# Parental Search and Selection of Child Care and Early Education: A Literature Review

OPRE Report 2024-082 April 2024



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# **OPRE Report 2024-082 April 2024**

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# Overview

# Introduction

Families commonly make decisions about child care and early education (CCEE). CCEE supports children's learning and parents' work and education. Families may use CCEE in a child care center, home, or school setting. They may use a licensed program or relatives, friends, or neighbors to provide care.

To support families who are looking for CCEE, the federal government provides funding to states, territories, and Tribes through the Child Care and Development Fund (CCDF) to design and implement consumer education activities. These activities are designed to help parents more easily access information about CCEE and available providers in their area, so they can make more informed decisions.

In response to policy actions, researchers have examined questions related to how parents search for and select CCEE. This literature review report summarizes findings across recent publications. It identifies key findings across research studies as well as limitations that could be addressed by future research.

# **Primary Research Questions**

- 1. What are the primary reasons families search for CCEE?
- 2. How do families learn about and search for CCEE options?
- 3. When do parents search for CCEE, and how long does it take to find a provider?
- 4. What are parents' perceptions of different CCEE types?
- 5. What is most important to them when looking for and considering their options?
- 6. Why do they select the programs and providers they do, and what barriers do they face in searching for and selecting CCEE?
- 7. How can research from other fields inform the study of CCEE search and selection?

# Purpose

This literature review report was developed as part of the Consumer Education and Parental Choice in Early Care and Education project. This report summarizes research published from 2012 to 2021 on how parents look for and select CCEE. The report identifies key findings and areas for future research.

# Key Findings and Highlights

- Parents often rely on their relatives, friends, close personal contacts, and other trusted sources for information on CCEE options.
  - Parents also frequently search the internet to find information about CCEE.
  - They less often report using formal sources, including child care resource and referral (CCR&R) agencies.
- Parents consider multiple factors when searching for and selecting CCEE.
  - Safety and quality are among top priorities, but they also weigh practical considerations, such as location and hours.
  - Cost is often a limiting or deciding factor—meaning some parents limit the options they consider to ones they can afford, or they ultimately select CCEE based on cost or whether they think the cost is worth it.
- Factors, such as family circumstances and beliefs, personal and community characteristics, and local CCEE supply, relate to whether parents use any form of CCEE and different types of CCEE.
  - Parents believe different CCEE types have different advantages and disadvantages, and those beliefs may influence the options they consider.
  - Some parents do not trust unfamiliar caregivers and prefer using caregivers they personally know.
- Many parents face barriers when searching for and selecting CCEE.
  - Access issues include trouble finding providers they can afford that meet their expectations for quality and availability during the hours they need.
  - Some parents have concerns about the reliability and trustworthiness of publicly available information on CCEE.
  - ► The complexity of public CCEE programs requiring proof of eligibility is another reported challenge.
- Although searching for and selecting CCEE may be challenging at times for all families, some families face additional burden because of limited CCEE supply and other systemic barriers.
  - Families facing greater challenges include those with infants, parents working nontraditional hours, families who live in low-income or rural areas, and those where the parents are immigrants unfamiliar with CCEE in the United States.

 The amount of available research evidence varied across key topics, with less known regarding how long it takes parents to find CCEE and why they use some information sources as they search for and select a provider.

# Methods

We reviewed three types of literature: 1) CCEE search- and selection-related literature published between 2012 and 2021; 2) earlier theoretical and conceptual papers and key articles that provide background for the reader; and 3) select literature published between 2000 and 2021 from other fields, such as behavioral science, communications, marketing, public health, and education, to provide examples of how people search for and make decisions about other services and products.

To identify the first set of literature (i.e., recent papers on CCEE search and selection), we used a systematic review process with defined search terms and inclusion and exclusion criteria to identify a comprehensive set of publications for screening. We identified 132 publications through database searches and an additional 6 unique publications from an open call for resources. We screened for relevance and excluded 61 publications that were deemed not relevant to the topic. Most excluded papers were about some aspect of CCEE but not parents' search for, selection of, or use of CCEE. Among the 77 publications that were relevant, 17 were theoretical or conceptual papers that we reviewed for content and cited in the literature review. The other 60 publications presented findings from empirical studies and included a mix of peer-reviewed articles (*n*=40) and non-peer-reviewed research reports and briefs (*n*=20). We then assessed the credibility of the 60 relevant sources to ensure the research was of sufficient rigor for inclusion. No publications were removed from consideration based on rigor.

# **Executive Summary**

This literature review presents research evidence published between 2012 and 2021 on how parents search for and select CCEE. In addition to literature on search and selection from the field of CCEE, papers from other fields, such as behavioral science, communications, marketing, public health, and education, were also included to provide examples of how people search for and make decisions about other services and products.

Findings from this review suggest that parents most commonly talk to family members and friends to learn about CCEE, with internet search engines (e.g., Google) as the next most common resource. Yet we know little about why parents use these information sources and not others, whether they are aware of consumer education resources in their community, and what their perceptions of available resources and information sources are. This literature review surfaced few published studies that examined parents' interactions with search websites and CCR&R agency staff and resources.

Findings also suggest factors, such as family circumstances and beliefs, personal and community characteristics, relate to whether parents use any form of CCEE and different types of CCEE. Studies also suggest family dynamics are important and that families' needs change over time. However, more research is needed to better understand the experiences and needs of new parents versus experienced parents, as well as those of parents transitioning from one provider to another under various circumstances. Few identified studies explored differences in how parents approach CCEE searches for children of different ages and how previous searches impact subsequent searches for the same child or a sibling.

More research is also needed that examines parents' CCEE decisions in the context of CCEE supply and quality. Many studies describe the types of providers that parents select but do not often examine what options were available, which options parents considered, why options were not selected, and tradeoffs parents make. These decisions are shaped by families' circumstances, yet less recent information is available on certain subgroups of families (e.g., rural families, families with children with special needs). Additional research is needed to understand the perspectives and experiences of these understudied family subgroups.

Finally, our review of the research literature points to several areas with limited or no evidence. We found less evidence on the timing of searches, such as how long searches take, why search lengths vary, why parents start searching earlier or later than others, and when searches most commonly occur and why.

# Introduction

# Background and Purpose

Every day, families across the United States make decisions about the care and education of their children. According to 2019 data, about 6 out of 10 children younger than age 5 are in a child care and early education (CCEE) arrangement at least 5 hours a week (National Survey of Early Care and Education Project Team 2022). Searching for and making decisions about CCEE is a common activity for families, especially families with working parents who rely on nonparental care (Hill et al. 2021). According to the 2012 National Survey of Early Care and Education (NSECE), almost half (47 percent) of households with a child younger than age 5 searched for care in the past 24 months (NSECE Project Team 2014).

CCEE can support parents' engagement in work and educational activities as well as children's learning and development. Families may use licensed or regulated CCEE provided in a child care center, family child care home, or school setting. They may also use caregivers exempt from licensing, which can include relatives, neighbors, and some faith-based group settings, depending on the state and its regulations.

CCEE programs and providers vary in many ways, including the ages of children they serve, their schedules, their curricula, the food they provide, and any tuition or fees they charge. Some are publicly funded and free to parents, such as Head Start or public prekindergarten, some rely entirely or partly on parent fees, and some use a mix of public and private funding. Application and enrollment steps can also vary. Eligibility for some CCEE programs depends on family income and circumstances; for example, families with low income or with a child experiencing homelessness, in foster care, or with special needs may qualify for Head Start and Early Head Start (Barnett and Friedman-Krauss 2016). Many state prekindergarten programs are limited to or give priority to children with low incomes (Friedman-Krauss et al. 2022). Because of this complexity and lack of centralization, families may not be aware of the variety in CCEE and what options are available to them.

### The Role of Consumer Education

In an effort to support families in need of CCEE, the federal government provides funding to states, territories, and Tribes through the Child Care and Development Fund (CCDF) to design and implement consumer education activities. Consumer education activities can also be funded with other sources. Some consumer education strategies are designed to reach and support all families broadly. Other strategies target families

with different needs using tailored information, such as for families with low incomes eligible for child care subsidies that help pay for care.

The Child Care and Development Block Grant Act (CCDBG) that authorizes CCDF was reauthorized in 2014, with an expanded focus on consumer education. New regulations in the 2016 CCDF Final Rule are designed to ensure parents have information to make informed consumer choices when searching for and selecting CCEE. For example, states provide parents with information about the child care provider (e.g., quality rating, any health or safety violations, licensing status). States are required to design easily accessible websites to support families' search and decision-making. These websites must offer transparent information in plain language about program quality, such as ratings from a state or local quality rating and improvement system (QRIS), and a history of health and safety violations.

Although these publicly available resources exist, there is still limited research available on whether and how families use them in their search for and selection of CCEE. Understanding the information sources families use and trust, what they know and do not know about CCEE programs, and how they look for and select CCEE are all useful pieces of evidence for CCDF Lead Agencies and other key decisionmakers designing and implementing consumer education strategies.

# How Differences in Access Can Shape CCEE Searches and the Arrangements Parents Select

CCEE access varies from community to community. Not all families have the same options, financial resources, and links to information to find and use the CCEE that best meets their family's needs. For example, the supply of CCEE is often more constrained for some families, depending on where they live, the ages and developmental needs of their children, and parents' scheduling and transportation needs (Paschall, Davis, and Tout 2021).

According to the Office of Planning, Research, and Evaluation (OPRE) Early Care and Education Access Framework (Thomson, Cantrell, Guerra, Gooze, and Tout 2020), **access** "means that parents, with reasonable effort and affordability, can enroll their child in an arrangement that supports the child's development and meets the parents' needs" and with information and options "reach[ing] underserved and disadvantaged children." The framework identifies five dimensions of access:

- 1. Reasonable effort, meaning the number of available/open age-appropriate CCEE slots near parents' homes or workplaces is adequate and information about those CCEE options is readily available to families;
- Affordability, meaning out-of-pocket costs do not exceed what families are able to pay, and families receive assistance to pay through subsidies or scholarships if needed;

- 3. Supports child development, meaning the care is safe and high-quality and meets children's developmental needs;
- 4. Meets parents' needs, in terms of schedules, location, and preferences for specific program features; and
- 5. Promotes equity, meaning CCEE options and information on those options is reaching underserved children and their families.

These dimensions also offer a useful way to organize information about parents' CCEE search and selection. As parents look for CCEE and make decisions about arrangements, they often do so with attention to cost, quality, and convenience (Forry, Simkin, Wheeler, and Bock 2013). Recognizing access issues and the unique challenges different families face is an important context for the study of CCEE search and selection.

# A Special Note on Terminology

### Child care and early education (CCEE)

We use CCEE as the broad term to refer to child care and early education. CCEE includes child care centers; home-based child care programs; private preschool or nursery school programs; care from a relative, friend or neighbor; and publicly funded Head Start and prekindergarten. Research studies may focus on a specific care type. We use the term CCEE when the research cited reports on nonparental care broadly; otherwise we specify, such as studies of Head Start or public prekindergarten enrollment.

### "Choice" and "Selection"

The term "choice" is used in many literatures we examined. In the CCEE field, parents' options have sometimes been described as "choices," and the process parents make of selecting care has been referred to as "choosing" care. However, many families face constraints when searching for and selecting CCEE, such as limited supply of options that meet their needs (for example, affordable care). They therefore may not feel like they have a true "choice" among a set of options—or may, in reality, have no choice at all (i.e., have only one option that meets their needs and constraints). In this report, we generally substitute the word "choice" with other words—usually, "options"—to refer to the CCEE providers available, and "decision" or "selection" to refer to what parents picked, as these words have a clearer meaning. However, we use the word "choice" when that is a word or part of a phrase that has a particular meaning in a publication we are citing.

# Literature Review Approach

As part of the Consumer Education and Parental Choice in Early Care and Education (CEPC) project, we reviewed three types of literature: 1) CCEE search- and selection-related literature published between 2012 and 2021; 2) earlier theoretical and conceptual papers and key articles on child care decision-making that provided background on this topic; and 3) select literature published between 2000 and 2021 from other fields, such as behavioral science, communications, marketing, public health, and education, to provide examples of how people search for and make decisions about other services and products.

To identify the first set of literature, we used a systematic review process with defined search terms and inclusion and exclusion criteria to identify a comprehensive set of publications for screening. We searched broadly for both peer-reviewed and grey literature published between 2012 and 2021 using defined search terms (e.g., child care + search). This resulted in 132 publications. We identified 6 other relevant publications from an open call for resources and submissions from research authors. Each publication was screened for relevance to confirm: 1) the study was relevant to CCEE search, selection, or consumer education; 2) the sample included parents, caregivers, or other respondents reporting on families' child care decisions; 3) the data were collected in the United States; and 4) the sample was not too restricted and could offer evidence generalizable to other families with young children. We excluded 61 publications that were deemed not relevant to the topic, most of which were about some aspect of CCEE but not parents' search for CCEE, selection of CCEE, or use of CCEE.

The 77 relevant publications included 40 peer-reviewed empirical articles, 20 non-peer-reviewed research reports and briefs presenting findings from empirical studies, and 17 theoretical or conceptual papers. We assessed the credibility of the 60 empirical studies to assure the research was of sufficient rigor for inclusion. For example, the credibility determination process ensured the stated findings were directly connected to the significant results of a statistical analysis and bias was minimized. No publications were removed from consideration based on rigor. Appendix A describes the search and screening methods in more detail, and Appendix B lists the 60 CCEE-related empirical publications identified in our review.

We reviewed and synthesized evidence across the 60 empirical publications to describe how parents search for and make decisions about CCEE. We supplemented that evidence with content from the identified theoretical papers and several seminal papers on the topic published before 2012 to provide additional background. Across these papers, we examined differences in search and selection by family and child characteristics and community context where such information was available.

In addition to this review of evidence from the CCEE field, we looked to literature from other fields to help us understand how people (and parents, specifically) make decisions and engage in a search and selection process in other aspects of their life. We read

research from behavioral science, communications, commercial marketing, education, medicine, nutrition, public health, and social work to identify concrete examples of how parents, as consumers, receive and use information to inform their decisions. We did not apply the same inclusion criteria for these publications as we did for the CCEE-related papers, although we did consider relevance to the topic. Our review of evidence helped identify barriers and facilitators that shape decisions broadly.

# Literature Review Findings

Research efforts to understand parental CCEE decision-making first gained attention in the early 1990s when researchers wanted to understand the effects of welfare reform (Fuller, Kagan, Caspary, and Gauthier 2002; Hofferth and Wissoker 1992). As many mothers with low incomes who were receiving cash assistance transitioned to the workforce, they looked for CCEE arrangements, raising questions about the availability, cost, and quality of care (Hofferth and Wissoker 1992). The 1990 passage of CCDBG also motivated research on the topic. This large public investment in CCEE generated funding for research and drove researchers to examine questions related to CCEE use and quality. Since then, a growing body of research evidence has shown the complexity of CCEE and the challenges that families of many different backgrounds face when they search for and select CCEE arrangements.

A <u>2013 OPRE publication</u> synthesized earlier research literature on parental child care decision-making (Forry, Tout et al. 2013) and pointed to parents' preferences and priorities and the factors that constrain or ease their decisions. The review showed that parents of all backgrounds value quality; they want safe care environments with warm and experienced caregivers. Yet some differences exist in the types of arrangements families use, including whether those arrangements are regulated. Several studies cited in the 2013 OPRE publication, including a study by Sandstrom and Chaudry (2012) and research by Shlay (2010), revealed that although parents' preferences often shape their decisions, ultimately a wider variety of factors, including local options and limited supply, contribute to care decisions.

This earlier literature laid the groundwork for more recent studies of CCEE search and selection, which have more closely examined how parents search for CCEE, their perceptions and priorities, and key factors that shape their selection of CCEE arrangements.

We build on the 2013 OPRE report, synthesizing evidence across the 60 research papers published since 2012 that we reviewed. These describe how parents search for CCEE, including the reasons they search, the types of people and resources they use to help them search for and select care (such as friends, other parents, and community and online sources), and their perceptions of certain care types. We also discuss recent evidence on why parents select certain CCEE arrangements. Last, we summarize key points from other fields of study about how people make decisions.

### A Special Note on the Word "Search"

As we discuss the literature we reviewed, we frame it as literature on active search and selection because the studies we reviewed were typically about how parents are consciously seeking out information about CCEE that may be available to them. Some parents may not think of the steps they are taking as "searching"; for example, they may know the provider they want to use and do not consider alternatives, or only have a few in mind that they consider and do not go out looking for a provider. Also, they may have searched for CCEE for an older child and—when describing a more recent CCEE search—may report not conducting an active search; instead, they applied what they learned from the earlier search or experience with CCEE.

Additionally, parents can receive information passively about CCEE—information that they did not seek out or search for but that was given to them. This includes receiving a pamphlet from a doctor or friend or a notice in their social media feed. To date, studies we found in our review have focused less on capturing these experiences that parents may not readily recall and report.

Even for parents who identify with the term "search," the data collected about that process tend to focus on experiences at a single point in time with a particular child. We note that parents' past experiences searching for and using CCEE can shape their current search behaviors and CCEE searches look different depending on families' circumstances.

# Parents' Experiences Searching for CCEE

Among the 60 publications we identified that were published between 2012–2021, 24 presented information on CCEE searches. Findings across these studies suggest that parents search for CCEE in a variety of ways and for different reasons. Although there is no single, clear definition of "CCEE search," literature suggests some parents engage in a more extensive search, considering multiple providers and seeking information to compare them and make a selection, whereas other parents have a simpler experience. The studies we reviewed typically included samples of families with low incomes, parents who are immigrants, and families with children younger than age 5. Our literature search resulted in few studies of CCEE for school-age children or children with special needs, so readers should be aware that the findings presented in this report may not fully reflect those groups.

Many studies in this review use data from the 2012 NSECE. This dataset is one of the only nationally representative studies of CCEE use and supply in the United States. This study offers valuable insights into parents' search and selection process. (Additional waves of NSECE data collection in 2019 provide more information, and a number of researchers are currently analyzing these data and producing research based on this analysis.)

Several other survey and qualitative studies have explored how parents search for CCEE. These studies have examined how long the process takes, what contributes to the duration of the search, and the sources of information families rely on to learn about CCEE and find available options. Together these studies offer insights into parents' CCEE search behaviors, but the evidence is thin on some topics, such as how parents approach CCEE searches at different stages in their lives, how previous searches impact subsequent searches for the same child or a sibling, or whether parents are aware of their states' consumer education resources. We review the available information and identify areas for future research in the research gaps section at the end of the report.

# What are the primary reasons families search for CCEE?

Parents' work needs and their desire to support child development are the main reasons parents search for CCEE.

Findings from the 2012 NSECE household data describe why families across the country search for CCEE (NSECE Project Team 2014; Hill et al. 2021). The survey asked parents to answer questions about their most recent (within the past 24 months) "child care search" for a specific child in the household. Of those with a child younger than age 5, almost half (46 percent) had recently searched for care.

The 2012 NSECE asked parents for the main reason they were looking for child care at that time. The most common reason, reported by 42 percent of surveyed households, was because their families needed child care while parents worked or because of a change in their work schedules that prompted the need for a new or different arrangement (NSECE Project Team 2014). About 28 percent of parents searched for care primarily to support child development and provide educational and social enrichment. The remaining responses were split among the other categories, such as "provider stopped providing care" (6.3 percent), "wasn't satisfied with care" (3.8 percent), "to give me some relief" (3.2 percent), and "to fill in gaps left by main provider or before/after school" (2.3 percent). Another 2.3 percent of searches were primarily for reasons related to affordability (i.e., reducing child care expenses). We note that parents were asked to select the main reason they were looking for child care; it is possible that the main reason parents selected was not the only reason they searched for care.

The reasons parents searched for care vary by age of the child, according to an analysis of the 2012 NSECE (NSECE Project Team 2014). About half (51 percent) of surveyed households searching for care for an infant or toddler indicated a change in parents' work (such as mothers returning to work) as the primary reason for initiating the search, compared with 28 percent of parents with preschool-age children. Parents with infants and toddlers reported searching for care to meet parents' work needs at more than twice the rate of supporting children's educational and social needs (51 percent

versus 19 percent). In contrast, parents with preschool-age children were more likely to search for an arrangement for child educational and social needs (41 percent) compared with parental work reasons (28 percent).

Researchers have also examined differences in why parents search for CCEE by household income levels. In an analysis of 2012 NSECE data, authors found that parental work was the main reason for CCEE searches for nearly half of households with income below the federal poverty level (FPL) but for only 36 percent of higher-income households at or above 300 percent FPL. Higher-income households were slightly more likely to report their primary reason of searching for CCEE as supporting children's educational and social development, rather than work (NSECE Project Team 2014).

Two small qualitative studies of African and Latina U.S. immigrant mothers echo these findings that parental employment and desire to support child development are among the primary reasons parents search for care (Vesely 2013; Vesely et al. 2021). In a sample of 40 low-income African and Latina mothers, 43 percent reported that employment was a primary reason for searching for CCEE (Vesely 2013). A quarter of these mothers cited the desire for their children to learn English as a primary reason for searching, while 12 percent cited supporting children's social and emotional development. In a more recent study with 55 undocumented Central American immigrant mothers, the majority of mothers reported searching for CCEE that could support their children's learning and development (Vesely et al. 2021).

Analyses of the 2012 NSECE found few differences in parents' primary reasons they searched for care, whether by parent immigrant status or other indicators of race and ethnicity. All groups consistently cited parental work and supporting children's social and educational development as important (NSECE Project Team 2014). Yet evidence from one small qualitative study of immigrant parents suggested their new immigrant status and immigration experience were contributing to their search for CCEE. In this study with African and Latina immigrant mothers, 13 percent of mothers in the sample shared that the stress and depression they experienced from their immigration, in addition to living in a new country away from familial supports and familiar surroundings, was a primary reason they searched for care. For these mothers, CCEE was a way to get connected with others in their local communities in the face of isolation and limited social support (Vesely 2013).

Overall, some emerging research suggests that certain family attributes, such as child age and parent's employment needs, may play a greater role in the search for care than the demographic characteristics of the families searching. However, more research is needed to fully understand the influence of family culture, immigration status, and children's special needs on parents' reasons for searching for CCEE generally and for different types of CCEE more specifically.

# How do families learn about and search for CCEE options?

### Many parents rely on those close to them for information as they search.

Parents often report learning about CCEE programs and providers available to them in their community through their personal networks and recommendations from friends with children, relatives, and other trusted personal contacts (Dodge-Ostendorf, Draper, and Engelman 2019; NSECE Project Team 2014). According to the 2012 NSECE, nearly two-thirds of households (62 percent) considered more than one provider, and of those, most (63 percent) relied on family and friends with children for information (NSECE Project Team 2014). Of the parents who considered only one provider, 71 percent said they, a friend, or a family member worked for the provider, previously used the provider, or personally knew the provider (NSECE Project Team 2014).

Similarly, a study carried out by Child Care Aware® of America (CCAoA) to understand the underrepresented perspectives of families with low incomes, racial and ethnic minorities, families with children with special needs, families experiencing homelessness, and linguistically diverse households found that many parents seek information from family, friends, and other trusted sources in their personal networks (Dodge-Ostendorf, Draper, and Engelman 2019). To better understand the ways that parents search for care, CCAoA carried out a three-prong qualitative data collection effort that included a nonrepresentative online child care information poll of 255 parents who had varying levels of education and income and included dual-language parents and parents of children with special needs. The effort also included focus groups with 43 families from around the country and included racially and ethnically diverse parents, impoverished and homeless parents, dual-language parents, and parents who live in both urban and rural parts of the country. Researchers also conducted 18 key informant interviews with leaders of community-based nonprofit organizations, CCEE programs, human service agencies, and CCR&R agencies. Across all three sources, word of mouth was the most frequently referenced source of CCEE information. Focus group participants specifically noted how recommendations from a trusted source can help reinforce their comfort level with a particular provider.

Several small qualitative studies build on this study by showing the importance of personal networks and trusted sources among African American, immigrant, and Latino families, especially those with low incomes (Ansari, Pivnick, Gershoff, Crosnoe, and Orzoco-Lapray 2020; Pacheco-Applegate et al. 2020; Moran 2021; Vesely 2013; Vesely et al. 2021). In the study of African and Latina immigrant mothers cited above, nearly three-quarters of mothers said they learned about CCEE options through friends, family members, employers, and neighbors (Vesely 2013). These

Parents often report learning about CCEE programs and providers through their personal networks and recommendations from friends with children, relatives, and other trusted personal contacts. personal networks also helped mothers complete the necessary paperwork to enroll. Similarly, a qualitative study in Texas of 30 Latino/a parents found that the majority of parents relied on their personal networks (e.g., family and friends) and neighborhood organizations (e.g., YMCA) for information to help them decide whether to enroll their 4-year-old children in publicly funded preschool (Ansari et al. 2020). Likewise, a study of 32 Latina mothers in Chicago found that most learned about CCEE options through friends, neighbors, and family members (Pacheco-Applegate et al. 2020). Finally, in qualitative interviews with 40 African American mothers and grandmothers of preschool-age children living in urban neighborhoods, respondents described seeking referrals from trusted sources such as friends, family members, and colleagues and then visiting the sites (Moran 2021).

## **Spotlight: Word-of-Mouth Communication**

Word-of-mouth communication—specifically known as word-of-mouth marketing in the communications field—occurs when one person discusses their positive or negative experiences with a product or services with someone they know, often a friend, neighbor, or family member. For example, a mother with a positive experience in one CCEE program may feel motivated to share her experience, recommend the program to others, and convince friends to enroll (Dodge-Ostendorf, Draper, and Engelman 2019). Studies across disciplines, including education and health, have found the power of word-of-mouth communication among consumers and how parents rely heavily on information they receive from their personal networks to make decisions for their children. This method of communication is believed to be an effective strategy for promoting information because of the perceived trustworthiness of the source (Chaudry, Henly, and Meyers 2010; Harrison-Walker 2001).

For example, in one qualitative study on school choice, parents reported relying heavily on information they received from other neighborhood parents they met on the playground as a way for parents to decide where to send their children to kindergarten (Bader, Lareau, and Evans 2019). Similarly, a mixed-methods study with parents of children with disabilities highlighted the importance of speaking to other families when selecting a school for their child. Parents expressed using the experiences of other families in a particular school to gain a deeper understanding of the reality of the school's culture and quality of special education programs (McKittrick et al. 2020). Several studies of how parents selected a pediatrician, obstetrician, or child dentist found that recommendations from a friend, relative, or neighbor mattered more than information on websites, advertisements, or online physician ratings (Goff et al. 2016; Hanauer, Zheng, Singer, Gebremariam, and Davis 2014; Mahmood and Demopoulos 2016).

# Parents also learn about CCEE from online sources, social media, and technology-based platforms.

A mix of large, nationally representative studies along with smaller, qualitative studies found that some parents learn about CCEE through online web searches, social media, and other technology-based platforms (Dodge-Ostendorf, Draper, and Engelman 2019; NSECE Project Team 2014; Tang 2021).

Analyses of the 2012 NSECE showed that 39 percent of respondents reported checking with "other sources," making it the second-most-common source of information about CCEE after friends and family (NSECE Project Team 2014). The survey asked respondents who selected "other sources" to elaborate. The most common response for "other sources" was using the Internet to search for care. In a qualitative study of 29 parents of children between 3 and 5 years old in Delaware, some participants specifically mentioned using Google to search online during recent CCEE searches (Tang 2021).

A separate study based on analyses of the nationally representative Early Childhood Program Participation Survey of the National Household Education Surveys Program (ECPP-NHES 2016) found that parents reported website ratings to be very important to them when selecting an arrangement (Corcoran and Steinley 2019). Specifically, this study asked parents in the United States with children younger than age 6 in nonparental care to rate the importance of different factors, such as location, cost, hours of operation, ratings on a website, and recommendations from friends and families. The study found that 27 percent of parents reported that "ratings on a website" were "very important" when selecting an arrangement (Corcoran and Steinley 2019).

The importance of web ratings varied for parents with different demographic and educational characteristics. For example, 41 percent of parents of Black children, 34 percent of parents of Hispanic children, and 20 percent of parents of White children reported that web ratings were "very important." Additionally, 47 percent of parents with less than a high school education reported that web ratings were "very important" compared with 25 percent of parents with a bachelor's degree and 17 percent of parents with an advanced graduate degree. Further research is needed to better understand why web ratings are viewed as more or less important among certain parent subgroups, and namely if race/ethnicity or education are acting as a proxy for other unmeasured family characteristics. Of note, parents who participated in the ECPP-NHES 2016 were not asked which websites they relied on most. Websites could have included verified resources that states maintain to support CCEE searches as well as informal user reviews and crowd-sourced ratings on specific social media platforms.

Beyond websites, other technology-based platforms have been mentioned in past studies on CCEE searches. In the study by Child Care Aware® of America cited above, researchers analyzed data from a national, nonrepresentative online poll to assess the sources of information parents use to get information about CCEE (Dodge-Ostendorf,

Draper, and Engelman 2019). Sixty-one percent of parents who responded to the poll reported using mobile apps to access child care information, while 60 percent reported using parent text messaging programs that send parents text messages with information about CCEE. Preferences toward using mobile apps to receive information was highest among families with an educational attainment of an associate degree or lower. The report authors mentioned how certain parenting apps provide easy-to-understand content and have the advantage of reaching a wide variety of parents comfortable with using mobile apps. Other methods of communication less frequently reported included websites developed by industry professionals; social media outlets like Facebook, Twitter, Instagram, Snapchat, and Pinterest; and TV programming and online videos (Dodge-Ostendorf, Draper, and Engelman 2019). In focus groups as part of that larger study, however, parents discussed social media platforms, such as Facebook, as a way to get information from a broader network of friends and personal contacts whose opinions they trust to get recommendations and feedback about CCEE options they are considering.

Taken together, this research suggests that some parents use web-based tools and resources to find information about CCEE. Yet, more research is needed to better understand the various types of tools and platforms and how parents use them to search for CCEE, given CCDBG requirements for states to maintain search websites.

Parents appear to use online sources as a way to get recommendations and feedback on CCEE options they are considering from a broader network of trusted personal contacts.

Some parents also learn about CCEE from community agencies and directly from CCEE providers and other trusted professionals.

According to the 2012 NSECE and smaller, qualitative studies, some parents learn about CCEE through resources in their communities, including CCR&Rs, as well as from trusted professionals (e.g., health care providers) and CCEE providers directly (Dodge-Ostendorf, Draper, and Engelman 2019; NSECE Project Team 2014; Tang 2021; Vesely 2013). Almost two-thirds of NSECE survey respondents considered two or more providers; among them, about 16 percent reported using "a community service or resource and referral lists," with differences noted by household income level. Specifically, higher shares of households with incomes below the FPL relied on resource and referral lists than those at or above the FPL. Among households with incomes below the FPL, a small percentage (13 percent) reported receiving support from a welfare or social services office (NSECE Project Team 2014).

Also, a small share of parents reported on the 2012 NSECE that they asked potential contacts who were providers themselves (10 percent) or searched the Yellow Pages, newspapers, or physical bulletin boards (12 percent). These search methods reported in the NSECE were similar for families with children of different ages and with different

community poverty levels (NSECE Project Team 2014). Additionally, fewer than 1 percent of families in the 2012 NSECE reported asking a health care provider about CCEE information (NSECE Project Team 2014).

Evidence from three qualitative studies of parents of young children showed the use of different community resources to find child care was mixed (Sandstrom, Grazi, and Henly 2015; Tang 2021). In the small qualitative study of African and Latina immigrant mothers cited above, a quarter of mothers—the majority of whom were from Africa—reported using information from organizations like social service programs, pediatricians, public libraries, and children's activities to learn about CCEE options (Vesely 2013). Another study included 29 parents of children between 3 and 5 years old in Delaware. About a quarter of the sample reported consulting with a local CCR&R or a social services organization to get direct support from a program staff member to get a list of possible providers (Tang 2021). Yet evidence from a study with 85 current and former child care subsidy recipients in New York and Illinois revealed few parents used a CCR&R, and many reported having never heard of such services (Sandstrom, Grazi, and Henly 2015). In some cases, these parents reported receiving a list of approved local providers' names and contact information from subsidy office staff, but the lists were reportedly outdated and not detailed enough to help guide the parents' search.

# What information do parents look for as they search?

On the 2012 NSECE, parents most commonly reported gathering information about provider cost (39 percent), care type (36 percent), and care hours (35 percent) during their search (NSECE Project Team 2014). Parents searching for preschool care were also interested in the content of the program (31 percent), though this was less common for households searching for infant and toddler care (24 percent) (NSECE Project Team 2014).

# When do parents search for CCEE, and how long does it take?

Research suggests searches vary by time of year, and the time it takes to search may depend on many considerations, though evidence is limited.

Evidence from the 2012 NSECE suggests that parents tend to search for care during specific months but also shows that life events play a role in when the search begins for many families. In the 2012 NSECE, most reported CCEE searches occurred in the winter (January–February) (NSECE Project Team 2014). This may be attributed to parents looking in advance for summer or fall arrangements. Still, major life events that may be planned or unplanned can also prompt a search at various times. For example, analyses of the 2012 NSECE have shown that parents report that work (including changes in hours or schedule, a new job, or a loss of job) was a primary reason for searching for care (NSECE Project Team 2014). In addition, parents report searching for CCEE when they are placing their child in nonparental care for the first time or when families change from one CCEE provider to another. Other research has shown that job

loss, child care subsidy loss, changes in family composition, and changes in providers' availability are all common triggers for beginning a new CCEE search (Davis, Carlin, Krafft, and Tout 2014; Pilarz, Sandstrom, and Henly 2022). These types of changes may be unpredictable rather than planned changes, highlighting that the timing of many searches is not limited to a certain time of the year.

For parents with children already enrolled in CCEE, findings from a small qualitative study of 85 low-income mothers suggests that the time it takes to search for care may be in part constrained by whether CCEE changes are planned and desired (Pilarz, Sandstrom, and Henly 2022). Planned, desired changes occur for a variety of reasons. For example, research suggests some parents transition a child to a new arrangement as their child ages and parents desire a setting that better supports their child's early learning (Pilarz, Sandstrom, and Henly 2022). When changes are planned and not sudden, parents typically have more time to search for options than when changes are unplanned or sudden.

When families experience problems with current providers, some make a sudden change to a new provider, as several qualitative studies of families with low incomes have found (Pilarz, Sandstrom, and Henly 2022; Scott and Abelson 2016; Speirs, Vesely, and Roy 2015). In a quantitative study that followed 250 families with low incomes over time, parents were more likely to change providers when they previously reported problems with their child care quality (Davis, Carlin, Krafft, and Tout 2014).

The limited evidence about how much time it takes parents to search for CCEE may be because it can be difficult to measure the "search time" separately from the time it takes parents to weigh their options and select a provider.

When it comes to the duration of the search, evidence uncovered in our literature review is very limited. The few studies that exist suggest that parents generally recall the whole search and selection process as one, making it harder to report how long they searched. For example, in a quantitative study of 260 parents from diverse racial and ethnic backgrounds who had applied for cash assistance (Forry, Isner, Daneri, and Tout 2014), parents were asked how much time had lapsed between when they started looking for CCEE and when they made their final arrangements. Two

primary groups emerged in the analysis; the majority of parents (82 percent) searched for two weeks or fewer (Quick Deciders) and considered two arrangements before making a final decision. Comparatively, the other group of parents (Time Takers) took more time (on average 11 weeks) and considered an average of three options. Quick Deciders were less likely than Time Takers to consult with experts, review child care lists, or ask family and friends for advice. It is unclear whether this finding suggests that Quick Deciders had time constraints or were limited by other constraints and needed to decide quickly. Quick Deciders may have been satisfied with the options available to

them and therefore took less time or had access to fewer resources and had less information to weigh.

The limited evidence about how much time it takes to search for CCEE may be because it can be difficult to measure the "search time" separately from the time it takes parents to weigh their options and select a provider. Further research is needed to better understand how and when parents search for CCEE and how this is related to the length of the search process.

# What are parents' perceptions of different care types?

### Parents perceive different benefits across different care types.

When parents search for CCEE, they may consider the type of care they are looking for, such as center-based or home-based CCEE. Family child care (FCC) and family, friend, and neighbor (FFN) care are two types of home-based child care. FCC providers offer care in a home-based setting for small groups of children, while FFN care is provided in a caregiver's or child's home by a person who is a relative, friend, or neighbor. A large body of evidence, drawn from a nationally representative study, suggests that parents perceive different care types have different advantages and disadvantages. For example, the 2012 NSECE asked parents to rate the quality of center-based care, FCC, and FFN care on six dimensions: nurturing environment, school readiness, social interactions, safety, affordability, and flexibility. Analysis of 2012 NSECE data revealed that, on average, parents rated center-based care as best for children's school readiness and social interactions—and the least favorable for affordability and flexibility. In contrast, parents rated FFN care highly in nurturing environment, safety, affordability, and flexibility—but low on school readiness and social interactions. On average, parents rated FCC low in nurturing environment, school readiness, safety, and flexibility yet found it more affordable than centers and slightly more supportive of social interactions than FFN care (Tang, Hallam, and Sawyer-Morris 2020). Of note, the NSECE asked parents to rate all three care types without necessarily having experience with each. For some parents, then, their perception about a care type may not have been based on personal experience.

A web survey of 40 parents in Delaware that used the same rating scale as the NSECE found somewhat similar findings. This small sample of Delaware parents rated center-based care similarly as parents on the national survey, but they rated FCC and FFN care a bit differently. They rated FCC relatively higher and FFN care relatively lower on school readiness and FFN care lower on safety than did parents in the 2012 NSECE (Tang 2021). In follow-up interviews with 29 survey respondents, most parents reported that they believed center-based care promotes children's learning and development, but its cost and lack of flexibility were concerning (Tang 2021). Moreover, while they thought FFN care did not contribute to children's school readiness, they thought it was a good supplement for formal CCEE programs. In other words, those parents thought

relatives, friends, and neighbors could provide care to meet their families' caregiving needs at times when their children were not attending formal CCEE programs for early learning.

The different perspectives families may have about home-based care, as noted in the studies just described, could in part be due to a lack of familiarity and understanding of what home-based care is (e.g., whether it is licensed or regulated in the same way as a center) (Vesely et al. 2021). In one qualitative study, for example, parents differed in their understanding of "family child care" and perspectives about whether it was safe because it is in someone else's home (Tang, Hallam, and Francis 2021).

In a different qualitative study with immigrant mothers, study participants distinguished among FFN caregivers, describing family members and friends who were "como familia" (that is, "like family") as safer and more trustworthy compared to neighbors, who they may not know as well (Vesely et al. 2021). Unregulated, home-based care was common in the local community where the study took place. When asked whether they would consider providers they did not personally know, participants reported feeling more comfortable with

Many factors influence how families think about home-based care and other types of care. These factors—such as community characteristics—influence the type of CCEE that a family ultimately selects.

a child care center in the community than "neighbor care" in a home because they trusted care in a center versus with an unknown neighbor (Vesely et al. 2021). The authors suggested parents may have had more trust in centers given the work of community liaisons for the local public preschool programs.

Evidence from one analysis of 2012 NSECE data suggests that as children get older, parents were more open to the idea of using a provider they did not personally know (Watts 2017). Multiple studies with national and state samples (Delaware, Minnesota, and Texas) found similar evidence to the NSECE data: parents of infants report a greater use of and preference for relative care and parent care only, compared with parents of preschoolers who show a greater use of center- or school-based CCEE, including preschool/prekindergarten, that provide early learning opportunities in a larger group setting (Ansari 2017; Carlin, Davis, Krafft, and Tout 2019; Coley, Votruba-Drzal, Collins, and Miller 2014; Miller, Votruba-Drzal, Coley 2013; Miller, Votruba-Drzal, Coley, and Koury 2014; Tang, Coley, and Votruba-Drzal 2012). As further evidence, a study of 130 fathers' views on the ideal type of child care found they preferred relative care among nonparental care options for their infants, although their most preferred type of care for their infants was parental care (Rose, Johnson, Muro, and Buckley 2018).

Based on our review of literature published between 2012 and 2021, few studies have examined the circumstances surrounding when parents begin the search process, how long the search takes, what options they weigh, and why they may consider some CCEE options but not others. Few studies have explored differences in how parents

approach CCEE searches for children of different ages and how previous searches impact subsequent searches for the same child or a sibling. Little research has examined differences between new parents and experienced parents: specifically, how parents may approach CCEE searches differently in ways that relate to their parenting experience.

Additionally, this literature review uncovered little evidence from published empirical studies on if and how parents use QRIS ratings in their search efforts. One early evaluation study of Kentucky's QRIS showed many parents were not aware of it over a decade after it was established in 2000 (Starr et al. 2012), but the field has changed in several ways since then. It is important to note that nearly every state now has a QRIS, sometimes administered at a regional level within a state if not at the state level, but they are often voluntary for many providers. In addition, home-based child care is not always included in QRIS, so ratings may not be available for every provider in a given community. States are now required to maintain a child care search website with licensed providers searchable by zip code and QRIS rating, if available. Parents' search behaviors may be different now with these resources than in the past, but many studies included in this review were conducted before states launched websites compliant with new regulations. Whether and how parents engage with their state's QRIS while searching for CCEE may be a promising topic for consideration for future research.

# Parents' Selection of CCEE Providers

Our review of the literature published between 2012–2021 identified 56 publications (among the 60 screened in) about parents' CCEE selection. This literature includes both larger, nationally representative studies and smaller, qualitative studies. Evidence from this body of literature suggests parents' preferences and priorities for CCEE may be constrained by supply, cost, or other factors that shape access for families. As such, the reviewed literature highlighted the reasons that parents ultimately cited for selecting a CCEE provider within these constraints.

In this section, we summarize research evidence about the important factors that shape families' priorities when selecting a CCEE provider as well as factors that shape the CCEE options that parents have. We also discuss the evidence on the reasons parents give for ultimately selecting certain types of CCEE. Finally, we present research on how the selection process varies by family, parent, community, and child characteristics.

# What do families prioritize when selecting a CCEE provider?

Families use a variety of CCEE providers, including, but not limited to: center-based care; family child care (FCC); paid and unpaid family, friend, and neighbor (FFN) care; and publicly funded prekindergarten, Head Start, and Early Head Start. Several studies explored factors important to parents when selecting a CCEE arrangement for their child. These factors are sometimes referred to as CCEE preferences, priorities, needs, or desired characteristics.

Some studies have examined the main reason or reasons families selected a provider. In these studies, parents were asked to reflect on the reason they selected a provider after a decision was made. Other studies asked parents to report on the factors they prioritized when making a decision about care. Based on our review of the literature, factors generally fall into the following categories: 1) **health, safety,** and other **quality** (e.g., cleanliness of care environment, adult-child ratios, characteristics of the staff, opportunities for early learning); 2) **practical factors** (e.g., location, hours); and 3) **cost**. Most parents consider and prioritize factors across the categories. Findings across studies highlight the number of factors families may consider when selecting a CCEE arrangement and how considering many factors at once may make the selection process more complex.

### Safety and quality are among the top factors that families consider.

Having a safe, clean, and inviting physical care setting and a caregiver with experience, warmth, and job qualifications were among the most highly rated quality considerations for parents of young children in the studies we reviewed, regardless of their income or race (Ansari et al. 2020; Bassok, Magouirk, Markowitz, and Player 2018; Forry et al. 2013; Raikes, Torquati, Wang, and Shjegstad 2012; Rose, Vittrup, and Leveridge 2013).

For example, in a qualitative study of 41 parents with low incomes, health and safety was the second most frequently cited factor parents considered (mentioned by 54 percent) behind cost (mentioned by 56 percent) (Forry, Simkin, Wheeler, and Bock 2013). In another qualitative study of 86 parents with low incomes, 29 percent of parents described how the health and cleanliness of the physical care environment was a key characteristic that parents looked for or valued (Sandstrom and Chaudry 2012). For some parents, past negative experiences with specific CCEE providers also influenced their decisions to select an arrangement they considered safer (Sandstrom and Chaudry 2012; Vesely et al. 2021). Latino immigrant parents in one study discussed their distrust of neighborhood CCEE options, experience of ethnic discrimination, and selection of a program where they felt safe and included (Ansari et al. 2020). Selecting a licensed provider was important to some parents because licensing meant a certain level of health and safety standards were being met (Forry, Simkin, Wheeler, and Bock 2013; Raikes et al. 2012; Sandstrom and Chaudry 2012).

For parents of children with physical disabilities, quality and safety may overlap, as accessible physical structures and other physical accommodations may be both necessary and indicative of a quality care environment. For example, a survey of more than 400 caregivers of children with and without disabilities found that parents whose children had a disability were more likely to prioritize physical features of the CCEE setting (e.g., presence of ramps, accessible playground structures) than parents whose children did not have a disability (Glenn-Applegate, Justice, and Kaderavek 2016). To parents of children with disabilities, it is possible that these basic structures allowed

their children to participate in daily activities and signified more broadly that their children were accepted and their needs considered.

Features of the teacher or caregiver were also important aspects of quality associated with parents' selected CCEE arrangement in multiple studies. A study of 659 parents receiving child care subsidies ranked the education level of the caregiver as the most important factor in their selection of care (Raikes et al. 2012), while a separate study of 82 parents rated teacher experience as the most important factor in their selection (Rose, Vittrup, and Leveridge 2013). A smaller study of 40 mothers and grandmothers of preschool-age children living in low-income, urban neighborhoods found that the quality of child care environments—and in particular, staff attributes such as warmth, responsiveness, and credentials—ultimately informed their decisions to enroll the child

Having a safe, clean, and inviting physical care setting and a caregiver with experience, warmth, and job qualifications were among the most highly rated quality considerations, regardless of their income or race.

or not (Moran 2021). The author noted that state-designated quality ratings had little to no influence on participants' decisions; instead, participants described how they visited the programs and observed the care environment first-hand. A study of 283 fathers of children younger than age 6 reported similar findings; fathers ranked caregiver warmth, educational level, and experience as the top three characteristics of care that were most important to their selection process for nonparental child care arrangements (Rose, Johnson, Muro, and Buckley 2018).

Survey studies of parents using publicly funded preschool have shown similar patterns, with parents reporting they prioritized certain aspects of the environment and teacher (Bassok, Magouirk, Markowitz, and Player 2018; Fairman, Logue, and LaBrie 2016). In a survey of more than 1,000 Louisiana parents whose 4-year-olds attended either Head Start, state-funded preschool, or a subsidized child care program, parents considered building academic skills (88 percent), a clean and safe environment (87 percent), and warm teachers (81 percent) as extremely important features of the care they ultimately selected (Bassok, Magouirk, Markowitz, and Player 2018). Similarly, a survey of 148 parents in Maine revealed that over three-quarters of respondents ranked a safe and inviting classroom space, friendliness of teachers, and qualifications of teachers as either somewhat or very important in parents' decisions to enroll in public prekindergarten (Fairman, Logue, and LaBrie 2016).

Finally, among two studies reviewed above, a share of parents also rated other quality indicators such as program accreditation and licensure (Raikes et al. 2012) and access to technology, such as educational computer software and the internet (Rose, Vittrup, and Leveridge 2013), as important factors when they selected care, highlighting the importance of the care environment overall.

### Parents also weigh practical factors.

Multiple studies on specific populations, and one nationally representative study, show that parents also weigh more practical features, such as hours and location, when selecting CCEE. In a study of 203 parents whose children qualified for state-funded prekindergarten, parents' considerations were distilled into two primary categories: 1) characteristics that described program quality, and 2) characteristics that indicated practical features of care, such as affordability, offering hours that fit parents' schedules, having flexible sick policies, and offering transportation (Grogan 2012).

At a basic level, research suggests parents need CCEE that is available during the hours they need care and that they can easily travel to. In focus groups with 43 families and a child care information poll of 255 parents conducted by Child Care Aware® of America, parents ranked hours of operation (in addition to quality features) as most important when selecting a child care provider (Dodge-Ostendorf, Draper, and Engelman 2019). Analyses of the nationally representative ECPP-NHES 2016 showed that 72 percent of parents of children birth though 5 in the United States rated availability of care provider (the times during the day when the caregiver was available to provide care) as "very important" when selecting a care arrangement. Other top factors included reliability of the care provider (86 percent) and location (61 percent) (Corcoran and Steinley 2019).

Other smaller qualitative studies conducted with families with low incomes point to the importance of schedule flexibility; convenience of location (i.e., proximity to home or work or accessible via public transportation); convenience of hours (such as full-day options); and availability of transportation to and from the program (Ansari et al. 2020; Forry, Simkin, Wheeler, and Bock 2013; Rose, Vittrup, and Leveridge 2013; Sandstrom and Chaudry 2012; Vesely 2013). Proximity to home was also very important among undocumented immigrant families in one qualitative study. Given their status, undocumented parents in this study expressed fear when traveling too far (Vesely et al. 2021). These practical factors may have narrowed down parents' *choice set*—the options parents can reasonably select from.

### Cost of care often matters when parents select care.

Across the studies reviewed, cost was consistently cited as a priority for parents when selecting care. At a national level, analyses of the nationally representative ECPP-NHES 2016 found that 51 percent of parents rated cost as a "very important" factor when selecting care, with some difference between families with incomes below and above the FPL (62 versus 49 percent, respectively) (Corcoran and Steinley 2019).

Findings from two qualitative studies of parents with low incomes suggest that some parents narrow their search to providers they believe they can afford. For example, a study of 86 working families with low incomes found that when it came time to make a selection, parents reported either eliminating the most costly options or selecting the

most affordable option, given all other considerations (Sandstrom and Chaudry 2012). In focus groups for another study, parents of different races and income levels said cost was not a priority when searching for CCEE but was the most significant determinant of whether they seriously considered a provider (Dodge-Ostendorf, Draper, and Engelman 2019).

Cost may also narrow down parents' choice set and could influence what they publicly share about their children's providers, according to findings from a study that analyzed more than 48,000 consumer reviews of child care businesses across 40 cities posted on the website Yelp (Herbst et al. 2020). This study found that parents in higher-income markets were more satisfied with their CCEE than those in lower-income markets and evaluated different characteristics in their reviews. For example, parents in lower-income areas were more likely to comment on a program's practical features, such as its pricing and accessibility. Parents in higher-income areas were more likely to focus on the learning environment and quality.

A small number of studies with African American and Latina mothers with low incomes have shown that affordability of care was a primary factor that shaped their CCEE selections (Moran 2021; Pacheco-Applegate et al. 2020). However, other small studies with families with low incomes show cost is not always the singular *most* important factor. A study with both urban and rural parents with low incomes demonstrated that parents prioritized cost along with other practical issues, such as location and hours when selecting care (Forry, Simkin, Wheeler, and Bock 2013). Similarly, cost—along with convenience of location (i.e., proximity to home or work; accessibility via public transportation)—topped the list of important factors in a qualitative study of mostly immigrant families with low incomes; cost was a particular concern for infant care, which was harder to find and more expensive (Sandstrom and Chaudry 2012).

Child care subsidies are designed to help families with low incomes afford child care by reducing out-of-pocket costs. Some evidence suggests having a subsidy reduces parents' concerns about cost, gives parents access to CCEE programs they otherwise could not afford, and allows families to focus on factors other than cost when selecting a provider (Raikes, Torquati, Wang, and Shjegstad 2012; Sandstrom and Chaudry 2012; Weber, Grobe, and Scott 2018). For example, in a survey of 580 current or recent subsidy recipients in Oregon, instead of cost, the largest predictors of care type were parents' prioritization of a caring environment that supported learning, followed by trust in the provider (Weber, Grobe, and Scott 2018). In a telephone survey of 659 parents receiving subsidies in four states, the education level of the provider was the most important factor in their selection of care (Raikes, Torquati, Wang, and Shjegstad 2012). However, parents receiving a subsidy must use a CCEE provider that accepts subsidies—and finding such a provider and maintaining subsidy eligibility can pose additional challenges (Sandstrom and Chaudry 2012). For parents in these studies, receiving a subsidy may have shifted their concerns from finding a provider they could afford to finding a provider that accepted subsidies. Conversely, many parents who experienced a subsidy loss often searched for a different provider they could afford

without a subsidy (Davis, Carlin, Krafft, and Tout 2014; Pilarz, Sandstrom, and Henly 2022; Sandstrom and Chaudry 2012). Further research is needed to understand how families with low incomes that do not receive a subsidy select care compare with parents who do receive subsidies.

# What factors are related to the care type parents select?

Multiple studies, including a large, nationally representative study as well as smaller qualitative studies, have also explored *care type* as an outcome, with the goal of understanding why parents selected or are using a certain type, such as center-based care, home-based care, or parental care only. This research indicates certain factors, such as family circumstances, parent and child characteristics, and local CCEE supply, are related to families' decisions to use any form of nonparental care and to use one nonparental care type over another. Available studies have not fully disentangled how much of the variation in parents' selections is driven by supply versus parents' desire for a particular arrangement. Still, understanding these factors can be helpful for supporting parents in their search for CCEE.

Below we integrate findings from one study based on nationally representative data from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) (Coley et al. 2014) with findings from smaller, qualitative studies to provide a more comprehensive picture of the existing evidence. We organize this research thematically, including family characteristics (such as parental employment, family structure, and housing); parent characteristics (such as speaking a language other than English or being an immigrant); community characteristics (such as geographic location and local CCEE supply); and child characteristics (such as child age, developmental delays, and identified disabilities).

Changes in parental employment, household composition, and housing are associated with the type of CCEE arrangements used.

Analyses of ECLS-B data showed that working parents, regardless of full-time or part-time schedules, were more likely to use nonparental care (center-based or home-based CCEE) than parental care only (Coley et al. 2014). Changes in parental employment—particularly job loss—are associated with changes in child care arrangements, according to two additional studies (Davis, Carlin, Krafft, and Tout 2014; Speirs, Vesely, and Roy 2015). For example, in a sample of 250 mothers who responded to a multi-year longitudinal survey, job loss was associated with an increased probability of ending a CCEE arrangement (Davis et al. 2014). A smaller study using ethnographic data from 36 mothers with low incomes highlighted how job loss and child care instability may be linked in multiple ways. In some cases, mothers reported their job loss led them to change their care arrangements while, for others, they reported that not being able to access care that met their needs was why they lost their jobs (Spiers, Vesely, and Roy 2015).

Evidence from a qualitative study of 25 parents employed in retail or fast-food restaurants illustrated how the stability and predictability of work schedules may also influence child care arrangements. Parents in that study who had unpredictable work schedules (e.g., fluctuating shifts, varied number of hours week to week, just-in-time schedules, on-call work) often reported piecing together informal child care as needed or relying on a family member to be on call to provide care when needed (Carillo et al. 2017).

Household composition may also influence where children are cared for. Analyses of ECLS-B data showed that single parents were less likely than married and cohabiting parents to use parental care only (Coley et al. 2014). That same analysis of the ECLS-B found that for each additional adult living in the household, a child's odds of being cared for within the home increased, suggesting that adults residing in the child's home may have been contributing to caregiving activities. Meanwhile, with every additional child in the household, a child's odds of being in home-based or center-based care versus parental care decreased. The authors hypothesized that having multiple children may encourage parents to provide care themselves, likely due to the cost (Coley et al. 2014).

Other analyses of the ECLS-B and the Fragile Families and Child Wellbeing Study data—a longitudinal study of nearly 5,000 children born in large U.S. cities between 1998 and 2000, where births to unmarried mothers were oversampled—focused on families who use child care subsidies. These studies found that household composition, and specifically living with extended family, moderated the association between child care subsidy use and the type of care parents selected, but it operated differently across the two samples (Markowitz, Ryan, and Johnson 2014). That is, for families in the nationally representative ECLS-B dataset, living with extended family decreased the likelihood of mothers using subsidies for FFN care versus center-based care. In contrast, for families in the Fragile Families dataset, living with extended family increased the likelihood that mothers use subsidies for FFN care compared to center based care. This difference may be because Fragile Families participants were sampled from more disadvantaged urban areas and were oversampled from births to unmarried mothers. That sample may have had restricted access to CCEE options that met their needs and were more likely to use their subsidy to pay an informal caregiver than a center.

Findings from the NICHD study, a longitudinal study of more than 1,000 families with young children, suggests that changes in family composition are associated with changes in child care arrangements and may prompt a child care search (Crosnoe, Prickett, Smith, and Cavanagh 2014). Findings suggest that when parents' partnership status changed (e.g., ended a relationship or re-partnered) their children were more likely to experience changes in child care type (e.g., switching from parental care only to relative care or center care to nonrelative home-based care).

Finally, a small, qualitative study of 28 families who experienced homelessness demonstrated that housing instability was a primary factor in these parents' decisions to forgo preschool enrollment for their children (Taylor, Gibson, and Hurd 2015).

Overall, evidence from several large- and small-scale studies points to the ways families' circumstances are related to whether parents use parental or nonparental care and how changes in families' circumstances may change children's care arrangements. Yet these studies provide less information on how changes in employment, family composition, or instability in work or housing are related to the selection of a new care arrangement, specifically the options families consider and why they make the decisions they do, highlighting an important area for future research.

Parents' English language proficiency and perspectives on preserving home language and English language learning are associated with selected care type.

Findings from a collection of large, nationally representative studies and smaller qualitative studies of families with home languages other than English or with parents with limited English proficiency show that some parents consider the language of the provider when they select care (Johnson, Padilla, and Votruba-Drzal 2017; Miller et al. 2014; Sandstrom and Chaudry 2012; Tang, Hallam, and Francis 2021; Vesely 2013; Vesely et al. 2021). Evidence is mixed regarding preference for language match—that is, when the parent and provider speak the same language. For example, one study showed that some families prefer a language match, citing continuity of language and culture for their children and for ease of communication with the provider when parents have limited English proficiency (Vesely 2013). Alternatively, other studies have shown that parents look for a setting where their children can learn English (Johnson, Padilla, and Votruba-Drzal 2017; Sandstrom and Chaudry 2012; Vesely, 2021).

Some evidence suggests that speaking a language other than English and English proficiency is related to the type of care parents ultimately select. For example, one analysis of the 2012 NSECE found that families who spoke a language other than English were seven times more likely to choose home-based CCEE than a center for their preschoolers (Tang, Hallam, and Francis 2021). Some researchers interpret these findings to mean that parents with low English proficiency may be more comfortable seeking nonparental care offered in their native language, which could be more accessible in home-based settings (Miller et al. 2013; Miller et al. 2014; Tang et al. 2021). Separately, in a study using ECLS-B data and a subsample of diverse children with immigrant parents (*N*=2950), greater household English proficiency was associated with increased center-based care use (Miller et al. 2014). Across these studies, parents were not consistently asked to explain whether and how their English proficiency and language preferences impacted their decision-making. Moreover, it is not clear whether English proficiency was associated with income, which in turn could influence the type of care parents selected. These questions highlight an important need for more research.

In contrast, across two other studies, African and Latina immigrant mothers with low incomes who spoke languages other than English looked for English-language CCEE settings that could help their children learn English (Sandstrom and Chaudry 2012; Vesely 2013), which is often associated with the selection of center-based care

(Johnson, Padilla, and Votruba-Drzal 2017). For example, analyses of the ECLS-B found that 4-year-olds with immigrant mothers who reported prioritizing having a provider who spoke English were more likely to be enrolled in Head Start or public prekindergarten compared to unsubsidized CCEE (Johnson, Padilla, and Votruba-Drzal 2017). Child age may also play a role in whether parents prioritize language match or English-language care environments. One qualitative study of 86 diverse families with low incomes (many of whom were immigrants with limited English proficiency) found that parents of infants and toddlers emphasized language match early in development to preserve the home language. Yet parents of preschoolers in that same study reported learning English was important to help prepare their children for kindergarten (Sandstrom and Chaudry 2012).

Some studies suggest among many immigrant parents, country of origin and factors unique to the immigration experience can shape CCEE decisions. Yet, a growing body of research suggests that structural barriers may ultimately explain differences in CCEE enrollment rates for Latino children.

Analysis of data from the nationally representative ECLS-B suggests that, for parents who are immigrants, region of origin is associated with the type of CCEE care selected. For example, families of African, European, or Middle Eastern descent were found to use more center-based care than families of Mexican, Asian, Latin American, Spanish Caribbean, and non-Spanish Caribbean descent. Alternatively, families of Asian descent were much less likely to use nonrelative home-based child care than most other immigrant groups in the sample (Miller et al. 2014). No data were available on the type of child care centers children attended, so it is unclear if parents favored or had access to publicly funded CCEE programs such as Early Head Start over private centers. Further research is needed to better understand how cost of CCEE shapes CCEE decisions of immigrant parents.

Immigrant families also appear to be influenced by factors unique to the immigrant experience, such as citizenship status, the local supply of non-English speaking providers, and state policy toward immigrants (Johnson, Padilla, and Votruba-Drzal 2017). Analyses of data from the sample of low-income children of immigrant mothers (*N*=1,050) in the ECLS-B dataset found that mothers who were U.S. citizens were more likely to use unsubsidized CCEE than parental care compared to mothers who were not U.S. citizens. Moreover, immigrant mothers who lived in areas with fewer non-English-speaking providers were more likely to use parental care and less likely to use Head Start, public prekindergarten, and other non-publicly funded CCEE. Finally, children of immigrant mothers living in states with greater availability of state assistance for immigrants were more likely to be enrolled in Head Start than to rely on parent care only (Johnson et al. 2017).

Relatedly, we identified a growing body of research on Latino immigrant families and their CCEE use. In one study, analyses of the ECLS-B, which collected data on children

from birth (2001) through kindergarten entry (2006) found children of Latino immigrants were less likely than their Black and White peers to enroll in any form of preschool, including center-based care, public prekindergarten, or Head Start, at the age of 4 (Ansari 2017). Studies investigating reasons for this enrollment gap hypothesize that access barriers—such as lack of transportation, perceived high care costs, and reported difficulty finding a provider with available slots, good hours, and high quality—play a role in CCEE enrollment (Schonberg, Goodale, and Doerfel 2019).

This hypothesis is also supported by smaller-scale research. In a small qualitative study of 30 Latino, mostly immigrant parents with low incomes who were all enrolled in the same state-funded preschool program, parents shared in focus groups that they selected their current CCEE arrangement in part because cultural barriers (e.g., discrimination, unequal distribution of resources) and structural barriers (e.g., transportation, perceived lack of good local options) made alternative options seem inaccessible to them (Ansari et al. 2020).

In fact, after accounting for a variety of characteristics (e.g., foreign-born status, parents' limited English proficiency, socioeconomic factors) that are often associated with structural inequities, racial and ethnic differences in children's preschool enrollment (defined as state prekindergarten programs and center-based programs including Head Start) disappear (Ansari 2017; Greenberg and Kahn 2012). For example, a study using data from the National Household Education Survey showed that children in families with low incomes and who had mothers with low levels of education and employment also had lower rates of center-based CCEE enrollment. Yet once controlling for differences in education and employment, Latino children were as likely to use centerbased care as their peers of other races (Greenberg and Kahn 2012). A similar study using data from the ECLS-B found that after accounting for socioeconomic factors (maternal employment, maternal education, and income) and parents' limited English fluency, there were no consistent differences in the preschool enrollment rates among Latino children and their Black and White peers. The authors of these studies concluded that lower CCEE enrollment patterns of Latino children may be partially explained by factors (e.g., family education levels, income) that can create challenges in accessing some preschool and center-based CCEE options.

In addition to these socioeconomic and linguistic barriers, undocumented Latino immigrant parents may face additional barriers to enrolling in formal child care (i.e., nonparental care). In a study that included Black and Latino families with low incomes (90 percent of whom were immigrants), "linked fate" with one another (i.e., the belief that the well-being of one is tied to the well-being of the group) was associated with lower odds of enrollment into preschool only for Latino families (Hill 2017). At the time of the study, increased Immigration and Customs Enforcement raids targeting undocumented immigrants occurred in areas of the study population, along with a growing anti-immigrant political climate. For parents in the study, this may have contributed to a reluctance to engage in the process of preschool enrollment, to avoid

exposing themselves to others who harbor negative sentiments about their ethnicity or immigration status or having to potentially interact with government organizations to enroll their child in CCEE.

The care types that parent use depend on whether they live in an urban or rural area as well as their local CCEE supply.

According to analyses of ECLS-B data, families in rural communities are more likely to use home-based care than center-based care while the opposite is found for families in urban areas (Coley et al. 2014). The authors concluded that the greater supply of center-based CCEE in most urban areas may have contributed to urban families' greater use of this care type, whereas families in rural areas with fewer centers within reach may rely more heavily on home-based care. The region of the country where families live may also contribute to the care type they select. The same study found that families living in the Northeast were the most likely to use some type of nonparental CCEE arrangement, including home-based and center-based care, compared to other regions of the country. Regional differences in cultural norms and traditions as well as overall CCEE supply may contribute to a family's desire to use CCEE.

At the local level, variation in the types of CCEE providers available and competition for enrollment slots also contribute to the care types that families use. In the same analysis of the ECLS-B described above, children living in zip codes where CCEE demand exceeded supply (as measured by the number of center-based CCEE workers to children under the age of 6) were less likely to use center-based care than home-based care or parental care only. This

Variation in the types of CCEE providers available and competition for enrollment slots also contribute to the care types that families use.

relationship was particularly strong for infants, suggesting there was greater demand for infant care than the local center-based care supply could meet (Coley et al. 2014).

Child characteristics related to child development, such as age and identified disabilities, are related to selecting certain types of care.

Evidence across multiple studies previously introduced suggests that parents select different types of CCEE arrangements depending on their child's age (Coley, Votruba-Drzal, Collins, and Miller 2014; Sandstrom and Chaudry 2012). An analysis of ECLS-B data shows preschool-age children are more likely to attend center-based CCEE than other care types whereas infants are more likely to use home-based care and parental care only (Coley, Votruba-Drzal, Collins, and Miller 2014). The exception is for single mothers of infants and toddlers, who are more likely to use center-based over home-based care (Coley, Votruba-Drzal, Collins, and Miller 2014). However, it is also possible that this association between care type and child age is due to cost of care, which is traditionally higher for infant and toddler care. More research is needed to better

understand how child age and care cost interact to influence the type of care parents ultimately select.

Moreover, parents of young children with disabilities may consider additional factors when selecting care, such as the availability of specific services (Sandstrom and Chaudry 2012). A recent study using nationally representative data from the ECPP-NHES 2016 found that young children with disabilities were 50 percent more likely to be enrolled in center-based care than no CCEE at all compared with their peers without disabilities (Costanzo and Magnuson 2019). They were also 25 percent less likely to be cared for by a relative or nonrelative caregiver in a home than to be enrolled in centerbased care (Costanzo and Magnuson 2019). However, that study found some differences by child age. Infants and toddlers with a disability were equally likely to be enrolled in center-based care or other nonparental care settings compared with families with young children generally. In contrast, preschoolers with a disability had a greater likelihood of being in center-based care than nonparental care in a home or parental care only (Constanzo and Magnuson 2019). These findings align with other research showing parents were less likely to use family child care (defined as care from a nonrelative who cared for the child somewhere other than the child's home) and more likely to use center-based care when their child had special needs (Weber, Grobe, and Scott 2018). However, more research is needed to understand whether parents of children with disabilities are more likely to select center-based care or if children in center-based care are just more likely to receive regular development screenings that lead to identification of special needs.

# Potential Barriers to Families' CCEE Search and Selection

Existing research also points to the barriers parents face when searching for and selecting CCEE. Parents' searches and selections may be constrained if the local CCEE supply is limited or otherwise does not meet their families' needs, leaving some parents on waiting lists and with few options to consider or choose from (Sandstrom and Chaudry 2012; Tang, Hallam, and Francis 2021; Trust for Learning 2018; U.S. Department of Education 2018). Specific access issues include: trouble finding an affordable provider that has an available slot; lack of options that support children's development (e.g., limited supply of high-quality options); and a mismatch between parents' needs and CCEE options in terms of location, schedules, and supports offered (Fairman and Logue, 2016; Paschall, Davis, and Tout 2021; Sloane, Fontana, Shaw-Amoah, Lapp, and Turner 2019; U.S. Department of Education 2018).

The ECPP-NHES 2016 asked a nationally representative sample of parents who were using child care for children younger than age 6 and not yet in kindergarten if they experienced difficulty finding child care and, if so, the primary reason why. Forty-four percent reported at least a little difficulty finding care. Primary reasons reported included

cost (32 percent), lack of open slots (27 percent), quality (22 percent), location (9 percent), and other reasons (7 percent) (Department of Education 2018). Also of note, a higher percentage of parents of White children (53 percent) reported no difficulty finding the type of care they wanted, compared with the percentages of parents of Black children (47 percent), Hispanic children (46 percent), Asian children (43 percent), and children of two or more races (41 percent), though the authors did not test to determine if differences were statistically different from one another.

We discuss each of these barriers in this section and provide additional supporting evidence.

#### Quality and cost of available options

Parents' perceptions of quality, and whether they believe the quality is sufficient and meets their children's developmental needs, shape the options they consider and their final care selections. Evidence from two studies show parents vary in their perceptions of what "high-quality care" looks like (Forry, Simkin, Wheeler, and Bock 2013) and in how they rate their current program's quality (Raikes et al. 2012). When quality is viewed as poor, parents are more likely to use parental care only or informal caregivers and not enroll in formal CCEE programs (Crosnoe et al. 2016; Sandstrom and Chaudry 2012).

Nationally representative survey data from the ECPP-NHES 2016 show that just over half (57 percent) of parents with children younger than 6 years old felt that there were "good choices" for child care where they lived. The percentage of parents satisfied with their care options was highest in households with incomes of over \$100,000 (69 percent). Moreover, the percentage of parents who reported that finding "quality" was their primary challenge was lower for Latino children (13 percent) than for Black (21 percent), White (27 percent), and Asian children (29 percent) (U.S. Department of Education 2018).

Several studies found that parents' concerns about CCEE quality often stemmed from their fear for their children's safety, distrust of providers, and past negative experiences they had or heard about from others (Forry, Simkin, Wheeler, and Bock 2013; Sandstrom and Chaudry 2012). For example, in one qualitative study of families with low incomes, some parents reported worrying about the safety and quality of certain CCEE settings because of what they saw on a television news program (Sandstrom and Chaudry 2012). Analysis of two nationally representative studies highlight the challenge of selecting an arrangement because perceived quality is low and "good choices" are limited (e.g., Crosnoe et al. 2016; U.S. Department of Education 2018).

Moreover, quality and cost are often intertwined. Quality CCEE often comes at a higher cost and parents' options are often limited by what they can afford (Dodge-Ostendorf, Draper, and Engelman 2019). As stated above, according to the ECPP-NHES 2016 (U.S. Department of Education 2018), roughly one-third of parents who reported difficulty finding child care cited cost as the primary reason. Cost was a particular challenge for parents in suburban and urban areas in that study.

#### Supply of care slots

Although parents consider many factors when searching for and selecting an arrangement, they are ultimately limited to options with open slots. Analyses of U.S. census data by Child Care Aware of America® on the gap between supply (i.e., number of slots across licensed programs) and potential demand (i.e., number of children with all parents in the workforce) suggest that child care supply frequently falls short of meeting the potential demand from working parents, leaving families who want or need

CCEE with limited options of licensed care (Norton, Bump, Tercha, Robertson, and Gardey 2019). Though this study offers a rough estimate of supply and does not account for unlicensed providers, such as FFN care, and actual demand (because parents not working may also want/need CCEE and all parents who work may not want/need licensed care), these data are useful in suggesting the extent of possible supply gaps.

Parents' searches and selections may be constrained if the local CCEE supply is limited or otherwise does not meet their families' needs, leaving some parents on waiting lists and with few options to consider.

#### Differences in supply by geographic location

CCEE supply varies across communities, with fewer nonparental care providers (including relative care, nonrelative care, and center-based care) generally available in rural communities (U.S. Department of Education 2018). Analyses of the ECPP-NHES 2016 data show "lack of open slots" in CCEE programs was a greater problem for parents searching for care in small towns and rural areas than in suburban communities. "Location" was also more commonly cited as the primary obstacle for parents in rural areas than for parents of children in all other geographic settings (U.S. Department of Education 2018).

Some researchers use the term *child care deserts* for geographic areas where the number of licensed child care slots across centers and family child care homes (i.e., licensed capacity) is insufficient to reach at least one-third of children younger than age 5. One recent geographic analysis of licensed child care center and home locations across the United States found that over half (51 percent) of Americans live in neighborhoods classified as a child care desert, with 3 in 5 families in rural areas lacking adequate child care supply (Malik, Hamm, Schochet, Novoa, Workman, and Jessen-Howard 2018).

#### Differences in supply by child age

On average, the supply of infant-toddler care is much more limited than the supply of CCEE for preschool-age children. Nationally, half of families live in areas where there are an estimated 4.3 children per licensed center or home-based slot for an infant or toddler, compared with 1.6 children per licensed center or home-based slot for a preschool-age child (Paschall, Davis, and Tout 2021). According to the ECPP-NHES

2016, parents of children ages 0–2 years reported greater difficulty finding care than parents of children ages 3–5 years. Specifically, a higher percentage of parents with children younger than age 1 reported a lack of open slots as the primary challenge, compared with older children (U.S. Department of Education 2018).

#### Differences in supply of particular care type options

When there is little availability and high demand for slots, families may be more limited in their options for CCEE. For example, in a nationally representative sample of parents of infants, toddlers, and preschoolers, more limited supply of center-based care at the local level—measured by calculating the number of children younger than age 6 living in a zip code by the number of center child care workers employed in nearby zip codes—was associated with the increased likelihood that a child would experience home-based care or parent care only (Coley, Votruba-Drzal, Collins, and Miller 2014). However, it may be that, in these communities, more families seek out and prefer home-based or parental care, thereby reducing demand and therefore supply of center-based care. More research is needed to understand how parents' preferences for care type interact with the local supply of care.

The local supply of public CCEE programs may also shape parents' options and, ultimately, their selection. For example, a study in Maine surveyed parents of kindergarteners and first graders about their decision to use or not use the public prekindergarten program at their child's school and found that the lack of available slots was either a somewhat or very important reason for not using the program for 20 percent of respondents (Fairman and Logue 2016). Needing a full-day option when only half-day prekindergarten was available (reported by 34 percent) and a desire to avoid multiple transitions during the child's day (reported by 38 percent) were other common reasons related to the limitations of local prekindergarten. Moreover, one qualitative study of 34 Black and Latina mothers with low incomes documented the challenge of local competition for scarce public preschool slots and perceived racial and ethnic disparities in access (Hill 2017). Nearly one-half of these Black mothers (*n*=8) and more than one-third of these Latina mothers (*n*=6) reported feeling a sense of competition. Black mothers in particular felt that the system unfairly prioritized certain racial/ethnic groups and children who did not speak English, making it harder for other families to enroll.

In a study analyzing nationally representative data, authors explored the association between the availability of non-English speaking care providers and immigrant families' CCEE use. Immigrant families living in communities with more non-English-speaking care providers were more likely to use nonparental CCEE of all types. Yet where the supply of non-English care providers was more limited, children from immigrant families were less likely to access CCEE settings of all types compared to parental care only (Miller et al. 2014). This suggests that the supply of CCEE with particular care features (i.e., language of provider) may, in turn, limit the available options for some families. However, more research is needed to better understand the range of factors that may be at play.

#### Availability during the hours needed

Parents differ in the hours and days they need child care. For parents working nontraditional hours (i.e., before 7:00 a.m. or after 6:00 p.m. on weekdays or anytime on weekends), finding high-quality, affordable, and available CCEE of any type in some communities can be a challenge (Sandstrom, Giesen, and Chaudry 2012; Scott and Abelson 2016; Sloane et al. 2019). Evidence from a large quantitative study and a smaller qualitative study suggests that mothers who work evening or overnight shifts or weekends may rely on relatives and neighbors for child care and are less likely to use center-based care (Liu and Anderson 2012; Vesely 2013). A qualitative study with a sample of child care subsidy recipients with unpredictable and nontraditional work hours showed parents sought providers that were flexible and willing to handle their shifting hours. However, they reported difficulty finding high-quality care with a provider who was also flexible with their schedule. Ultimately, many parents expressed dissatisfaction with their providers, and many reported that this dissatisfaction contributed to searching for new arrangements (Scott and Abelson 2016). In a small study of nontraditional-hour child care in Pennsylvania, nontraditional-hour care providers reported having no trouble filling their slots and felt little need to advertise (Sloane et al. 2019). Instead, they relied primarily on word-of-mouth referrals. Authors of this study also interviewed parents in need of care during nontraditional hours, who reported the only way they were able to learn about available care was to call individual providers to determine if they had care available at the hours they needed it.

#### Navigating CCEE applications and enrollment

Some CCEE programs (e.g., public prekindergarten, Head Start and Early Head Start) have eligibility requirements and typically have a verification process in place. This often includes paperwork to document household income. Families who attempt to apply are not always able to follow through with the verification process (Weixler et al. 2020). A text analysis of messages sent during a randomized controlled trial of New Orleans' centralized application system for publicly funded CCEE (including its Head Start, Early Head Start, and state-funded prekindergarten programs, including those in private schools and child care centers) found that parents were generally aware of the verification process, but the majority wanted help with it. The most frequent barrier to verification was a lack of understanding of the steps required. Other barriers included logistical problems, difficulty finding or accessing documents, or scheduling conflicts with work hours (Weixler et al. 2020).

Furthermore, evidence from small qualitative studies of immigrant families point to some additional access issues. Specifically, immigrant mothers reported experiencing documentation issues when proving their residence for program eligibility and having limited understanding of eligibility criteria for programs such as Head Start and child care subsidies (Vesely 2013). When looking for center-based CCEE, undocumented immigrant mothers in another study described the challenges of understanding the

various application requirements and enrollment procedures, including how a waitlist worked since that concept was not familiar to them (Vesely et al. 2021). While most mothers emphasized the importance of making use of their tight social networks to find a trustworthy provider, many newly arrived immigrant mothers reported they did not know where to find information about CCEE and did not know who to ask. Though these studies reflect an immigrant experience navigating CCEE enrollment, it is likely that some native-born families also face these challenges with enrollment.

# Limitations of consumer education resources and measures of quality

Another noted barrier is a lack of awareness of available consumer education resources, which may be new and not well advertised in some communities. In a small study examining parents' CCEE search experiences and familiarity with Delaware's new consumer education website, only 4 of the 29 interviewed parents knew of the state's website (Tang 2021). Most others (*n*=17) described using Google to do an online search using keywords like "child care" and "preschool" and their location, and then filtering to make a list of CCEE options to look into, and/or looking at Facebook pages for information and reviews. After being sent a link to the website and told to explore it, most parents in the interview sample felt it would be a good resource, especially for new parents. They liked having contact information and details such as injury reports.

Interfacing with online platforms to access desired information can also be challenging for some parents. In that same study, roughly a third of parents (10 out of 29) had mixed views on whether the search website was easy to navigate. Parents made suggestions including simpler instructions, improvements to the filter and map functions, and compatibility with mobile technology. Some parents wanted more detailed program information, such as teacher-child ratios and teacher qualifications. Parents also reported preferring a search website that did not require users to set up a user account and provide personal information before conducting a search. Two parents were not comfortable using technology generally, and two others reported preferring personal referrals rather than relying on a website. Two of the four parents who knew about the state's website also knew about Delaware's Stars, the state's QRIS, because of personal connections with the Stars program and emphasized the importance of the ratings. But the other 27 parents did not discuss knowing about or using the ratings when searching for CCEE, suggesting a lack of awareness of the state's QRIS or their use of other information to quide their search and selection.

States use QRIS as one way to support parents in making informed decisions on CCEE. Overall, few published studies (e.g., Herbst 2016; Moran 2021) have examined whether and how QRIS ratings and other measures of quality informed parents' CCEE search and selection. Emerging research suggests parents may have a notion of quality that is much more expansive than QRIS and taps into ways their providers support the families' well-being. For example, a study of Maryland's QRIS asked parents what

quality meant to them and found that while most care features of quality that parents shared were captured in the QRIS, some, such as staff attitudes and disposition (e.g., compassionate, like their jobs), providers' flexibility, and absence of pets and alcohol and tobacco use were not (Forry, Simkin, Wheeler, Bock 2013). Another study found that parents' ratings of their preschool programs on characteristics such as cleanliness and safety, teacher warmth, hours and location, affordability, and supporting child development were largely unrelated to measures of program quality collected from environmental observations and teacher education and experience (Bassok, Markowitz, Player, and Zagardo 2018.

Given recent investments in state child care search websites and QRIS redesigns since the 2014 CCDBG Reauthorization and Final Rule, more research is needed to understand how parents' perceptions of quality shape their child care searches and their use of QRIS ratings. Future work could also examine how useful QRIS ratings can be to parents and what the ratings do or do not tell them about care quality. Because few studies have examined parents' experiences with consumer education tools designed to support CCEE search and selection, the findings described here only offer preliminary insights.

# Considerations for Decision-Making: Learning from Other Fields

Research from other fields offer information about how individuals make decisions on various issues. Though it is unclear whether there are nuances specific to parents' decision-making processes when searching and selecting CCEE, related research can offer insight into how parents, and consumers more generally, may gather information and make decisions. We conducted a brief review of key papers across disciplines, including behavioral science, communications, commercial marketing, health, nutrition, and K-12 education, to supplement the evidence from CCEE publications. Based on this review, we identified several key themes, listed below. For each theme, we offer hypotheses for how the theme applies to parents searching for and selecting CCEE.

#### Decision-making is often a process involving multiple steps.

Behavioral science research examines why and how humans behave and make decisions the way they do. This evidence has been applied to social services programs to improve service delivery and client outcomes (Richburg-Hayes et al. 2014). According to behavioral science, decision-making is influenced by how choices are presented, including the order, description, and range of available options. The decision-making process begins with awareness—or the "mere-exposure effect"—meaning people's decisions are based on their being aware of the issue or opportunity at hand (Richburg-Hayes et al. 2014). After becoming aware, decision-makers gather information to build their knowledge, to be more informed on the issue. They may rely

on one or more trusted information sources and then search for and explore options. The final step involves the consideration of options and weighing costs and benefits and then making a final selection. Findings from behavioral economics suggest that tools that offer the opportunity to build knowledge and explore options could be a useful guide to support parents throughout decision-making processes.

#### People need timely and easily accessible information.

Behavioral economic research suggests that, in general, people tend to focus on their present circumstances instead of their potential future circumstances (Gabaix 2019). If this evidence applies to the CCEE search and selection process, it could be that parents may not think about CCEE before the need for care arises and only will start to focus on their options once it becomes relevant—for example, when a child is born, when a parent returns to work and needs child care, or when a child turns preschool age. Behavioral economics evidence also reveals that consumers often turn to *default* options if they are not aware of other possibilities when the time comes to make a selection. Yet, at the same time, if faced with many options, people can experience *choice overload* (Scheibehenne, Greifeneder, and Todd 2010). Choice overload refers to a cognitive bias in which people have a hard time making a decision. Complexity can lead to indecision and procrastination and less satisfaction with the chosen option. If this evidence is applicable to CCEE research, it suggests the timing of when parents receive information and the clarity of that information is important so they have the details they need about relevant options when they need it.

# Consumers weigh whether information is trustworthy, reliable, and useful as part of the decision-making process.

When parents think information is untrustworthy or they have doubts about the reliability of the information, they may not use it or might instead ask others they trust for advice. As mentioned earlier in this review, several studies of how parents selected a pediatrician, obstetrician, or child dentist point to the fact that few parents used websites or advertisements or relied on online physician ratings during their search (Goff et al. 2016; Hanauer, Zheng, Singer, Gebremariam, and Davis 2014; Mahmood and Demopoulos 2016). Instead, these studies found that recommendations from a friend, family, or neighbor mattered more (Hanauer, Zheng, Singer, Gebremariam, and Davis 2014; Mahmood and Demopoulos 2016).

One specific example comes from a national survey of parents and their search for a pediatrician, which found that parents rated word of mouth from family and friends and referrals from another doctor as important in their search while rating online doctor ratings and websites as least important sources of information. The main reason parents gave for not using websites was a lack of trust in the information and ratings on them (University of Michigan C.S. Mott Children's Hospital 2013). We note, in these

studies, parents were not asked about a specific website with physician ratings that have been validated in some way such as a state QRIS would be. Websites based on patient reviews can take many forms, and parents may have more trouble determining what is trustworthy and applying that information to their search.

Researchers examining the health care field also found that promotoras (the Spanish word for community health provider) are viewed as trusted sources of messages about health care (Ayala et al. 2010). Specifically, this study found promotoras were effective in helping people who might not otherwise trust institutions to seek the health care they need (Ayala et al. 2010). Central to these concepts is trust (or distrust) of systems and information sources. Families from marginalized communities may distrust systems and feel "institutional betrayal" because of previous traumatic experiences interacting with them (Smith and Freyd 2014). In these cases, families may be more receptive to receiving information from a trusted member of their community than through other formal channels that require them to openly seek information held by institutions of power.

Studies show how the media and marketing campaigns can sometimes lead (or mislead) parents to think and act a certain way (Long, Taubenheim, Wayman, Temple, and Ruoff 2008; Romo-Palafox, Pomeranz, and Harris 2020). Successful strategies include The Heart Truth, the first federally sponsored national campaign aimed at increasing awareness among women about their risk of heart disease. The campaign used the power of branding with the creation of the Red Dress as a national symbol to make an emotional connection with women and gain their attention, and ultimately educate them on how to reduce their risk (Long et al. 2008).

However, the rapid growth of digital media technologies and influencers can make it hard for parents to know what information is true and reliable and most useful to them. As one example, Evans and colleagues (2015) conducted a randomized controlled trial to evaluate the effects of the text4baby mobile app on pregnant women and their families. The app offered educational information to expectant parents, and when compared to a control group that did not receive text messages through the app, text4baby participants reported more positive outcomes including lower postpartum alcohol consumption. The authors demonstrated the potential effective use of social media as an educational tool for parents if messages are delivered in a way that resonates with parents.

Another experimental study examined the take-up and impact of a text-messaging program for parents of middle school and high school students in the District of Columbia to share resources and school updates. Researchers found benefits in automatically enrolling families in the program rather than inviting parents to sign up, including greater adoption and use of the tool and improvements in student achievement (Bergman and Rogers 2017). The authors showed that, when parents are faced with a decision to actively enroll in educational technology and information about their options and the benefits is unclear (i.e., friction in the messaging), take-up is lower.

Parents may select the default "easier" option (i.e., whether or not to opt in) rather than taking the steps to connect to a resource that could benefit them and their child.

### Limitations and Opportunities for New Research

Our review of the research literature points to several areas with limited or no evidence. We describe these gaps as opportunities for new research and as helpful suggestions for researchers currently engaged in studies on these topics.

#### 1. Understanding details in the search process

We identified a number of publications that describe the factors parents look for when searching for CCEE and the sources they use to search. We found less evidence on the timing of searches, such as how long searches take, how early parents start looking before they want to start CCEE, the extent to which parents differ in search length and start time, and reasons why search lengths may differ. Differences in family circumstances may contribute to the timing, but this is not well documented. Research is needed, for example, to more clearly understand the experiences and needs of parents searching for CCEE for the first time versus more experienced parents. Additional research is also needed that examines the experiences of parents transitioning from one provider to another under different circumstances (e.g., a planned or a sudden change) and their experiences searching for a new provider.

#### 2. Examining parents' decisions in the context of care supply and quality

Multiple studies examined current CCEE arrangements and the factors related to which CCEE providers parents ultimately selected. However, these studies did not explore all the options parents considered and why each of those options was not selected. Further research on *choice sets* (i.e., the options available to families), all available options considered, and how parents weigh factors and make tradeoffs would help understand the complexity of CCEE decisions. Specifically, it would be helpful for future research to include the local supply-and-demand context when interpreting parents' search and selection process, given that the limited existing evidence suggests that these processes may be constrained by local CCEE child care markets. Such contextualized studies could also begin to document the interplay between local consumer education strategies and how parents search for and select CCEE.

Importantly, many studies show that parents broadly cite ensuring their children are healthy and safe as a critical factor when looking for and selecting care. However, existing research suggests health and safety are more often cited as pressing concerns for some families with lower incomes who, based on other research, are more likely to live in neighborhoods with high crime, violence, and pollution. Studies of CCEE searches generally find parents with higher incomes

focusing on other elements of care quality. This could be because there may be a higher supply of CCEE that meets these health and safety criteria and thus support these families in searching for other criteria more directly where there is variation. In other words, perhaps the CCEE options accessible to them are of higher quality, but this connection is unclear. Understanding parents' consideration of health and safety is an important issue that needs further study.

#### 3. Learning about the range of families' needs

Our review identified key differences in parents' priorities, search patterns, and care decisions based on family and community characteristics. However, existing research on certain subgroups is limited. For example, few studies considered families living in rural communities or in child care deserts and how they arrange nonparental care. Similarly, only a few studies focused on the needs of children with disabilities. Some families likely experience multiple barriers simultaneously, including socio-cultural barriers (e.g., discrimination, unequal distribution of resources) and structural barriers (e.g., lack of options that meet their needs or transportation) that may complicate their search and selection of CCEE. More research is needed to identify and fully understand the circumstances and experiences of families facing the most challenges with CCEE searches and the resources they would find helpful.

Overall, much of the research on parents' search process in this review, relies on a single large dataset (the 2012 NSECE). While valuable and informative, the field would benefit from examining other large and more recent datasets. Researchers should also consider more recent qualitative data at the community level to support our understanding of the search process at a more granular level and to better understand how parents' search and selection of CCEE may change over time.

#### 4. Improving data collection instruments on CCEE search and selection

Because of the underlying complexity in CCEE searches and selections (e.g., timing, information sources, available supply, awareness of options, priorities and preferences, tradeoffs in decisions), more measure development is needed to improve the ways surveys capture this information. As one example, better data are needed to distinguish between need for care and reason for current search. Most existing surveys used to collect information about CCEE searches, uncovered in this review, typically ask parents closed-ended questions about the reasons they are looking for care, with options such as parental employment or child socialization. To date, research has documented these as the primary reasons that parents need or want CCEE. Based on our review, research conducted to date has rarely captured specific events that triggered a new CCEE search, such as a family-related reason (e.g., birth of a new baby, parental separation, housing move) or provider-related reasons (e.g., concerns about care

quality, program closure). Better understanding the circumstances that prompt parents to look for CCEE may help inform consumer education strategies that are tailored to families' needs.

## 5. Studying the sources of information parents use when searching for and selecting care

Past research suggests that the main sources of information parents have used to learn about CCEE include their family and friends, as well as the internet (NSECE Project Team 2014). However, we know little about *why* parents use these sources of information to carry out their search and selection compared to other sources they may have access to. Moreover, this review uncovered less evidence on how different parents prefer to receive information about CCEE—whether they would prefer information on state websites, social media, in print, or in other ways. The field would benefit from research that explores both how and why parents choose to access information about CCEE and why parents prefer use of certain sources or formats.

Research provides evidence that members of parents' personal networks—friends, relatives, coworkers—can be trusted messengers. However, the extent to which trusted sources are reliable sources with accurate knowledge of available CCEE options is unclear. Future research could more intentionally investigate the knowledge base of trusted sources, as well as explore why parents trust some information sources and not others and what could make formal sources of support appear more reputable to families.

#### 6. Exploring parents' use of available consumer education resources

This literature review surfaced few recent studies that examined parents' knowledge of and interactions with state CCEE search websites and other local consumer education resources. Though these resources exist, the publications we reviewed did not specifically investigate if parents find these resources useful and whether modifications or more tailoring of resources may be needed to improve access and utility for different families. Future work could more deeply examine the user experience to address this. Additionally, evaluations of states' consumer education efforts could identify successful strategies to reach parents at different steps in their search, distinguish what is working well to engage parents, and highlight areas where improvements are needed to better reach certain groups.

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## Glossary

## Child Care and Early Education Terms

**Access:** Access to early care and education means that parents, with reasonable effort and affordability, can enroll their child in an arrangement that supports the child's development and meets the parents' needs (Thomson et al. 2020). This is a family-centered, multidimensional definition of access developed to help guide the child care field in its efforts to study and improve access.

**CCEE**: Child care and early education. In this report, CCEE is inclusive of center-based child care programs; home-based child care programs; care from relatives, friends, and neighbors; and publicly funded prekindergarten, Head Start, and Early Head Start programs. Although child care programs can serve school-age children, this report focuses on CCEE for children from birth to kindergarten.

**Center-based care/child care center:** Child care and early education services provided in a nonresidential setting; may also collectively be referred to as "centers."

Child Care and Development Fund (CCDF): A federal program authorized by the Child Care and Development Block Grant Act (CCDBG) that provides funding to states, territories, and Tribes to support their efforts to meet the child care needs of families for children birth to 12 years old, including the provision of child care subsidies to families with low incomes, child care licensing, child care supply-building, child care workforce training and supports, child care consumer education, and other efforts to improve child care quality and access.

**Child care licensing:** Child care licensing is a process where state and territory governments set minimum health and safety requirements that child care programs must meet to legally operate. These requirements help ensure children are healthy and safe in a child care program.

Child care resource and referral agency (CCR&Rs): Local organizations that help parents locate and select child care by providing referrals to local child care providers and information on state licensing requirements, child care subsidies, child care quality, and available services for children.

**Child care subsidy:** Financial assistance that reduces out-of-pocket child care costs to parents and guardians. States and territories receive funding from the federal government to provide child care financial assistance to help families with low income pay for child care so they can work or attend school. Eligibility requirements are different in each state.

**Consumer education:** Information provided to the public to help parents make informed choices about child care services. The Child Care and Development Block Grant Act (CCDBG) requires states, territories, and some Tribes to provide information to parents to improve transparency, help parents better understand their child care options, and encourage providers to improve the quality of their services. Information may include child care monitoring and inspection reports and information on program features and quality, though the details vary from state to state.

**Home-based care:** Care for one or more children in a home setting, typically either the providers' home or the child's home. Care can be paid or unpaid and from family, friends or neighbors, or from someone who operates a child care business in their home. Depending on state requirements, a home-based provider may be legally required to be licensed or registered if caring for a certain number of children for a certain number of hours in a day. Also known as "family day care," "home daycare," "home-based child care," or "family child care."

Quality rating and improvement system (QRIS): A system designed by states or local governments to assess, improve, and communicate the level of quality of child care and early education programs. QRIS provides a framework for educating parents about what "quality care" looks like and how to find a high-quality provider. QRIS use rankings, scores, symbols (e.g., 5-star scale), or recognizable labels, such as Gold, Silver, and Bronze, to communicate quality levels determined by the state or local QRIS administrator. One component of a QRIS is consumer education. Under the Child Care and Development Block Grant Act (CCDBG), states are required to create a child care search website and publicly post quality ratings when available.

**Regulated care:** Home-based and center-based providers that are required to meet the health and safety standards established by the state, territory, or Tribe where they provide care. See *child care licensing*.

#### Research Terms

**Empirical study:** Research based on observation and measurement rather than theories or beliefs. Data are gathered and analyzed, and findings are compared against a hypothesis or theory.

**Experimental studies:** Research where people are randomly assigned to participate in an activity (sometimes called an "intervention" or "treatment") or not participate in the activity (called the "control group"). Changes in knowledge, skills, attitudes, or behaviors of the people in the two groups are compared to see if there are differences. If the group participating in the activity performed better than the group not participating, then this is considered strong evidence that the activity is effective and that the results are caused by the activity. These results are called "impacts."

**Generalizability:** The extent to which a study's results are applicable for a broader group of people or situations than those observed in the study. Some studies provide strong evidence of results for a particular group (for example, families with higher incomes), but it is not clear that the same results would be seen for another group (for example, families with low incomes).

**Nonexperimental study:** Research that focuses on describing the needs, processes, or activities of an individual or a group.

**Quasi-experimental studies:** Research that compares two groups that are as similar as possible but were not randomly assigned. Various techniques can be used to create matched groups where some people participate in the activity and some people do not. The goal is the same as in an experimental study—to see if there are impacts that are the result of the activities. The evidence from this type of research is also strong, but not as strong as an experimental study.

# Appendix A. Literature Review Methods

In this section, we provide a summary of methods used to conduct the literature review. We then describe each step in the literature review process, including searching for publications, cataloging and screening sources, and coding and analyzing findings.

## Summary of Literature Review Methods

Our literature review involved three approaches:

Core review on CCEE search and selection (2012–2021): We conducted an extensive search for literature related to CCEE search and selection published between 2012 and 2021 and conducted a systematic review of those publications. We searched electronic databases for publications in peer-reviewed journals and for grey literature, including research reports and briefs. We considered both empirical studies and non-empirical papers, such as theoretical or white papers. We selected 2012 as a start date in light of a literature synthesis on parental child care decision-making that was published in 2013 (Forry, Tout et al. 2013) that reviewed papers on this topic published through 2012. To build on and not duplicate that prior synthesis, we focused this literature review more narrowly on parents' search and selection of CCEE, drawing on the subsequent research that was published. We describe our search strategies in more detail below.

Supplemental review on CCEE search and selection (pre-2012): We reviewed select CCEE-related publications published before 2012, based on recommendations from experts and our knowledge of the literature commonly cited on this topic. These papers provide important historical context and informed later research on this topic. We primarily reviewed these papers for background because knowing what was published in earlier years helped target our efforts. Where relevant, we cite findings from these papers in this report.

Review of select literature from other fields on marketing, communications, and decision-making: We reviewed papers from other fields (e.g., behavioral science, communications, commercial marketing, education, medicine, nutrition, public health, and social work) to identify example studies of consumer marketing and education strategies that showed how people—especially parents of young children—make decisions on topics other than CCEE (e.g., selecting a pediatrician). We consulted with experts to recommend publications and search terms, and we searched databases using those terms.

#### Search Strategies and Key Search Terms

For our core review of publications related to CCEE search and selection, we used several strategies to identify publications:

- Searched academic databases including Primo Central (Urban Institute's library database), Google Scholar, PubMed, ERIC, Early Care and Education Research Connections, National Bureau of Economic Research, and the Behavioral Evidence Hub (www.bhub.org);
- Solicited working papers and reports through a published request for resources
  posted on Urban Institute's website. The announcement was posted on the Child
  Care and Early Education Policy Research Consortium (CCEEPRC) Basecamp
  website and in OPRE's monthly e-newsletter; and
- Consulted with internal and external experts about seminal or current literature most relevant to the topic. Experts either shared copies of publications directly or sent the citation(s) for publications that we then searched for.

We limited our search to publications in English and to studies with data collection in the United States to maximize generalizability. When searching databases, we used the PICO search method (Population, Intervention, Comparison, and Outcome).¹ Each search specified a "population" (parent, family, caregiver, child); an "intervention" (child care, early care and education, early childhood education, day care, preschool, pre-K, prekindergarten, and nursery school); and an "outcome" (consumer education, choice, search, decision-making, decision, selection, barriers, constraints, needs, preferences, awareness, knowledge, information, motivation, access, instability, transition). We did not include a "comparison" search term because we were not limiting ourselves to evaluation studies. We also searched on particular family and child characteristics using these terms that appeared in the publication title, abstract, or cited keywords. Terms included:

- Population: parent,\* family, caregiver, child\*
- **Special subpopulations:** low-income, subsidy/subsidies/subsidized, immigrant, foreign born, dual language learners, nontraditional, nonstandard, disabilities, special needs
- **Intervention**: child care, childcare, early care and education, early childhood education, day care, preschool, pre-K, prekindergarten, nursery school
- **Comparison:** N/A (We were not limiting ourselves to evaluation studies. One experimental study was identified and included in our review.)

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<sup>&</sup>lt;sup>1</sup> McKenzie, Joanne E., Sue E. Brennan, Rebecca E. Ryan, Hilary J. Thomson, Renea V. Johnston, and James Thomas. 2020. Chapter 3: Defining the Criteria for Including Studies and How They Will Be Grouped for the Synthesis. In *Cochrane Handbook for Systematic Reviews of Interventions version 6.1*, edited by Julian Higgins James Thomas, Jacqueline Chandler, Miranda Cumpston, Tianjing Li, Matthew Page, and Vivian Welch. Cochrane. Available from www.training.cochrane.org/handbook.

- **Outcome:** consumer education, choice, search, decision making/decision-making, decision, selection, barriers, constraints, needs, preferences, awareness, knowledge, information, motivation, access, instability, transition
- \* Denotes the root word used in the search, but results produced variants of that word, such as *children* for the term *child*.

For the select literature from other fields, we consulted with experts who shared copies of publications or citations for relevant papers. Experts also mentioned relevant terms from the behavioral science field that could inform our work, such as *choice set*, *default options*, *choice overload*, *nudges*, and *message framing*. Based on expert engagement, we searched databases for illustrative examples of how marketing and communications efforts and interventions have informed behavior change in the primary areas of K-12 education, medicine, public health, nutrition, communications, and commercial marketing as well as research on parental decision-making in these areas. We used the search terms *consumer education*, *choice*, *choose*, *search*, *decision-making*, *decision*, *decide*, *selection*, *awareness*, and *preferences* along with the discipline (e.g., education) to identify relevant papers.

#### Cataloging Search Results

We created a Zotero bibliographic reference library with shared group access within the research team to store and categorize all identified publications from both peer-reviewed journals and grey literature. Zotero downloads all reference information for each publication, allowing for easy creation of bibliographies in multiple formats. As research assistants identified publications, they pulled them into Zotero, reviewed them to identify study methods, and tagged each publication with keywords referring to study methods (e.g., focus groups, qualitative interviews, observations, survey, secondary analysis of survey data, administrative data analysis.) and the type of research design (i.e., experimental, quasi-experimental, and nonexperimental). Two papers presented findings from experimental studies while all other publications described nonexperimental studies. For grey literature, research assistants identified the publication type (e.g., research report, research brief, theoretical paper, literature review, white paper).

# Screening Publications from the Core Review of CCEE-Related Publications

Two PhD-level researchers screened each identified publication from our core review using a multi-step process to determine relevancy, generalizability, and credibility. To ensure reliability on this screening process, they first screened two publications together and compared ratings to make sure they understood the criteria and applied it in a similar way. The screening process included the following steps:

- Assessed whether it is empirical research. (This includes studies involving primary data collection, secondary data analyses, and meta-analyses that apply statistical analysis to assess the evidence but excludes theoretical papers, white papers, and traditional research syntheses.) Reviewed Zotero tags, the publication abstract, and if necessary, the full copy of the publication to make determination.
  - a. For empirical research, proceeded through steps 2–5. For non-empirical literature, continued to step 2 to review relevance and stopped screening.
- 2. Reviewed publication title, abstract, keywords, and if necessary, the full copy of the publication, to assess relevance.
  - a. For CCEE research: determined if relevant to CCEE search and selection or CCEE consumer education
  - b. For select literature from other fields: confirmed relevant to human decision-making from behavioral science and communications fields, commercial marketing to parents, public health campaigns, or communications efforts in field of K-12 education, medicine, nutrition, or social work.
- Reviewed stated research questions and objectives to determine if they were relevant to CCEE search and selection or consumer education. Studies that met this criterion explicitly mentioned CCEE search and selection or consumer education in the research questions or the overall objective of the study.
- 4. Reviewed study sample to assess alignment with inclusion criteria and the broad generalizability outlined below.

#### For CCEE research:

- Confirmed study sample included parents or guardians reporting on child care decisions for the family.
- Confirmed data were collected in the United States.
- Considered sample characteristics (e.g., education level, income level, race/ethnicity, geography, subsidy use) and whether sample offered evidence that could be generalizable to all families with young children or specifically to families with low incomes. Identified any use of convenient sampling and samples with predominantly high-income, highly educated, or White parents to ensure studies offered perspectives of diverse families. Excluded publications that did not meet criteria.

For select literature from other fields, we did not limit the sample to include only parents or caregivers of young children, or to studies that used data collected in the United States. Instead, we reviewed relevant literature and gave preference to studies involving parents of young children.

- 5. Credibility determination (see exhibit A1).
  - a. For all empirical publications, we followed a three-step process outlined in Jarjoura, Tyson, and Petrosino (2016) and adapted in Derrick-Mills et al. (2019) to rate the credibility of the findings.
  - b. We assigned a score of 1 for each step with a "yes" response and 0 for each step with a "no" response. Summed scores to indicate questionable (0; very little confidence in the findings), low (1; our confidence in the findings is limited), medium (2; moderately confident that the qualitative and quantitative evidence supports the finding within the context of the study), or high (3; very confident that the qualitative and quantitative evidence supports the finding within the context of the study) credibility of findings.

**Exhibit A1. Credibility Determination Process** 

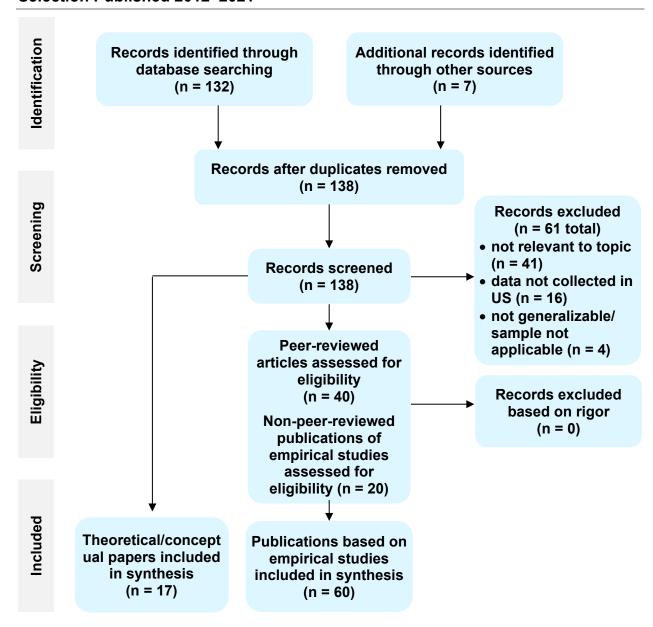
Qualitative data	Quantitative data
Step 1: Are the findings clearly connected with direct quotes or detailed descriptions of observations, rather than simply being the opinion of the researcher, with little connection to the evidence?	Step 1: Are the findings directly connected to a statistical finding and consistent with that statistical finding in terms of statistical significance, direction of effect, and magnitude of effect? (Note that not all will be relevant for all types of quantitative findings.)
Step 2: Is there an adequate amount of qualitative data to have confidence in the findings, or would additional time in the field have produced different findings? If different methods are triangulated to produce the finding, credibility is higher. If there is no indication of the number of interviews or time spent observing, credibility is weakened.	Step 2: Are findings based on at least 85 percent of the original sample (or 85 percent of the subsample if the finding is based on a subsample)?
Step 3: Is there evidence of careful qualitative analysis, such as using multiple coders, validation methods, qualitative software, or discussions of data validity?	Step 3: Are clear risks of bias for findings minimized? Things to consider are: 1) post hoc nature of finding (i.e., possible "data fishing"); 2) appropriateness of statistical method; 3) selection bias or other internal validity concerns if finding is of a causal nature; 4) poor question wording or measurement construct fit; 5) adequate statistical power if finding is one of no effect; and 6) any other concern that would raise doubt about the finding.

Source: Jarjoura, Tyson, and Petrosino 2016

Studies that did not meet items 1–4 or received a credibility rating of questionable or low were excluded from the review. In cases where one researcher was uncertain about whether or not a given study met the checklist items outlined above, they shared it with the other researcher, who reviewed the publication, provided an independent rating, and the two staff then shared and discussed their independent ratings to come to a

consensus. The task leader was available as a third reviewer to make a final inclusion decision, though this was never needed. Exhibit A2 displays the steps in involved in the process of identifying, screening, and determining eligibility for inclusion in the report. Appendix B summarizes the publications from the core CCEE review that were included in our review while Exhibit A3 displays counts for the study methods used in those publications.

Exhibit A2. Literature Review Flow Diagram for CCEE Publications on Search and Selection Published 2012–2021



**Note:** This flow diagram is adapted from David Moher, Alessandro Liberati, Jennifer Tetzlaff, and Douglas G. Altman. 2009. "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement." *PLoS Med* 6, no. 7: e1000097. https://doi.org/10.1371/journal.pmed.1000097

Exhibit A3. Study Methods and Data Sources Reported in Publications Counted in Core CCEE Review

Study Design and Methods	Count
Study design	
Experimental	2
Quasi-experimental	0
Non-experimental	58
Study methods	
Quantitative	37
Qualitative	16
Mixed methods	7
Data sources	
Secondary data analysis	29
Qualitative interviews	18
Surveys	14
Focus groups	5
Child assessments	5
Observational measures	3
Administrative data	3
Census data	2

**Note:** Each of the 60 publications based on empirical studies that were included in the synthesis was reviewed and coded as either experimental, quasi-experimental, or non-experimental (mutually exclusive categories) to describe the study design. Separately, each publication was coded as quantitative, qualitative, or mixed methods (mutually exclusive categories) to describe the study methods. The counts shown in Exhibit A3 for these categories sum to 60—the total count of publications. Each publication described the data sources used in the study—often more than one data source. Exhibit A3 provides a count of data sources across the 60 publications.

## Coding and Analyzing Evidence

After completing the screening process, we created a coding scheme to code text in all publications using NVivo qualitative analysis software. Codes referred to high-level topics: reason for search, timing of search, time spent searching, sources of information used, search process, preferences/values, CCEE selection/decision-making, and

challenges/barriers. We used coded information on the study sample. With NVivo, we could code chunks of text from uploaded publication PDFs and analyze the published findings to identify themes across papers. The two researchers who screened the publications also fully read and coded them. They first established reliability on the coding scheme by each coding the same two publications and comparing codes. They met to discuss discrepancies in coding, clarified how to use the codes, and then divided up and coded the publications. Reliability was high from the start, with nearly all codes applied in the same way.

We reviewed the coded evidence across papers to identify what is known about CCEE search and selection to outline the contents for this report.

# Appendix B. Summary of Publications from Core CCEE Review

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
The Selection of Preschool for Immigrant and Native-born Latino Families in the United States	Ansari, A.	2017	5,850 Latino, Black, and White preschoolers	Secondary data analysis (ECLS- B)	Quantitative	Preschool enrollment	Yes	Selection
Immigration and the Interplay of Parenting, Preschool Enrollment, and Young Children's Academic Skills	Ansari, A. and Crosnoe, R.	2015	6,250 children (ages 2–5) born in the United States in 2001	Secondary data analysis (ECLS- B)	Quantitative	Preschool enrollment	Yes	Search Selection
What Do Parents Want from Preschool? Perspectives of Low- Income Latino/a Immigrant Families	Ansari, A., Pivnick, L. K., Gershoff, E. T., Crosnoe, R., & Orozco-Lapray, D.	2020	30 low-income Latino/a immigrant families with children enrolled in state-funded preschool program in Texas	Focus groups	Qualitative	Predictors of enrollment in child care; Predictors of CCEE choice	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Are There Differences in Parents' Preferences and Search Processes across Preschool Types? Evidence from Louisiana	Bassok, D., Magouirk, P. Markowitz, A. J., & Player, D.	2018	858 low-income families with 4- year-olds enrolled in publicly funded programs in Louisiana	Survey, administrative data analysis, observational measures	Quantitative	Parental preferences and search process	Yes	Search Selection
Are Parents' Ratings and Satisfaction with Preschools Related to Program Features?		2018	636 parents of children in CCEE	Survey, child assessments, observational measures	Quantitative	Parental satisfaction with CCEE	Yes	Selection
Parental Preferences and Patterns of Child Care Use among Low-income Families: A Bayesian Analysis	Carlin, C., Davis, E., Krafft, C., & Tout, K.	2019	317 parents who had at least one child age 6 or younger and who had applied to receive financial assistance through Minnesota's welfare or child care subsidy programs		Quantitative	Predictors of type of care	Yes	Selection
Instability of Work and Care: How Work Schedules Shape Child-Care Arrangements for Parents Working in the Service Sector	Carrillo, D., Harknett., K., Logan, A., Luhr, S., & Schneider, D.	2017	25 parents living in San Francisco in 2005	Qualitative interviews	Qualitative	Predictors of informal child care use	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Selection into Early Education and Care Settings: Differences by Developmental Period	Coley, R.L., Votruba-Drzal, E., Collins, M. A., Miller, P.	2014	Nationally representative sample of 10,700 children born in United States in 2001	Secondary data analysis (ECLS- B)	Quantitative	Predictors of type of care	Yes	Selection
Early Childhood Program Participation, Results from the National Household Education Surveys Program of 2016	Corcoran & Steinley	2019	Nationally representative sample of 5,837 children between birth and the age of 5 not yet enrolled in kindergarten in 2016	Secondary data analysis (NHES- ECPP)	Quantitative	Factors important for ECE decision- making	No	Search
How Does Disability Influence Child Care Arrangements for Young Children? An Examination Using the NHES ECPP	Costanzo, M. & Magnuson, K.	2019	Nationally representative sample of 29,464 children 6 or younger between 1995–2012	Secondary data analysis (NHES- ECPP)	Quantitative	Predictors of care for children with disabilities	Yes	Selection
The Selection of Children from Low- income Families into Preschool	Crosnoe, R., Purtell, K., Davis-Kean, P., Ansari, A., & Benner, A.D.	2016	Nationally representative sample of 6,250 children born in U.S. in 2001	Secondary data analysis (ECLS- B)	Quantitative	Predictors of type of care	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Changes in Young Children's Family Structures and Child Care Arrangements	Crosnoe, R., Prickett, K.C., Smith, C., & Cavanaugh, S.	2014	1,298 children with available data on their care arrangements at 1, 6, 24, 36, and 54 months	Secondary data analysis (NICHD Study of Early Child Care and Youth Development)	Quantitative	Predictors of the type and quantity of care arrangements	Yes	Selection
Time for a Change? Predictors of Child Care Changes by Low-income Families	Davis, E., Carlin, C., Krafft, C. & Tout, K.	2014	Parents with a child 6 or younger who applied for cash assistance or subsidy programs; N=250 children	Secondary data analysis (Minnesota Child Care Choices Study)	Quantitative	Predictors of change in type of care	Yes	Selection
Family Voices Driving Quality Child Care Choices	Dodge- Ostendorf, A., Draper, F., & Engelman, K.	2019	Focus groups with 43 families; 255 parents of children age 5 and younger who responded to a parent poll; 18 key informants	Qualitative interviews, focus groups, survey	Qualitative	Types of information most beneficial to vulnerable families; sources of care information used	No	Search Selection
Factors Influencing Parents' Decision to Use Public Pre-K Programs in Maine: Results of a Parent Survey	Fairman, J., Logue, M.E., & LaBrie, S.	2016	148 parents of preschool students in Maine	Survey	Quantitative	Preschool enrollment	No	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
'You know how it makes you feel': Low-income Parents' Childcare Priorities and Definitions of Ideal High-quality Childcare	Forry, N., Simkin, S., Wheeler, E.J., & Bock, A.	2013	41 low-income parents of children between ages 2 and 5	Focus groups, survey, written activity	Qualitative	Parent priorities for child care	Yes	Selection
Child Care Decision Making: Understanding Priorities and Processes Used by Low-Income Families in Minnesota	Forry, N., Isner, T., K., Daneri, M.P., & Tout, K.	2014	260 parents with a child 6 or younger who applied for cash assistance or subsidy programs	Secondary data analysis (Minnesota Child Care Choices Study), census data	Quantitative	Child care decision- making process	Yes	Search Selection
How Do Caregivers Select Preschools? A Study of Children With and Without Disabilities	Glenn- Applegate, K., Justice, L.M., Kaderavek, J.	2016	407 caregivers of children in early childhood special education classrooms	Survey	Quantitative	Predictors of care for children with disabilities	Yes	Selection
Early Childhood Education and Care Use: Differences by Race/ethnicity and Age	Greenberg, J.P., & Kahn, J. M.	2012	6,391 Latino, Black, and White children age 0–5	Secondary data analysis (NHES- ECPP)	Quantitative	Number and type of nonparental care arrangements	Yes	Selection
Parents' Choice of Pre-kindergarten: The Interaction of Parent, Child and Contextual Factors	Grogan, K. E.	2012	203 caregivers; majority Black or White	Survey	Quantitative	Parental pre-k considerations ; predictors of parental pre-k considerations	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
The Role of Parental Immigration Status in Latino Families' Child Care Selection	Ha, Y., & Ybarra, M.	2014	862 children 0–5 from the 2001 Los Angeles Families and Neighborhood Survey; majority were Latina mothers and lowincome	Secondary data analysis (Los Angeles Families and Neighborhood Survey)	Quantitative	Predictors of type of care	Yes	Selection
The Impact of Quality Rating and Improvement Systems on Families' Child Care Choices and the Supply of Child Care Labor	Herbst, C.M.	2016	14,270 children age 0–5; 259,005 mothers of children age 0–5	Secondary data analysis (NHES- ECPP; CPS)	Quantitative	Families' child care choices and maternal employment; the supply and compensation of child care labor	No	Selection
What Do Parents Value in a Child Care Provider? Evidence from Yelp Consumer Reviews	Herbst, C.M., Desouza, K.C., Al-Ashri, S., Khullar, M., & Bajaj, V.	2018	48,675 unique Yelp reviews from 46,182 individuals	Secondary data analysis	Qualitative	Parental preferences for child care	No	Search Selection
Examining the Role of Intergroup Relations in Black and Hispanic Parents' Preschool Enrollment Decisions	Hill, Z.	2017	369 low-income Black and Hispanic parents of preschool children (3–5)	Survey, interviews	Quantitative	Preschool enrollment	No	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Parents' Reasons for Searching for Early Care and Education and Results of Search: An Analysis using the Access Framework	Hill, Z., Bali, D., Gebhart, T., Schaefer, C., & Halle, T.	2021	Nationally representative sample of infants and toddlers (0–35 months) and preschoolers (36– 72 months)	Secondary data analysis (NSECE)	Quantitative	Access to child care	No	Search
Predictors of Public Early Care and Education Use among Children of Low-income Immigrants	Johnson, A.D., Padilla, C. M., & Votruba- Drzal E.	2017	Subsample of low- income families in which the mother is an immigrant; nationally representative sample of 10,700 children born in United States in 2001	Secondary data analysis (ECLS- B)	Quantitative	Predictors of type of care	Yes	Selection
Neighborhood Effects on Working Mothers' Child Care arrangements	Liu, M., and Anderson, S. G.	2012	Subsample of mothers who were employed and were using nonparental care more than 10 hours per week	Secondary data analysis (FFCWS)	Quantitative	Predictors of type of care	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Child Care Subsidies and Child Care Choices: The Moderating Role of Household Structure	Markowitz, A. J., Ryan, R. M., & Johnson, A. D.	2014	Subsample of year 2 children who used regular nonparental care and had provider interview data; subsample of children with provider interview data from the Fragile Families and Child Well-Being Study	Secondary data analysis (ECLS- B; FFCWS)	Quantitative	Predictors of type of care	Yes	Selection
Online Resource Hub: Parent and Caregiver Focus Groups. Summary Report.	Marzano Research, SE2	2020	68 parents and caregivers in Colorado	Focus groups	Qualitative	Perceptions of CCEE information	No	Search
Predictors of Early Care and Education Type among Preschool-aged Children in Immigrant Families: The Role of Region of Origin and Characteristics of the Immigrant Experience	Miller, P., Votruba-Drzal, E., & Coley, R. L.	2013	Subsample of immigrant families; nationally representative sample of 10,700 children born in United States in 2001 (N=2,950)	Secondary data analysis (ECLS- B)	Quantitative	Predictors of type of care	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Immigrant Families' Use of Early Childcare: Predictors of Care Type	Miller, P., Votruba-Drzal, E., Coley, R. L., & Koury, A. S.	2014	Subsample of immigrant families from ECLS-B (N=2,950)	Secondary data analysis (ECLS- B; FFCWS)	Quantitative	Predictors of type of care	Yes	Selection
Perspectives on the Child Care Search Process in Low- income, Urban Neighborhoods in the United States	Moran, K. K.	2021	40 women caring for African American children who are preschool age	Qualitative interviews	Qualitative	Search, factors important for CCEE decision- making, importance of quality ratings	Yes	Search Selection
Household Search for and Perceptions of Early Care and Education: Initial Findings from the National Survey of Early Care and Education	National Survey of Early Care and Education Project Team	2014	Nationally representative sample of caregivers	Secondary data analysis (NSECE)	Quantitative	Search, perceptions of care	Yes	Search Selection
Finding Child Care in Two Chicago Communities: The Voices of Latina Mothers.	Pacheco- Applegate, A., Carreon, E. D., Ellis, E., Thomas, W. C., Henly, J. R., Spielberger, J., & Ybarra, M.	2020	32 mothers and 8 directors of child care centers from 2 communities in Chicago	Qualitative interviews	Qualitative	Predictors of care decision; Ways caregivers learn about CCEE; Awareness of CCEE	No	Search Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Measuring and Comparing Multiple Dimensions of Early Care and Education Access	Paschall, K., Davis, E., & Tout, K.	2021	Nationally representative sample of infants and toddlers (0–35 months) and preschoolers (36– 72 months)	Secondary data analysis (NSECE)	Qualitative	Access to child care	No	Search Selection
Making Sense of Childcare Instability among Low-income Families: (Un)desired Search and (Un)planned Reasons for Changing Care Arrangements	Pilarz, A. R., Sandstrom, H., & Henly, J.	2021	85 low-income parents receiving child care subsidies; subsample from larger randomized telephone survey	Qualitative interviews	Qualitative	Parent perceptions about child care changes	Yes	
Parent Experiences with State Child Care Subsidy Systems and Their Perceptions of Choice and Quality in Care Selected	Raikes, H., Torquati, J., Wang, C., & Shjegstad, B.	2012	659 parents	Survey	Quantitative	Predictors of care decision	Yes	Selection
Decision Making About Nonparental Child Care by Fathers: What Is Important to Fathers in a Nonparental Child Care Program	Rose, K.K., Johnson, A., Muro, J., & Buckley, R. R.	2018	130 fathers: 63% White, 13% Black or African American, 12% Spanish/Hispanic Latino, 8.5% Asian	Survey	Quantitative	Hypothetical decision making/ preferences for care	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Parental Decision Making about Technology and Quality in Child Care Programs	Rose, K.K., Vittrup, B., & Leveridge, T.	2013	82 parents of children between 1 and 6 years old	Survey	Online survey; Quantitative	Hypothetical decision making	Yes	Selection
'You Have to Choose Your Childcare to Fit Your Work': Childcare Decision-making among Low-income Working Families	Sandstrom, H., & Chaudry, A.	2012	86 low-income parents with a child younger than 5	Qualitative interviews	Qualitative	Predictor of care selection	Yes	Selection
Clients' Recommendations for Improving the Child Care Subsidy Program: Illinois and New York Child Care Research Partnership Research Brief	Sandstrom, H., Grazi, J., & Henly, J.R.	2015	86 low-income parents receiving child care subsidies, subsample from larger randomized telephone survey	Qualitative interviews	Qualitative	Improvements to subsidy programs	No	Search
How Contextual Constraints Affect Low-Income Working Parents' Child Care Choices	Sandstrom, H., Giesen, L., & Chaudry, A.	2012	86 low-income parents with a child younger than 5	Qualitative interviews	Qualitative	Predictor of care selection	No	Selection
Predicting Preschool Enrollment among Hispanic WIC Participants in Los Angeles County	Schonberg, Goodale, & Doerfel	2019	Subsample of mothers with children between the ages of 3 and 4 (N=1,355)	Secondary data analysis (WIC's 2014 Los Angeles County survey)	Quantitative	Predictors of preschool enrollment	Yes	Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Understanding the Relationship Between Instability in Child Care and Instability in Employment for Families with Subsidized Care	Scott, E.K., & Abelson, M.J.	2016	44 parents of young children who received child care subsidies	Qualitative interviews	Qualitative	Child care instability	Yes	Search
Examining the Status of Non- Traditional Child Care in Pennsylvania	Sloane, K.	2019	Families in Pennsylvania with young children (younger than 5)	Administrative data analysis, focus groups, interviews	Mixed Methods	Descriptive picture and experiences of providers and families	No	Selection
Is Stability Always a Good Thing? Low- income Mothers' Experiences with Child Care Transitions	Spiers, K., E., Vesely, C.K., & Roy, K.	2015	36 low-income mothers of young children	Secondary data analysis (Three- City Study)	Qualitative	Predictors of child care arrangement changes	Yes	Search
Dashboard Report: Message Test	SE2	2020	200 caregivers in Colorado between the ages of 18–64 with a child 5 or younger	Qualitative interviews	Qualitative	Perceptions of CCEE language	No	Search
Message Testing with Colorado Parents: Survey Insights by Subgroup	SE2	2020	200 caregivers in Colorado between the ages of 18–64 with a child 5 or younger	Qualitative interviews	Quantitative	Group differences in perceptions of CCEE language	No	Search

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Are There Differences in Parents' Child Care Search and Decision-making Process?	Tang, J., Hallam, R., & Francis, J.	2021	500 parents who used nonparental CCEE on a regular basis for their preschooler and have conducted CCEE searches for their preschooler in the past 24 months	Secondary data analysis (2012 National Survey of Early Care and Education)	Quantitative	Predictors of CCEE choice; Search; Predictors of type of CCEE	No	Search Selection
Preschool Parents' Perspectives on the Child Care Search Process and Consumer Education Resources	Tang, J.	2021	40 parents in Delaware (survey); 29 survey respondents participated in follow-up interview	Web survey, qualitative interviews	Mixed methods	Perceptions of CCEE; Search; Consumer education	No	Search Selection
Low-income Families' Selection of Child Care for their Young Children	Tang, S., Coley, R. L., & Votruba-Drzal, E.	2012	802 children; low- income; majority ethnic minority	Secondary data analysis (Three- City Study)	Mixed methods	Predictors of non-maternal care, type of primary provider	Yes	Selection
Preschool Parents' Perceptions of Early Care and Education Arrangements: A Latent Profile Analysis	Tang, J., Hallam, R. A., & Sawyer- Morris G.	2020	1,674 parents of preschool children	Secondary data analysis (2012 National Survey of Early Care and Education)	Quantitative	Parent perceptions of CCEE arrangements	Yes	Search Selection

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Parental Preschool Choices and Challenges when Young Children and Their Families Experience Homelessness	Taylor, J., Gibson, B. and Hurd K.	2015	28 families who had experienced homelessness; subsample of a larger RCT with 2,307 families (Family Options Study)	Qualitative interviews	Qualitative	Predictors of school enrollment	Yes	Selection
Parents as Consumers of Early Childhood Education: Research Findings 2017	Trust for Learning	2018	12 focus groups in 4 cities	Qualitative interviews, survey	Qualitative	Parent perceptions; barriers to care type	No	Selection
Low-income African and Latina Immigrant Mothers' Selection of Early Childhood Care and Education (ECCE): Considering the Complexity of Cultural and Structural Influence	Vesely, C. K.	2013	40 first-generation low-income immigrant mothers	Qualitative interviews	Qualitative	Reasons for selection; Selection decision making	Yes	Search
'A place where my children could learn to read, write, and play': The Search for Early Care and Education among Undocumented Central American Immigrant Mothers	Vesely, C. K., DeMulder, C.K., Sansbury, A.B., Davis, E., Letiecq, B.L., Willard, I., & Goodman, R.D.	2021	55 undocumented immigrant mothers of young children from El Salvador, Guatemala, and Honduras	Qualitative interviews	Qualitative	Navigation and challenges of CCEE system	Yes	Search

Title	Author(s)	Year	Sample	Data Source	Method	Key Outcomes	Peer- reviewed?	CCEE Topics Addressed
Families with Low Incomes and the Search for Child Care: An Exploration of Factors Influencing Search Actions and Choices	Watts, K.S.	2017	1,120 parents of young children (age 0–83 months)	Secondary data analysis (2012 National Survey of Early Care and Education)	Quantitative	Predictors of search and selection	No	Search Selection
Predictors of Low- income Parent Child Care Selections	Weber, R. B., Grobe, D., & Scott, E. K.	2018	44 caregivers interviewed; 580 caregivers surveyed	Qualitative interviews, survey	Mixed methods	Predictors of type of care	Yes	Selection
Helping Parents Navigate the Early Childhood Enrollment Process: Experimental Evidence from New Orleans	Weixler, L., Valant, J., Bassok, D., Doromal, J. B., & Gerry, A.	2020	4,111 parents, average monthly income below poverty line	Administrative data analysis	Quantitative	Awareness of process, impact of text messages, barriers to verification of the system	Yes	Search
Early Childhood Care Arrangements: Choices and Costs	U.S. Department of Education	2018	National household survey	Secondary data analysis (ECPP- NHES: 2016)	Quantitative	Parents' perceptions of having good CCEE options	No	Search Selection