further, children in Head Start were, on average, nearly 3 months younger than preschool children and 2 months younger than child care children. Finally, sampled Head Start children were far more likely to be Black (87%) compared to children in state preschool (59%) or child care centers (73%).

4.2. Parents preferences

Fig. 1 displays the percentage of parents who indicated a particular program feature was "extremely important." The features that parents were most likely to characterize this way were "build academic skills" (88%), "offer clean and safe environments" (87%), and "provide warm teachers" (81%). Sixty-six percent also cited the

¹ 13 percent of child care parents did not include family income data. We include controls for missing family income status in our regressions to account for potential differences in this group relative to the broader sample.

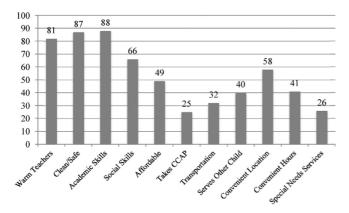


Fig. 1. Percentage of parents that rate ECE features as "extremely important." Note: *N* = 858.

importance of programs that build children's social skills. These items, which emphasize the care environment and learning opportunities, were cited as "extremely important" far more often than practical features of care, such as affordability (49%), transportation (32%), location (58%), or hours of operation (41%).

Table 3 presents results from regressions exploring whether these patterns systematically differ across program types. For each outcome, the first regression column provides means comparisons by program type, with child care centers as the reference group. The second regression column for each outcome accounts for demographic differences across program types.

On the whole, the factors that parents noted were "extremely important" were consistent across the three types of ECE settings considered. For instance, parents with children in all three settings were equally likely to note that academic skill building or social skill development were "extremely important." Although uncontrolled models revealed that parents in child care centers were more likely

to have preference for clean and safe environments than both Head Start and preschool parents, less likely to report preferences for affordability than Head Start parents, and more likely to prefer centers that accepted CCAP than preschool parents, these associations were all reduced by the addition of socio-demographic controls accounting for differential selection into settings, specifically race and family income.

In models that include covariates, there are only two instances for which there are statistically significant differences across program types. First, 39% of state preschool parents cited the provision of transportation as extremely important. After controlling for covariate differences (column 14), parents whose children were enrolled in state preschool were 26 percentage points more likely to report that transportation was extremely important than child care parents, and 28 percentage points more likely than Head Start parents. Preschool parents were also 18 percentage points more likely than child care parents and 23 percentage points more likely than Head Start parents to report that enrolling their child in the program their other children attended was extremely important (column 16).

4.3. How are parents searching for care?

Fig. 2 presents the information sources parents consulted to support their search, revealing that most parents found their child's ECE programs through friends and family (39%) or local public schools (44%). Relatively few utilized information from advertisements (6%) or referral agencies (11%). Unlike parent preferences, for which we found few differences across program types, there are meaningful differences in parents' information sources, highlighted in Table 4.

The odd numbered columns show raw differences across program types. For example, column 1 shows that two-thirds (67%) of Head Start families reported they learned about their child's

Table 3Parents' ratings of features of care as extremely important, by program type.

| | Warm teachers | | Varm teachers Clean/safe Academics | | cs | Social skills | | Affordable | | Takes CCAP | | |
|--------------|----------------|--------|------------------------------------|--------------------|--------|---------------|---------------------|------------|------------------|-------------|------------------------|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Head Start | -0.07 | -0.05 | -0.08* | -0.07+ | -0.01 | 0.01 | -0.00 | -0.02 | 0.12** | 0.06 | -0.00 | -0.08 |
| | (0.05) | (0.05) | (0.04) | (0.04) | (0.03) | (0.03) | (0.06) | (0.06) | (0.04) | (0.05) | (0.05) | (0.06) |
| Preschool | -0.07 | -0.06 | -0.07^* | -0.05 | -0.04 | -0.02 | -0.04 | -0.02 | 0.02 | 0.06 | -0.10^{*} | -0.09^{+} |
| | (0.05) | (0.05) | (0.03) | (0.03) | (0.03) | (0.03) | (0.06) | (0.06) | (0.04) | (0.05) | (0.05) | (0.05) |
| Constant | 0.88** | 0.83** | 0.93** | 0.89** | 0.91 | 0.84** | 0.69** | 0.90** | 0.45 | 0.29* | 0.31 | 0.39 |
| | (0.05) | (0.08) | (0.03) | (0.07) | (0.03) | (0.07) | (0.05) | (0.12) | (0.03) | (0.12) | (0.04) | (0.13) |
| Covariates | | × | | × | | × | | × | | × | | × |
| Observations | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 |
| R-squared | 0.00 | 0.03 | 0.00 | 0.03 | 0.00 | 0.04 | 0.00 | 0.03 | 0.01 | 0.09 | 0.01 | 0.07 |
| | Transportation | | | Serves other child | | Convenie | Convenient location | | Convenient hours | | Special Needs services | |
| | 13 | 14 | | 15 | 16 | 17 | 18 | 19 | | 20 | 21 | 22 |
| Head Start | 0.05 | -0.02 | 2 | 0.01 | -0.04 | 0.07 | 0.03 | -0 |).11 | -0.13^{+} | 0.14 | 0.07 |
| | (0.04) | (0.05 |) | (0.04) | (0.05) | (0.06) | (0.07) | (0. | 07) | (0.07) | (0.05) | (0.05) |
| Preschool | 0.22** | 0.26 | • | 0.18** | 0.18** | 0.07 | 0.08 | -0 | .14 [*] | -0.09 | 0.06 | 0.08+ |
| | (0.04) | (0.05 |) | (0.04) | (0.04) | (0.06) | (0.06) | (0. | 06) | (0.06) | (0.05) | (0.04) |
| Constant | 0.17 | 0.16 | | 0.28 | 0.24 | 0.52 | 0.64 | 0.5 | 52 ** | 0.46 | 0.19 | 0.29 |
| | (0.03) | (0.10 |) | (0.03) | (0.12) | (0.05) | (0.14) | (0. | 06) | (0.13) | (0.04) | (0.10) |
| Covariates | | × | | | × | | × | | | × | | × |
| Observations | 858 | 858 | | 858 | 858 | 858 | 858 | 85 | 8 | 858 | 858 | 858 |
| R-squared | 0.04 | 0.14 | | 0.03 | 0.07 | 0.00 | 0.03 | 0.0 |)1 | 0.06 | 0.01 | 0.09 |

Notes: Robust standard errors in parentheses. Cells highlighted in bold indicate significant differences between Head Start and preschool parents. For each regression outcome, the first column presents differences in means across program types. The second column presents these differences when including several child and family covariates in the model. Covariates include child gender, race, parent education, family income, non-English language status, and single-parent household status. 5% of the parent sample did not report family income, so we controlled for this in the covariates model instead of eliminating these parents from the sample.

^{*} p < 0.05.

^{**} p < 0.01.

Table 4 Parents' information sources for finding ECE site, by program type.

| | Friends/family | | Public sch | ool | Ads/Internet | | Referral agency | | Church/other | |
|--------------|----------------|--------|------------|--------|--------------------|--------|-----------------|--------|--------------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Head Start | 0.26** | 0.22** | -0.09 | -0.07 | -0.13 [*] | -0.13* | 0.00 | -0.00 | -0.03 | -0.01 |
| | (0.07) | (0.07) | (0.08) | (0.08) | (0.06) | (0.06) | (0.02) | (0.02) | (0.04) | (0.04) |
| Preschool | -0.15 | -0.16° | 0.37 | 0.34 | -0.15 | -0.15 | -0.01 | -0.01 | -0.05 | -0.02 |
| | (0.06) | (0.06) | (0.08) | (0.08) | (0.06) | (0.06) | (0.01) | (0.01) | (0.04) | (0.04) |
| Constant | 0.42** | 0.49** | 0.23** | 0.33** | 0.19** | 0.11+ | 0.02 | 0.01 | 0.15** | 0.06 |
| | (0.05) | (0.13) | (0.07) | (0.12) | (0.06) | (0.07) | (0.01) | (0.03) | (0.03) | (0.07) |
| Covariates | | × | | × | | × | | × | | × |
| Observations | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 |
| R-squared | 0.13 | 0.15 | 0.18 | 0.21 | 0.04 | 0.07 | 0.00 | 0.02 | 0.00 | 0.02 |

Notes: Robust standard errors in parentheses. Cells highlighted in bold indicate significant differences between Head Start and preschool parents. For reach regression outcome, the first column presents differences in means across program types. The second column presents these differences when including several child and family covariates in the model. Covariates include child gender, race, parent education, family income, non-English language status, and single-parent household status. 5% of the parent sample did not report family income, so we controlled for this in the covariates model instead of eliminating these parents from the sample.

90

^{**} p < 0.01.

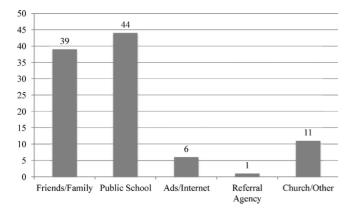
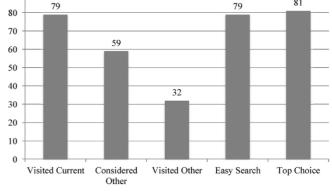


Fig. 2. Parents' primary information sources for finding ECE site (percentages). Note: N = 858



81

Fig. 3. Parents' search processes and search satisfaction (percentages). Note:

current ECE program through personal networks. In contrast, only 42% of parents in child care centers and 26% of parents in state preschool reported personal networks as their primary source. Column 3 shows that parents with children in public preschool were much more likely to report getting information primarily through their local public school (59%) than child care parents (23%) and Head Start parents (13%). Relative to Head Start and state preschool parents, child care parents were more than three times as likely to report using advertisements or the internet for their searches (18% compared to 6% and 3%). These differences are still significant and of comparable size even when covariates are included (columns 2, 4, and 6). Taken together, the results indicate that child care parents use a more diverse set of sources to find out about their child's programs than either Head Start or preschool parents.

Fig. 3 turns to parents' comparison shopping and satisfaction with their search. Most parents (79%) report visiting their child's care arrangement prior to enrolling them; fewer parents indicate they considered another program in addition to the one they ultimately selected (59%), and less than a third indicated they visited a program other than their chosen site. At the same time, the majority of sampled parents indicated they did not find the search difficult (79%) and enrolled in their top choice program (81%).

Table 5 disaggregates these patterns by program type. These models suggest that child care parents do more comparison shopping than parents in other program types. They were 11 percentage points more likely to visit their current programs (86%) than preschool parents, even after controlling for covariate differences

(column 2). There were no differences across program types in the likelihood that parents considered any other program in addition to the one they ultimately selected. However, in additional analyses (available upon request), we do find that child care parents are over 20 percentage points more likely than other parents to indicate they considered a state preschool in addition to the program they ultimately selected. Indeed, after accounting for covariate differences, child care parents were 13 and 19 percentage points more likely to visit multiple programs than were parents who enrolled their children in Head Start and preschool, respectively (column 6).

Child care parents appear less satisfied with their searches, however. For instance, 63% of child care parents reported that finding care was not difficult, whereas in Head Start and state preschool, the percentages were 77 and 84, respectively. These differences persist in models including child and family covariates (column 8), though the significant difference between Head Start and preschool parents attenuated with the addition of the control for race in column 8. Similarly, after controlling for covariate differences, parents of children in child care centers were 12 percentage points less likely than Head Start parents to report enrolling in their top choice program.

5. Discussion

Over the past 50 years, the number of four-year-olds in some kind of formal ECE arrangement has tripled (Bainbridge et al., 2005; Magnuson & Waldfogel, 2016). For low-income families in particular, the options for formal ECE are diverse and may have long-term

⁺ p < 0.10.

p < 0.0.

Table 5Parents' search processes and satisfaction, by program type.

| | Visited current | | Considered | lother | Visited other | | Easy search | | Top choice | |
|--------------|-----------------|--------|--------------------|--------|---------------|--------------------|-------------|--------|------------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Head Start | -0.04 | -0.06 | -0.07 | -0.05 | -0.16** | -0.13 [*] | 0.14* | 0.13* | 0.13* | 0.12* |
| | (0.04) | (0.05) | (0.08) | (0.09) | (0.06) | (0.06) | (0.05) | (0.05) | (0.06) | (0.06) |
| Preschool | -0.11 | -0.11 | -0.13 ⁺ | -0.10 | -0.24 | -0.19** | 0.21 | 0.18 | 0.06 | 0.03 |
| | (0.04) | (0.05) | (0.07) | (0.08) | (0.05) | (0.06) | (0.05) | (0.04) | (0.06) | (0.06) |
| Constant | 0.86** | 1.06** | 0.69** | 0.38* | 0.51** | 0.21 | 0.63** | 0.82** | 0.74** | 0.66 |
| | (0.04) | (0.09) | (0.07) | (0.14) | (0.04) | (0.19) | (0.04) | (0.10) | (0.06) | (0.11) |
| Covariates | | × | | × | | × | | × | | × |
| Observations | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 | 858 |
| R-squared | 0.01 | 0.03 | 0.01 | 0.03 | 0.03 | 0.07 | 0.03 | 0.06 | 0.01 | 0.03 |

Notes: Robust standard errors in parentheses. Cells highlighted in bold indicate significant differences between Head Start and preschool parents. For reach regression outcome, the first column presents differences in means across program types. The second column presents these differences when including several child and family covariates in the model. Covariates include child gender, race, parent education, family income, non-English language status, and single-parent household status. 5% of the parent sample did not report family income, so we controlled for this in the covariates model instead of eliminating these parents from the sample.

implications for both children and families. This study provides the first descriptive evidence regarding differences in parents' preferences and search processes across formal program types as they exist in the Louisiana policy context.

Consistent with previous literature, our study indicates that warm teachers, a clean, safe environment, and academic supports were the features that parents across all program types were most likely to characterize as "essential" in the ECE programs they sought for their children, (Barbarin et al., 2006; Chaudry et al., 2011; RWJ, 2016; Rose & Elicker, 2008; Sandstrom & Chaudry, 2012; Shlay, 2010; Shlay, Tran, Weinraub, & Harmon, 2005). Location, hours, and other convenience factors were less frequently cited as "extremely important," and parents' preferences for these factors at times varied by program types. For instance, relative to parents with children in either Head Start or child care, parents whose children were enrolled in preschool programs were more likely to rate transportation provision and finding a program that enrolls their other child as "extremely important." Overall, the results indicate that the low-income, Louisiana parents included in our sample have similar preferences for care across program types. However, "convenience features" might ultimately drive parents to sort into ECE arrangements that best meet their needs.

Differentiation across program types is more pronounced when we turn to search processes. In line with earlier research, we find parents doing limited comparison shopping (Anderson et al., 2005; Forry et al., 2014; Layzer et al., 2007). For instance, about 40% of our sample did not consider another program in addition to the one where they ultimately enrolled their child, and 68% did not visit a center other than the one where their child enrolled. However, these overarching patterns differed across groups. Specifically, parents whose children ended up in child care centers searched more, considered more alternatives, found the search process more difficult, and were less likely to consider their child's program their first choice.

Unfortunately, the survey leveraged for the current analysis does not allow us to disentangle *why* these differences emerge across program types, only that they do exist. Like many studies of parents' ECE selection, we use survey data from parents *after* they make their ECE selection. The program where we observe a child is driven by a combination of demand and supply factors. In other words, we are capturing some combination of parents' preferences for care and the choice set that is available to them. We do not have an empirical means by which to disentangle these two factors. For example, we do not know families' home or work addresses, and therefore cannot model their choice set. We also lack

sufficiently detailed information about family resources to assess parents' eligibility for nearby programs.

Understanding the drivers of the patterns we documented is essential for designing policies. Toward that goal, we provide several candidate explanations for why the search processes reported by parents who enrolled in child care centers were significantly different from those with children in either Head Start or state preschool.

One possibility is that child care families, who were the highest earners in the sample, missed the eligibility cut-off for Head Start and were not prioritized for targeted preschool programs, and therefore limited their search to child care settings. Their searches may be more challenging because of limits to their choice set. Such a scenario is consistent with earlier work by Fuller and Liang (1996), which highlights the challenges of finding care for families whose income levels put them just above the poverty cut-off.

Another possibility is that families of children enrolled in child care settings did meet eligibility criteria and did apply, but due to limited supply were not given a slot and therefore sought out other alternatives. A third possibility is that child care parents searched more and reported that they did not enroll in their top choice because they lacked critical information about their options and/or the process of enrolling four-year-old children in Head Start or state preschool (timeline, eligibility requirements, etc.) in Louisiana. Many parents who enrolled in Head Start and preschool relied on social networks or schools for information; for parents who do not have networks with a connection to Head Start or a state preschool, it may be that accessing this information was difficult.

It is certainly plausible that child care programs better meet some families' needs or preferences than do Head Start or public preschool programs in their choice set. For example, it may be that child care settings provided more of the convenience features parents needed. Child care centers in this sample universally offered full day services, and many also offered summer care, which may be crucial for working parents. In addition, as noted above, there is substantial variability within program types, and many child care centers provide high-quality care. Indeed, in the current sample, child care centers demonstrated CLASS scores and group sizes comparable to Head Start and preschool programs, so opting into a child care setting did not necessarily imply a trade-off between convenience and quality.

Still, even if some parents who select child care view it as a superior option to Head Start or state preschool, it is not clear why this group of parents was systematically more likely to note their child's program was not their first choice or that their search was difficult.

⁺ p < 0.10.

^{*} p < 0.05.

[&]quot; p < 0.01.

Perhaps for our current sample, finding an available and affordable child care option was more challenging, and less centralized, than searches for public preschool or Head Start. However, the fact that in supplementary analyses (available upon request) 52% of child care parents indicated they also considered a public preschool program and 26% indicated they also considered a Head Start program suggests that, at least for some families, lack of availability, lack of eligibility, or lack of information are keeping them from their preferred options.

For policymakers seeking to improve the quality of children's ECE experiences, these hypotheses suggest divergent policy solutions. For example, if parents lack information about their choice set and the quality differences between their options, informational interventions may be highly effective. For instance, the movement toward Quality Rating and Improvement Systems (QRIS) in many states could provide important supports for parents attempting to make ECE decisions. In particular, to the extent that QRIS reduce fragmentation by equalizing information across program types, parents may be more able to identify and select programs that meet their needs. Indeed, Chase and Valorose (2010) report that 88% of their sample of Minnesota parents would find a QRIS very helpful (53%) or somewhat helpful (35%), a proportion that was higher among low-income parents.

If, on the other hand, parents are aware of local program options, but lack access to high-quality, affordable programs for any of several reasons, then informational interventions may be less effective than policies that improve access to and affordability of high-quality options. For instance, if parents are choosing programs that are low on observed quality, but provide the practical features they require, policymakers could consider means by which state preschool or Head Start programs may extend services to accommodate the needs of parents (extended hours, etc.). If parents cannot access preferred settings because of cost or eligibility restraints, ECE policy should focus on expanding access, whether by increasing the value of child care subsidies or expanding available slots in Head Start and preschool settings.

More research is needed to understand how low-income parents make choices across the fragmented ECE landscape, particularly across states and geographic areas with different ECE regulations and funding structures. In Louisiana, new centralized enrollment efforts, which allow parents to learn about and apply for any publicly-funded ECE program through a centralized process, will offer a unique opportunity to understand these issues. Studying these coordinated enrollment efforts will allow researchers to better understand the extent to which parents' decisions could be supported by information, or whether other policy interventions are needed to create high-quality ECE opportunities for all lowincome children. In the meantime, the current study highlights the importance of integrating practical features into QRIS systems. The variation by program type in parents' preferences for convenience features highlights the relevance of these categories for parents; providing streamlined information across program types will facilitate better ECE decision-making in the short run.

5.1. Limitations

This study is the first to document differences in low-income parents' preferences and search processes across ECE program types within the formal sector and highlights substantial differences in search processes between families who end up in child care settings compared to those in either Head Start or preschool. In interpreting these findings, several data limitations are worth highlighting.

First, surveys are common but imperfect tools for understanding parents' ECE preferences and search processes. A perception of the "desirable" survey response may lead parents to state that their

child's development was the most essential factor in their decision, even if in practice affordability and location were more binding. Our results are almost certainly biased by these types of issues, though this limitation is inherent to this whole body of research.

Second, the fact that we are leveraging survey data from parents after they have enrolled their child in a particular ECE program may have important implications for the ways in which they responded to survey items. We assume that parents' preferences influence their ECE choice (e.g., if parents state a preference for warm teachers, they seek out a program that has warm teachers). However, this may not necessarily be the case. For example, it could be that parents enrolled in a program that provides transportation will report that this transportation is "extremely important" at higher rates than they would have had we surveyed them before they had finalized their decisions. In the present study, we observe similar families, in terms of stated preferences, sorting into program types that offer varied services. If, however, parents are choosing programs that do not meet their preferences because of either a lack of information or a lack of access to the kinds of programs they would prefer, then there may be ample room for policy intervention.

Third, the available data cannot conclusively determine the individual choice sets from which parents selected their children's programs. Family income, children's age, and practical constraints such as hours, cost, or location likely influenced the options available to parents. For example, children under the age of four would not have been eligible to enroll in state preschool, while some of the higher earning families in the sample may not have been eligible for, or prioritized to enroll in, Head Start. Further, parents with nontraditional work schedules, for instance, may not have been able to enroll their children in state preschool programs that seldom offered flexible hours or summer care. While we cannot determine choice sets at the individual level, a key contribution of this study is the descriptive information it provides about how parents who ultimately enroll their children in different program types tend to differ in their demographic characteristics as well as their preferences and search processes.

Finally, the proportion of parents using child care in the sample is relatively low (11%). This is an artifact of our study's focus on programs with classrooms that primarily serve four-year-olds. With the expansion of public preschool, child care centers now more often serve younger children. Our study does not capture infants and toddlers, for whom parents' preferences and search processes likely differ substantially (Coley et al., 2014). For example, the majority of children in our sample were enrolled in free or near-free ECE settings; it is likely that in a sample that included more children enrolled in child care settings, parent concerns over cost would play a stronger role.

6. Conclusions

This study provides suggestive descriptive evidence that low-income parents in Louisiana with children enrolled in Head Start, state-funded preschool, or private child care centers have very similar preferences with respect to the aspects of ECE programs they view as most important, but they have quite different experiences searching for programs. The study does not address *why* this is the case, which is an important question for ECE policymakers. Instead, it raises important questions for future research. It may be that ECE policy needs to focus on strategies to increase access to affordable and high-quality ECE opportunities for all low-income children, while ensuring that these programs meet families' diverse practical needs. Alternatively, if information gaps are pronounced, policies could focus on the refinement of QRIS to help parents make optimal choices. In the meantime, the results of the current paper highlight the need for further research to improve our understanding of how

low-income parents make choices across the fragmented ECE landscape. Specifically, it is necessary to improve our understanding of the experiences of families in child care settings, who in the current study were less likely to view their child's ECE program as their first choice and more likely to experience searches they perceived as challenging.

Acknowledgements

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