

Child Care Decision-Making Literature Review



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Members of the Child Care Policy and Research Consortium’s Child Care Decision-Making Workgroup

Members of the Child Care Policy and Research Consortium’s Child Care Decision-Making Workgroup contributed to the conceptualization of this literature review and provided substantive reviews of this product. The views expressed in this publication do not necessarily reflect the views of these members.

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Overview

This review was produced as part of the Child Care and Early Education Policy and Research Analysis and Technical Expertise Project. The purpose of this project is to support the provision of expert consultation, assessment and analysis in child care and early education policy and research. It is funded through a contract with the Office of Planning, Research and Evaluation.

This review was co-authored by researchers from Child Trends, The Urban Institute, and George Mason University. The purpose of the review is to summarize research on the context and factors that facilitate parents' decision-making about child care. It is intended to provide a foundation of empirical knowledge for state administrators, early childhood program developers, and policymakers who can use information about child care decision-making processes and outcomes to improve their programs and services for families.

The review reflects current and seminal work from researchers throughout the U.S. on the preferences, constraints and supports that influence parents' child care decision-making. Summarized literature includes published journal articles as well as reports from studies funded by the Office of Planning, Research, and Evaluation and other federal government agencies. Policy-relevant responses to the literature from three state child care subsidy administrators are included.

This literature review addresses the following topics:

- Parents' child care decision-making process
- Parents' preferences and priorities in selecting a care arrangement
- Constraints to selecting preferred care arrangements
- Facilitators to selecting preferred care arrangements

Executive Summary

The purpose of this review is to summarize research on the context and factors that facilitate parents' decision-making about child care. It is intended to provide a foundation of empirical knowledge for state administrators, early childhood program developers, and policymakers who can use information about child care decision-making processes and outcomes to improve their programs and services for families. The review reflects current and seminal work completed by researchers throughout the U.S. on the preferences, constraints and supports that influence parents' child care decision-making. Literature for this review comes from published journal articles as well as reports from studies funded by the Office of Planning, Research, and Evaluation and other federal government agencies. The structure and content were selected to reflect topics of interest to early care and education administrators, policymakers, and stakeholders.

We use a child care decision-making model developed by Weber (2011) and policy-relevant issues identified in discussions with state administrators to frame the review. Additionally, we focus on literature related to the child care decisions of parents with young children (age 0-5). Findings from the literature are organized into four main sections reflecting empirical findings about: 1) parents' child care decision-making processes, 2) parents' preferences and priorities in selecting a care arrangement, 3) constraints to selecting preferred care arrangements, and 4) policies and programs that support parents in selecting their preferred care arrangement. Key findings from each of these sections are provided below. Further details and citations can be found in the full literature review.

Key Findings

Parents' Child Care Decision-Making Process

- Most low-income parents perceive having limited child care options and consider few options.¹
- No negative associations have been found between the amount of time spent searching for care or number of options considered and parental satisfaction with care.²
- Most low-income parents learn about their child's provider from friends, family members, and neighbors.³
- On average, low-income parents make child care decisions quickly;⁴ 41% of parents from one study made choices within one day.⁵

Parents' Preferences and Priorities in Selecting a Care Arrangement

- When asked for their child care preferences, the majority of low-income parents place a high value on the quality of arrangements. These preferences are not always reflected in parents' choices when selecting a child care arrangement.⁶
- Parents' definitions of quality vary across studies, but tend to include both structural and process-oriented features identified by early care and education professionals as being indicators of quality. Structural features included in parents' definitions of child care quality include provider education⁷, provider experience and training⁸, and a low child-adult ratio⁹. Process-oriented features included in parents' definitions of child care quality include provider warmth¹⁰, activities to support children's development (including cognitive/academic skills and social skills¹¹, and open communication within the family-provider relationship¹². In addition to these specific factors, parents placed a strong emphasis on their children's health and safety and their trust of the provider.¹³

- Child care preferences differ by a number of child, parent, family, and community characteristics. For example, whereas parents of infants and toddlers tend to prefer parental/relative care, parents of preschoolers tend to prefer center-based care.¹⁴ Studies have found that parents with less than a college degree place more emphasis on safety and practical features, such as cost and location, and parents with a college degree are more likely to focus on quality features.¹⁵ Studies have also found parents who are working, and particularly working full-time, are more likely to cite practical considerations than parents who are not working, or working part-time.¹⁶ Likewise, family income has been positively associated with parents' endorsement of quality as compared to practical features (e.g., cost, location) as top priorities.¹⁷
- Child care preferences and choices among immigrants vary by county of origin¹⁸ and reflect experiences from their country of origin and values of their culture.¹⁹
- In addition to having many of the same preferences and concerns of other parents, parents of children with special needs are also concerned about specific program features that are critical to the care of their child's special needs.²⁰ Availability of care that meets children's special needs is limited.²¹ Limits in availability of child care options that can meet children's special needs have resulted in a high use of care from family members, friends, and neighbors as well as employment disruptions for parents.²²

Constraints to Selecting Preferred Care Arrangements

- Contextual factors related to the child care market include the availability, accessibility, affordability, and parental awareness of supply.²³
- Child care options for infants and school-age children tend to be more limited than options for preschool-age children.²⁴
- Rural areas tend to have fewer regulated child care providers than metropolitan areas and more unmet child care needs have been documented in low-income communities than higher income communities.²⁵
- Employment factors (e.g., shifting and unpredictable work schedules, nonstandard hours, and inflexible work policies) limit families' child care options.²⁶
- Among families reliant on public transportation, accessibility to care options is limited by the schedule and routes of public transit.²⁷
- Families' child care choices reflect the options they perceive to be affordable.²⁸
- Parents, particularly immigrants or refugees, may have limited awareness of their eligibility for free/subsidized early care and education arrangements, such as Head Start.²⁹

Facilitators to Selecting Preferred Care Arrangements

- The majority of low-income parents knows about resources and referral services, but did not use this service to find their child's care.³⁰
- Most parents have reported that they would be interested in the type of information that Quality Rating and Improvement Systems provide, and would use this information in making child care choices.³¹
- Most parents are not aware of state/local Quality Rating and Improvement Systems, though the percent of parents who are aware of these systems are growing.³²

- The use of child care subsidies have been associated with parents using their preferred type of care.³³
- Scholarships, designed to facilitate parents' access to high quality care, have been associated with changes from unlicensed to regulated (primarily center-based) care.³⁴

Implications for Policy and Practice

- Resources to support child care decision-making should acknowledge the multitude of inter-related factors that shape how decisions are made and the fact that preferences for different features of child care arrangements may vary by the characteristics of the families.
- Studies suggest that friends, families and, in some cases, trusted professionals (such as case workers and pediatricians) play a role in decision making. Creating a cadre of trusted child care advisors who can listen to families' unique circumstances and provide guidance that is culturally sensitive would be a potentially valuable service to families. Additionally, community or neighborhood-based initiatives, such as provider open houses and yard signs, could be used to increase community members' awareness of the child care options, and particularly options that have been rated as high quality through QRIS, available in a neighborhood.
- A focus on effective marketing and engagement strategies is needed to increase the awareness and utility of QRIS, especially for low-income families. States may choose to market QRIS as a system that rates providers on specific quality indicators that will likely resonate with parents. For example, states could highlight how their QRIS includes indicators of quality identified as important by parents in extant literature (e.g., provider background checks, small group sizes, and training on learning activities that can support children's growth). The timing of these efforts should consider the participation rates of programs so that parents responding to marketing efforts will encounter a sufficient supply of rated programs.
- Child care subsidies and other sources of financial supports (such as scholarships) can enable parents to access these preferred settings when they are available. Interactions with families to provide informational resources at the point of application for child care subsidies may be used to support families' search process and provide them with information about other free or low-cost programs, such as Head Start or pre-K.

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INTRODUCTION

The purpose of this review is to summarize research on the context and factors that facilitate parents' decision-making about child care. It is intended to provide a foundation of empirical knowledge for state administrators, early childhood program developers, and policymakers who can use information about child care decision-making processes and outcomes to improve their programs and services for families. The review reflects current and seminal work completed by researchers throughout the U.S. on the preferences, constraints and supports that influence parents' child care decision-making. Literature for this review comes from published journal articles as well as reports from studies funded by the Office of Planning, Research, and Evaluation and other federal government agencies. The structure and content were selected to reflect topics of interest to early care and education administrators, policymakers, and stakeholders.

Framework and Issues Addressed in this Review

We use a child care decision-making model developed by Weber (2011) and policy-relevant issues identified in discussions with state administrators to frame the review. Additionally, we focus on literature related to the child care decisions of parents with young children (age 0-5). Findings from the literature are organized into four main sections reflecting empirical findings about: 1) parents' child care decision-making processes, 2) parents' preferences and priorities in selecting a care arrangement, 3) constraints to selecting preferred care arrangements, and 4) policies and programs that support parents in selecting their preferred care arrangement. Aspects of the decision-making process addressed in this review include the scope (number of options considered, information sought) and duration of the search process. Our review of parents' preferences and priorities includes a discussion of quality features identified as being important to parents,

as well as an overview of variation in child care preferences/priorities by child, parent, family, and community characteristics. Issues affecting the child care decision-making process and priorities for select special populations (immigrants and families with children who have special needs) are also considered. Constraints in selecting care arrangements are then discussed, followed by a review of literature on programs designed to facilitate parental access to preferred care arrangements. It should also be noted that, though there are a plethora of studies addressing each of the topics covered in this review, the process of making child care choices is complex and there remains a number of unanswered questions. Additionally, the sample and methodology of available studies addressing each of these topics varies. To assist the reader's interpretation of research findings, information on the methodology, sample size, and analytic methods of cited studies is provided. This review concludes with a summary of research highlights as well as emerging issues. Finally, possible implications for research to inform policy and practice from both researchers' and state administrators' perspectives are explored.

FINDINGS FROM THE LITERATURE

Parents' Processes in Making Child Care Choices

Research on the child care decision-making process examines **how** parents make child care choices. In general, literature on the child care decision-making process is underdeveloped. Available literature on this topic addresses select aspects of this process, including the number of options parents consider, which sources they rely on for information, and the duration of the search process. Additionally, a few studies address differences in how mothers versus fathers make child care decisions (e.g., Ceglowski, 2006). Though theoretical work has highlighted the dynamic complexities that influence parents' child care decision-making process (e.g., Chaudry, Henly, & Meyers, 2010; Meyers & Jordan, 2006; Pungello & Kurtz-Costes, 1999), there is a dearth of literature addressing the quality of information parents obtain, their thought process when making a child care decision, and the dynamic nature of the child care decision-making process in response to changing family circumstances.

Number of options parents consider. Two large studies with a high proportion of low-income parents have examined the scope of families' child care search processes. Based on survey and administrative data from families and their license-exempt providers in Illinois, Anderson, Ramsburg, and Scott (2005) found approximately three-quarters of parents using a subsidized care arrangement considered only one option during their last search process. In contrast, Layzer, Goodson, and Brown-Lyons (2007) found that slightly more than half (52%) of low-income parents using home-based care who participated in the National Study of Child Care for Low-Income Families considered more than one child care arrangement in their most recent search, though the number of options considered was not specified. Layzer et al. reported that 31% of parents in their study perceived having no alternative arrangements to choose from, and the majority (83%) of those who perceived having alternative options felt limited to one or two other options.

While there is literature documenting parental perceptions of limited options, there are no empirical findings to date suggesting that considering few options is associated with worse outcomes for children and families. Layzer et al. (2007) did not find an association between the number of available options and parental satisfaction with their selected arrangements. Similarly, in a study of care changes among infants from the NICHD Study of Early Child Care, Gordon and Hognas (2006) found parents who only considered one child care option to be more likely to use their preferred type of care and less likely to switch arrangements in the first six months.

Sources of information parents rely on. A few studies address the sources of information parents consult in the process of making child care decisions. Based on their review of the literature, Pungello and Kurtz-Costes (1999) concluded that most parents begin their decision-making process based on information from informal sources (e.g., friends, family, and neighbors). A minority of parents in these reviewed studies then sought information from referral agencies. Pungello and Kurtz-Costes' findings are consistent with descriptive analyses of parents using family child care from the National Study of Child Care for Low-Income Families. In this study of 642 low-income parents, 64% of parents who used non-relative care were either referred to their provider by friends, families or neighbors or had a pre-existing relationship with the provider (Layzer et al., 2007). Likewise, Iruka and Carver's (2006) analysis of data from the 2005 National Household Education Survey's Early Childhood Program Participation Survey found that most parents had learned about their child's provider from a friend.

Duration of the search process. Few studies, to date, have provided information on the average duration of parents' child care searches. Studies that have addressed this topic have found relatively short search durations. For example, although the average duration of the search process for parents in the National Study of Child Care for Low-Income Families was four weeks, approximately 41% of parents made a choice within one day (Layzer et al., 2007). Additionally, in a forthcoming study of a sample of welfare applicants with young children in Minnesota, Forry, Isner, Daneri, and Tout (2012a) found 82% of respondents reported making child care choices within two weeks. Based on existing studies, it is unclear whether quick child care decisions are indicative of time constraints parents face in their child care decision-making process, or their satisfaction with available choices. Forry and colleagues found no differences in the perceived quality of arrangements or satisfaction of parents who made decisions within two weeks, compared to those who took, on average, eleven weeks (Forry et al., 2012a). It should be noted that it is unclear in the studies summarized in this section whether parents are making their first child care choice, or switching their children's care arrangements.

Priorities and Preferences in Making Child Care Choices

Research on parental values and preferences in selecting a care arrangement has yielded few consistent patterns of findings. The lack of consistent findings may be partially explained by differences in the study methodologies employed or variations in child care preferences related to child, parent, family, and community characteristics. Additionally, variation in research findings may reflect the dynamic nature of parental preferences, which are informed by social norms, past experiences, and current situations (Chaudry et al., 2010; Weber, 2011).

Methodological Considerations in Interpreting Child Care Decision-Making Literature Review Findings

When interpreting research findings presented in this review, readers should be mindful of the sample size and criteria used to select study samples, data collection strategies, and methods used to analyze data. These considerations are particularly important when interpreting findings related to child care preferences and priorities as findings on these topics tend to vary across studies.

Samples included in this review vary and include small samples (< 10) from in-depth qualitative studies, mid-sized samples (between 50 and 300) that tend to represent families living in a particular city or various localities within a state, and nationally representative samples, which are selected to be representative of all families living in the United States. While qualitative studies with small sample sizes tend to offer insights into individuals' perceptions or behaviors, quantitative studies with larger sample sizes may be more representative of the population being studied and thus more generalizable. Likewise, the criteria used to select sample

members vary across studies. Samples in this review include welfare recipients and recent welfare leavers, low-income families, immigrant families, and families with children who have a special need. In reviewing study findings, it is important to recognize that findings are most pertinent for the population being studied.

Data collection strategies used to study child care preferences and priorities include individual and group qualitative techniques (e.g., focus groups), semi-structured and structured interviews, and interviews with parents to assess their responses to hypothetical scenarios. Each data collection strategy offers unique information, with strategies that collect more in-depth information (e.g., those using qualitative techniques) tending to be based on data from smaller samples, and strategies that ask for specific information (e.g., through close-ended questions) tending to include information from larger samples. In addition to variation in data collection strategies, variation in question wording used to assess parental preferences and priorities (e.g., prospective vs. retrospective questions and ratings vs. rankings) have yielded different results across studies using the same data collection strategy (Rose & Elicker, 2008). Data collection strategies and techniques used to analyze data are closely related. Below are brief descriptions of different strategies for obtaining and analyzing information about parental preferences/priorities:

- **Open-ended questions:** Typically used in qualitative research, open-ended questions allow parents to describe their preferences/priorities using their own words. Open-ended questions can be prospective (e.g., What would you consider?) or retrospective (e.g., Last time you chose an arrangement for your child, what did you consider?). Responses to prospective questions may reflect parents' ideals, whereas retrospective questions may prompt parents to provide reasons for an actual decision. Open-ended questions tend to be analyzed using inductive methods, in which themes or generalizations are developed based on data from individuals.
- **Close-ended questions:** Close-ended questions come in multiple forms, including:
 - Rankings (e.g., Which of the following are most important to you?)
 - Ratings (e.g., How important would you rate each of the following?)
 - Fixed Choice (e.g., What is most important to you? A) Cost, B) Convenience, etc.)

Close-ended questions tend to be analyzed using descriptive methods, in which the information collected is summarized across individuals, or deductive methods, in which analyses are used to test a specific hypothesis. Deductive methods may include statistics that compare samples or multivariate methods that assess associations while controlling for other characteristics.

- **Scenario-based techniques:** Scenario-based data collection techniques present parents with a scenario to rate. Two commonly used methods for analyzing scenario-based data are factorial analysis and conjoint analysis. Both of these methods present parents with multiple child care scenarios whose characteristics vary systemically (e.g., one scenario may be a child care center that is close to the respondent's home but has a mediocre quality rating, while a second may be a child care center that has a high quality rating but is far away from the respondent's home). Parents' rankings of multiple scenarios are used to identify their priorities when making child care choices that are contingent upon multiple factors.

Due to the wide variation in methods used to study parental preferences and priorities, it is difficult to compare findings across studies. Additionally, conceptual and empirical work is needed to clarify the range of phenomena related to parent preferences, the reasoning underlying stated preferences, and the stability of preferences over time.

Early work on parental preferences distinguished between practical features of care arrangements (e.g., cost and convenience) and correlates or indicators of quality in an arrangement (e.g., education or sensitivity of provider);(Hofferth & Wissoker, 1992). More recent research has continued to highlight the importance of each of these factors (Henly & Lyons, 2000). The majority of findings in the literature suggest that parents place a high value on perceived quality of care arrangements. Though parents less frequently report cost, location, and hours to be their top priority, evidence suggests that these factors do inform parents' preferences and constrain their choices (Brandon, 1999; Davis & Connelly, 2005; Hofferth, Brayfield, Deich, & Holcomb, 1991; Johansen, Leibowitz, & Waite, 1996; Lowe & Weisner, 2004; Peyton, Jacobs, O'Brien, & Roy, 2001).¹

Though parents' value for quality in selecting a care arrangement is clear from the literature, parents' definitions of "high quality" care vary. Features of high quality care valued by parents include structural or regulated features (e.g., education, training, and experience of provider, child-adult ratio) and process-oriented features related to health and safety, the emotional tone of the setting, quality of the caregiver-child relationship, structured activities to support children's development, and the parent-provider relationship. Due to variations in the design of studies (e.g., use of open vs. close-ended questions, differences in features assessed through close-ended questions, etc.), existing literature does not allow for reliable comparisons of parental priorities among features of care across studies.

Structural features of quality. A number of studies have documented parents' attention to structural features when selecting a care arrangement for their child. Structural features most often cited in studies of parental priorities/preferences for care are provider education, training, and experience, and the child: adult ratio of child care programs. A mixed-methods study of economically and ethnically diverse working mothers, which used ratings, rankings, and conjoint analysis to analyze parental preferences for care found the education of a caregiver to be among the top three priorities of parents across methods (Rose & Elicker, 2008). Likewise, in a study of low-income African American parents using a survey featuring scenarios rated by parents, Shlay, Tran, Weinraub, and Harmon (2005) found that parents place a high value on child care providers' experience and specialized training in child development. Low-income parents' value for a low child: adult ratio in care arrangements has also been highlighted in studies about parental priorities in selecting a child care arrangement by Shlay (2010) and Van Horn, Ramey, Mulvihill, and Newell (2001) using factorial analysis and open-ended questions, respectively.

Process-oriented features of quality. Multiple aspects of process-oriented quality have been identified in the literature as being of interest to parents. These aspects include health and safety, emotional tone of the care environment and quality of the caregiver-child relationship, structured activities to support children's development, and a positive, trusting relationship between the provider and parent.

Health and safety. Safety has been identified as an important consideration for parents in multiple studies. Using factorial analysis with 93 recent welfare leavers, Shlay (2010) found that regardless of race/ethnicity, parents consistently prioritized health and safety over other quality features when selecting a preferred care arrangement. Another study by Shlay and colleagues (2005), using the same methods with a sample of 143 low-income, employed African American mothers, found safety to be an important consideration, but not the highest priority. The importance of health and safety to parents has been highlighted in qualitative studies of racially and ethnically diverse mothers in entry-level jobs and employed mothers of young children by Henly and Lyons (2000) and Leach et al. (2006). Using ratings of importance, Cryer and Burchinal's (1997) found parents of young children (birth-5 years) from the Cost, Quality and Child Outcomes Study to rate health and safety as important, regardless of child age. Also using quantitative methods, Ispa, Thornburg, and Venter-Barkley (1998) asked parents to indicate the three most important criteria to them when making their last child care choice and found health and safety to be, on average, in parents' top three priorities. This finding was

¹ Please note that research has demonstrated that parental preferences do not always reflect parent's choices (Sandstrom & Chaudry, 2012).

consistent across parents living in metropolitan and non-metropolitan areas. It is notable that 68% of parents in Anderson, Ramsburg, and Scott's (2005) study of families using license-exempt care, who were given a list of criteria and asked to select the three most important criteria in their last child care search, cited safety as central to parents' definitions of high quality care.

Emotional tone/ quality of the caregiver-child relationship. Evidence regarding the importance of the care environment's emotional climate to parents has also been found in multiple studies. Specific quality features related to emotional climate include provider affect, provider-child interactions, and interactions among children in the classroom. The majority of parental preferences for care or their definitions of high quality care related to emotional tone focus on the affect of the provider. Specifically, multiple studies have found provider warmth to be important to parents (Ispe et al., 1998; Raikes et al., 2005; Rose & Elicker, 2008; Shlay, 2010; Shlay et al., 2005). In three studies using different methodologies (ratings, rankings, and conjoint analysis) provider warmth was the most important criteria in choosing a provider (Ispe et al., 1998; Raikes et al., 2005; Rose & Elicker, 2008). Other researchers have found the provider-child relationship and/or emotional tone of the care setting to be important to parents as well. For example, in the Illinois Study of License-Exempt Care, 68% of parents cited the provider-child relationship to be one aspect of a high quality arrangement. Cryer and Burchinal (1997) examined parents' ratings of specific criteria and found positive interactions in the care setting more broadly to be an important dimension of high quality care.

Structured activities to support children's development. Though parental preferences regarding specific teaching practices vary, the availability of structured activities to support children's development has been identified as an important quality feature to parents. In a study of ethnically and economically diverse parents, Gamble, Ewing, and Wilhlem (2009) found activities/components of programs that facilitate children's problem solving, social skills, executive functioning, early reading, health, and behavior to be the most frequently endorsed component of parents' definitions of high quality care, using parent's ratings of importance. Ispe et al. (1998) analyzed parents' rankings of the three most important criteria parents of young children used when selecting their last child care arrangement and found daily programming to be, on average, one of parents' top criteria for selecting a program. When compared, families in metropolitan areas were more likely than parents in non-metropolitan areas to endorse daily programming as important (Ispe et al., 1998). Leach et al. (2006) found cognitive stimulation to be one of the most important features of high quality care in qualitative interviews with 57 mothers of infants in the U.K. Mensing, French, Fuller, and Kagan (2000), through longitudinal qualitative interviewing of seven mothers over a 15-month period, found learning opportunities to be a key criteria in selecting care among low-income parents. Van Horn et al. (2001) found low-income parents to be more likely to indicate learning/school-like activities as important using a checklist than open-ended questions. Finally, in a quantitative study of 439 parents whose children were enrolled in pre-kindergarten, sound instruction was endorsed as a feature of high quality arrangement as well as a factor in selecting a care arrangement by at least one-fifth of parents in the study (Barbarin et al., 2006).

Findings related to parents' specific expectations regarding learning opportunities vary in specificity across studies, at times reflecting the interview protocols/data collection strategies used. Parents participating in qualitative studies have highlighted both cognitive stimulation through instruction (Barbarin et al., 2006; Holloway, Rambaud, Fuller, & Eggers-Pierola, 1995) and opportunities to foster children's social development (Chaudry et al., 2011; Van Horn et al., 2001) when discussing the importance of learning opportunities. A qualitative study of African immigrant parents with preschool-aged children highlighted a value for learning through exploration and discovery (Obeng, 2007), and Leach et al.'s (2006) qualitative study found mothers of infants to emphasize the importance of a stimulating and busy environment with equipment to facilitate play. Using quantitative methods, Gamble et al. (2009) found, among low-, middle-, and high-income parents, two features of a child-centered orientation (encouraging confidence and instilling a love of learning) were rated

among the top five most important features of care. However, other studies have found low-income parents, in particular, to place a high value on more didactic, structured learning activities (Bredenkamp & Willer, 1993; Holloway et al., 1995). Though much of the literature focuses on the development of children’s cognitive or pre-academic skills, parents’ commitment to children’s social development has also been highlighted in studies using ratings and qualitative methods (e.g., Layzer & Goodson, 2006; Lowe & Weisner, 2004; Obeng, 2007).

Positive, trusting parent-provider relationship. In a qualitative study with low-income mothers from different ethnic groups, Mensing and colleagues (2000) found trust of caregivers to be a preeminent criterion for child care selection, with trust being required before other features are considered. Similarly, Weber and Grobe (2011) found that parents who were either currently receiving a subsidy or had recently exited the subsidy program ranked trust as the most important reason for selecting the provider currently caring for their child(ren). Leach and colleagues (2006) and Barbarin and colleagues (2006), using qualitative and quantitative interviews, respectively, found parents to value open communication and a sense of partnership between themselves and their early education providers. Likewise, through focus groups with low-income parents in Maryland, Forry, Wheeler, and Simkin (2012b) documented parents’ endorsement of regular communication, flexibility, opportunities for parent involvement, and provider support of the family as indicators of high quality care. Despite the rich literature on family engagement in early care and education settings, few studies have directly asked parents about the importance of the family-provider relationship in seeking a care arrangement.

Variation in Preferences by Demographic Features

A number of research studies have found associations between child, parent, family/household, and community characteristics and parental preferences for child care. Most of these studies are non-experimental and cross-sectional (i.e., one time data collection) in nature. Before summarizing findings from this literature, a caution is warranted. First, though non-experimental studies offer valuable information, causal inferences cannot be made based on their findings. Second, even when regression models control for observable competing variables, unobservable factors underlying associations may not be specified in this research. For example, a shortage of supply for families with certain characteristics could, at least partially, underlie associations between stated child care preferences and demographic features (e.g., age of child, family income). The research summarized below uses multiple techniques for identifying differences in child care preferences. Some of these techniques allow the researcher to account for (or “control for”) characteristics of the child, parent, family, or community while others do not. When applicable, information on control variables included in analyses is provided.

Variation by child characteristics. Research indicates that parental preferences when selecting child care vary by certain child characteristics, including child’s age, temperament, and social skills. Multiple studies have documented parents’ preferences for infants/toddlers to be in parental/relative care and for preschoolers to be in center care. For example, Rose and Elicker (2008) found mothers of infants placed more emphasis on their child being in relative care and less emphasis on convenience or their child being in center-based care than did mothers of preschoolers using conjoint analyses. In another study, Rose and Elicker (2010) conducted a survey with 345 employed mothers to assess their ideal preferences for child care and found that the majority of mothers of infants and slightly more than half of mothers of toddlers preferred parental care, and slightly more than half of mothers of preschoolers preferred center-based care.

Parental perceptions of child temperament and/or skills have also been associated with child care preferences. Through an analysis of correlations using survey data from 220 parents with children in non-parental care, Gamble, Ewing, and Wilhelm (2009) examined parents' beliefs about child care and found that parents who rated their children as being shy, immature or less developmentally advanced were less likely to cite school readiness and curriculum options as important than parents who did not rate their child as being shy, immature, unable to focus, or anxious. It should be noted that multivariate analyses, controlling for characteristics of the mother/family (e.g., hours of employment, income, education, ethnicity, marital status, and number of children in the household) and select characteristics of the child (e.g., gender, time in non-parental care) found no difference in parental preferences by temperament, though a positive association between perceived developmental skills and the importance of curriculum and school readiness was documented (Gamble et al., 2009). Based on data from a mixed-methods study involving surveys with 200 parents with children in center-based early care and education, Grogan (2011) used hierarchical regressions and found that, controlling for socioeconomic status, ethnicity, family beliefs, and select child characteristics and skills, low-income parents who reported their children to have strong social skills were more likely to include practical considerations in their criteria for selecting an early care and education arrangement.

Variation by parental characteristics. Associations have also been found between child care preferences and parents' demographics, features of employment, stress, and beliefs.

Parent demographics. Research has identified associations between parental preferences for child care and both parent education and parent ethnicity, though findings on each of these associations vary across studies. Studies linking parental preferences for child care and maternal education have found mothers with less education to place a higher emphasis on safety and practical features (cost and hours). By asking parents to select among center-based child care scenarios with varying characteristics, Leslie and colleagues (2000) found that, compared to women without a college degree, women with a college degree were less likely to endorse cost as a strong determinant in making a child care choice and more likely to endorse child:staff ratio and curriculum. Using data from a checklist and open-ended questions with 1,001 subsidy-receiving mothers, Van Horn and colleagues (2001) used logistic regression to control for type of care and select child, maternal, and community characteristics and found mothers without a high school degree to be more likely to cite safety than mothers with a high school degree or higher education. Finally, Rose and Elicker (2008) found a few differences by parental education. Compared to mothers with a college degree, those with less than a high school education had a stronger preference for flexible hours and low cost when rating program characteristics using conjoint analyses. Additionally, mothers with either a high school diploma or college degree more strongly valued an academic-based curriculum, as compared to play-based curriculum, than mothers with graduate-level degrees. According to a study by Johansen and colleagues (1996), both mothers and fathers of three-year-olds with higher levels of education (college or more advanced degrees) reported educational components of child care to be more important than mothers/fathers with less than a college degree.

Mixed findings have resulted from studies addressing the association between parental race/ethnicity and child care preferences. Inconsistent findings may reflect differences in the methodologies used and/or challenges in disentangling associations between race, ethnicity, culture, income, education, and neighborhood characteristics. Using qualitative interview data from 501 families who participated in the National Center for Early Development and Learning's Multi-State Study of Pre-Kindergarten (NCEDL), Barbarin and colleagues (2006) found small ethnic differences in the attributes parents associate with high quality care. Specifically, African Americans prioritized home-school partnerships and close relationships with staff, Caucasians prioritized classroom emotional climate, and Latinos prioritized comprehensive service provision. Two other studies found differences in child care preferences by parent race/ethnicity. First, in a person-centered analysis by Kim and Fram (2009), the researchers found African American and Hispanic parents to be more likely than white parents to rate all

queried characteristics of arrangements as important, as compared to rating practicality, learning, or another specific characteristic of arrangements as most important. Second, using logistic regressions, Rose and Elicker (2010) found that, controlling for maternal education, income, employment and marital status, and family role ideology, non-white mothers were more likely to prefer parental care as their first choice for infants, toddlers, and preschoolers than white mothers. In contrast, two studies using factorial survey methods with low-income parents found no differences in child care preferences by ethnicity (Shlay, 2010; Shlay et al., 2005).

Features of parent employment. Parental preferences have been associated with select features of parents' employment. In Kim and Fram's (2009) study of profiles of child care preferences, they found that working mothers placed more emphasis on practical considerations than on quality considerations. With regard to employment hours, controlling for type of care and select child, maternal, and community characteristics Van Horn and colleagues (2001) found that compared to unemployed or part-time working mothers, full-time working mothers were less likely to take into account the specific hours of available care. Additionally, Peyton and colleagues (2001) found that, controlling for families' income-to-needs ratio, maternal sensitivity, and parenting stress, mothers working fewer hours tended to make child care decisions rooted in quality considerations more often than in practical considerations (Peyton et al., 2001). Finally, Johansen and colleagues (1996) found that, controlling for indicators of the relative price of care for families, their ability to pay for care and select demographic characteristics of the child and family, higher hourly wages of a child's father were associated with greater considerations of educational attributes of care.

Parental stress and beliefs. Finally, research has shown that child care preferences vary by parental stress and childrearing beliefs. In their study of 633 mothers, mothers with a high level of parenting stress, as compared to a moderate level of parenting stress, were more likely to make child care decisions based upon practical considerations (including hours of operation, cost, or location) than the quality of the care environment (Peyton et al., 2001). Rose and Elicker (2008) found, when rating the importance of child care characteristics, mothers with traditional family role ideologies were more likely to value home-based/relative care and caregiver warmth than mothers with egalitarian role ideologies. Conversely, as compared to traditional mothers, egalitarian mothers rated cost, convenience, and location in a center to be more important (Rose & Elicker, 2008). Johansen et al. (1996) found, controlling for indicators of the relative price of care for families, their ability to pay for care and select demographic characteristics of the child and family, maternal expectations for their children's education are positively associated with their value of educational and developmental features of care. Additionally, in their qualitative study, Lowe and Weisner (2004) highlighted the importance of family routines and belief sets in determining parental priorities.

Variation by family/household characteristics. Family income, socioeconomic status, and family structure have each been associated with parental preferences for care. Family income has been negatively associated with attunement to cost when selecting a child care arrangement (Leslie et al., 2000; Rose & Elicker, 2008). Rose and Elicker (2008) found other variations in child care preferences related to the education of caregivers and location of care by family income using ratings and conjoint analyses. Additionally, three studies about parents' considerations when selecting child care, two of which included a small number of control variables, have found income to be positively associated with parental emphasis on quality, as compared to practical features of care (Gamble et al., 2009; Grogan, 2011; Peyton et al., 2001). Using profile analysis, Kim and Fram (2009) found differences in profiles of child care preferences associated with a family's socioeconomic status. Specifically, the most socio-economically disadvantaged parents rated all characteristics as important, whereas those with higher incomes were more likely to be in the subgroup of parents focused primarily on features of a care setting related to children's learning. Family structure has also been associated with parental preferences for child care. In Leslie et al.'s (2000) study of child care preferences, single mothers were more attuned to cost and less attuned to child:staff ratio than married mothers.

Variation by community characteristics. Variation in parental priorities has been associated with features of the community as well as social networks within the neighborhood. For example, Johansen and colleagues (1996), using data from the National Longitudinal Study and controlling for relative indicators of families' ability to pay for care and the price of care, as well as sociodemographic characteristics of the child, parent, and family, and an indicator of parents' expectations for their child's future education, found parents in metropolitan areas to more highly value structural and process-oriented measures of quality settings (e.g., use of educational materials and recreation equipment, staff training) for young children than parents in rural areas. Likewise, Ispa and colleagues (1998), using survey data collected from 127 couples with young children in Missouri and controlling for both parent gender and family social class, both found parents in metropolitan areas to more highly value the developmentally appropriate practice in child care programs than parents in rural areas. In addition to urbanicity, Garavuso (2006) found mothers' social networks within communities to inform their values and ideas regarding evaluation of child care options.

What We Know about Child Care Decision-Making with Special Populations

It is clear from the review of research that child care decision-making is influenced by multiple, complex factors. From the perspective of developing effective policy and programs, it is important to consider how these factors may vary for particular groups of families. Recent research on child care decision-making in two special populations - immigrant families and families of children with special needs – is summarized in this section.

Immigrant Families

With one in four children in the U.S. having a foreign-born parent, children of immigrants are the fastest growing population of children in the United States (Fortuny, Hernandez, & Chaudry, 2010). As immigrant families exhibit different patterns of child care use than families with native-born parents (Karoly & Gonzalez, 2011), it is important to understand the correlates and processes that shape immigrant families' child care choices.

Child care preferences and decision-making processes. The literature to date addresses families' preferences in selecting a care arrangement for select immigrant groups. In a telephone survey of 396 randomly sampled mothers of young children (birth-5 years) living in California, including 209 low-income immigrant mothers from Mexico, Central and South America, and the Caribbean, Buriel and Hortado-Ortiz (2000) found that immigrant Latina mothers preferred relative care for their children. When relatives were not available, these mothers tended to opt for licensed care, but expressed dissatisfaction with their care arrangements. Likewise, Fuller, Holloway, and Liang (1996) using 1991 NHES data to examine child care decisions among families with preschool-aged children ages (3-5 years), found that Latino immigrant families with a residential grandparent were far less likely to use center-based care than Latinos without a grandparent in the household. Becerra and Chi (1992) examined the child care experiences of low-income Chinese and Mexican immigrant families, and non-Hispanic, white non-immigrant families, living in Los Angeles with children under age three. Mexican families preferred relative care. Despite indicating a preference for home-based care, Chinese mothers in this study believed center-based care was ideal because it would help their children begin their education and start acculturating to American culture. Recent qualitative studies provide further insight into immigrant parents' preferences for child care. In particular, qualitative interviews with low-income immigrant parents from Latin America, Asia, Africa, and the Caribbean found that immigrant parents preferred child care, whether it was relative- or center-based care, that reflected aspects of families' cultures and country of origin, including discipline, socialization of values and beliefs, and food served (Chaudry et al., 2011; Obeng, 2007).

A few recent qualitative studies highlight and provide insight into aspects of child care decision-making that are unique to immigrant families. Qualitative studies of immigrant families by Chaudry et al. (2011), Matthews and Jang (2007), and Vesely (2013) highlight the importance of considering immigrants' experiences in their country of origin. In particular, findings from all three studies indicated that parents' knowledge of and use of formal child care in their countries of origin, as well as their experiences related to community responsibility for ensuring children's safety in their countries of origin, were not aligned with the individual responsibility for children embraced by the U.S. (Chaudry et al., 2011; Matthews & Jang, 2007; Vesely, 2013). Moreover, these studies elucidated the important roles of social networks in influencing immigrants' use of child care and their knowledge of eligibility for government subsidized child care programs (Chaudry et al., 2011; Matthews & Jang, 2007; Vesely, 2013).

Child care choices. The implications of variation in child care decision-making across different immigrant groups are evident when examining child care choices. Some of the earliest as well as more recent work focused on child care choices among immigrant families examined the demographic characteristics of these families as correlates for their choices regarding child care. Using data from the Early Childhood Program Participation component of the 2005 National Household Education Survey (NHES), Karoly and Gonzalez (2011) found that low parental education, low family income, two-parent family structure, and Latino ethnicity together account for immigrant families' lower use of centered-based child care for their three- and four-year-old children compared to non-immigrant families. Likewise, using nationally representative data from the 1996 panel of the Survey of Income and Program Participation (SIPP), Brandon (2004) found that Mexican and Asian immigrant families' child care choices for preschool children were linked to family income and structure. Moreover, Hirshberg, Huang, and Fuller's (2005) study of 1,974 parents with children birth to age five, including both Latin American and Vietnamese immigrants, found that married immigrant parents were less likely to use non-parental care for their children under age five, and Spanish speaking parents were less likely to select center-based child care for their children compared to English-speaking Latino and white parents. Finally, in their study of Chinese and Mexican immigrants, Becerra and Chi's (1992) found that Mexican mothers, in particular, who could not speak English well were less likely to use center-based care.

Children with Special Needs

According to the 2009–10 National Survey of Children with Special Health Care Needs, more than 15 percent of U.S. children under age 18 have an identified special health care need (National Survey of Children with Special Health Care Needs (NS-CSHCN) 2009/10). Children with special health care needs are defined by the U.S. Department of Health and Human Services as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally” (U.S. Department of Health and Human Services, 2007, p. 5). Such needs include asthma, allergies, behavioral disorders, speech problems, seizures, autism, severe physical disabilities, mental retardation, and more. Although some special needs go undetected until children enter school, nearly one in every 10 children under age 6 has a special health care need (NS-CSHCN 2009/10). These rates have risen since the last national survey in 2006 (U.S. Department of Health and Human Services, 2007), which suggests that more special needs are being identified among young children.

Child care preferences and decision-making process. Several recent studies have explored parents' preferences and process in selecting a child care arrangement for children with special needs. Qualitative and survey research has shown that, in addition to having many of the same preferences and concerns about child care as other parents, parents of children with special needs are also concerned about specific program features that are critical to the care of their children's special needs (e.g., individualized intervention services, specialized equipment, inclusion activities, and trained providers who can administer medication) (Chaudry et al., 2011; DeVore & Bowers, 2006; Haussler & Kurtz-Costes, 1998; Ward et al., 2006).

Availability of care that can accommodate children's special needs has been documented as a challenge in multiple studies (Chaudry et al., 2011; Haussler & Kurtz-Costes, 1998; Ward et al., 2006). In a mixed methods study including a statewide survey of 441 parents of young children with special needs in Maine, which has one of the highest rates of special needs children in the country, Ward et al. (2006) found that parents experienced significant problems finding and keeping their child care arrangements due to an inability of providers to accommodate children's special needs. DeVore and Bowers (2006) highlighted that the success of parental choices may depend not only on their options but on the steps they take to search for and partner with providers. They found that parents who searched on the basis of whether providers offered specialized care ended up cycling through multiple providers, whereas other parents who searched for a provider who would cooperatively partner with them to care for their child developed more successful arrangements the first time around.

Child care choices. Research shows that a significant number of families are struggling to provide appropriate care for their special needs children. One quarter of families with a special needs child report that a parent had to either reduce their work hours or stop working to care for their child, with more severe needs linked to greater employment problems (NS-CSHCN 2009/10). Largely due to the difficulties mentioned, parents of children with special needs are more likely to utilize care from a relative, friend, or neighbor than from a child care center or family child care provider (Booth-LaForce & Kelly, 2004; Chaudry et al., 2011; Ward et al., 2006). Booth-LaForce and Kelly (2004) conducted longitudinal interviews with 89 mothers with children diagnosed with a severe disability at birth (e.g., Down's syndrome) and 77 mothers with children at biomedical risk for developing a disability (e.g., very low birth weight), from the time children were 12 months until 30 months. Children with special needs enrolled in non-maternal care at the average age of 12 months, which is much older than the national average of three months (NICHD Early Child Care Research Network, 2001), and the majority of mothers in this study used informal care arrangements (Booth-LaForce & Kelly, 2004). Similarly, based on in-depth qualitative interviews, Chaudry et al. (2011) found children with severe special needs requiring medical equipment were typically cared for by relatives in the home, because no affordable and suitable alternative was available. In Ward et al.'s (2006) study, parents reported being concerned about the high cost of inclusive care, frustrated that their providers refused to administer medications and/or called more often than parents felt was necessary, and disappointed in providers' lack of support and inclusion of their children in activities. Parents in this study overwhelmingly used informal care arrangements, with usage rates being even higher among children with multiple needs, and used family child care the least often.

Constraints and Facilitators to Selecting Preferred Care Arrangements

As presented in Weber's (2011) child care decision-making framework and Chaudry et al.'s (2010) expanded accommodation model, a comprehensive understanding of how parents select child care arrangements can only be achieved when the contexts in which decisions are made are taken into account. Recent child care research demonstrates that families' choices are constrained and facilitated by various individual and contextual factors.

Contextual constraints. Contextual factors related to the child care market include the availability, accessibility, affordability, and parental awareness of supply (Davis & Connelly, 2005; Sandstrom, Giesen, & Chaudry, 2012). Research related to each of these factors is summarized below.

Limited availability. Families' child care decisions are dependent on the supply of care in their communities and the opportunities available to them. Davis and Connelly (2005) analyzed how various child, family, and market characteristics, including availability and cost, predicted the type of care used in a Minnesota sample.

Results showed that families were more likely to use the care of a relative, friend or neighbor when they knew someone who was available to provide care. Similarly, Henly and Lyons (2000) interviewed low-income mothers in Los Angeles who reported that the proximity of informal caregivers, competing provider obligations, and relationship conflicts all limited the availability of informal arrangements.

Availability and child/family characteristics. Depending upon child and family characteristics, child care options within a community can be limited. Multiple studies reported that parents of infants and school-aged children have fewer child care options than parents of preschool-age children (Chaudry et al., 2011; Davis & Connelly, 2005; Paulsell et al., 2002). Likewise, a study by the National Association of Child Care Resource and Referral Agencies (NACCRRA) documented unmet child care needs in low-income communities (NACCRRA, 2006) and DeMarco (2008) cited lack of availability as limiting the choices of families in rural areas. Additionally, Chaudry et al. (2011) found low-income parents with limited English proficiency, who wanted a provider that spoke their language, had fewer care options than English speaking families. Finally, two studies have found parents of children with special needs that are difficult to accommodate have a limited number of provider options (Chaudry et al., 2011; Ward et al., 2006; see text box for further details).

Availability and features of parental employment. Parental employment characteristics can enable or constrain families' access to child care options. In a study of primarily white, married couples in the Midwest, mothers returning to work after giving birth were more likely to use fathers for care (which they preferred) when they worked an evening or night shift (Riley & Glass, 2002). In addition to enabling the use of parental care, employment factors can constrain the formal child care options available to families (Henly & Lyons, 2000; Sandstrom & Chaudry, 2012; Scott, London, & Hurst, 2005). Low-income workers, in particular, often experience shifting and unpredictable work schedules, nonstandard hours, and inflexible work policies that limit their child care options (Chaudry et al., 2011; Henly & Lambert, 2005; Henly & Lyons, 2000). Qualitative interviews with low-income, nonstandard workers in the Workplace Environment Study (Henly & Lyons, 2000), the Study of Work-Child Care Fit (Henly & Lambert, 2005), and the Child Care Choices of Low-Income Working Families study (Chaudry et al., 2011) as well as a sample of current subsidy recipients (Scott, Leymon, & Abelson, 2011) each highlight the difficulty parents with nonstandard hours and unpredictable and variable schedules have in finding affordable care arrangements that can accommodate their work schedules. Based on telephone interviews with 580 current and past subsidy recipients, Weber and Grobe (2011) found that almost two-thirds of parents had one or more work-related child care constraints: less than seven days notice of work schedule, evening or night shifts, or weekend shifts. Additionally, using qualitative data from the Study of Work-Child Care Fit, Henly, Shaefer, and Waxman (2006) found precarious work schedules (e.g., non-standard, variable, and fluctuating hours from day-to-day with little notice) to constrain the child care options of hourly workers, especially those in retail.

Limited accessibility. Accessibility of providers is also a strong correlate of child care choices. For example, in Chaudry et al.'s (2011) study, low-income working families in Providence, Rhode Island and Seattle described how they relied heavily on public transportation in accessing child care programs. For these parents, travel beyond their community to seek additional child care opportunities, which were possibly of higher quality, was unmanageable. Henly and Lyons (2000) also identified concerns about location and accessibility among low-income working mothers in Los Angeles; many traveled long and complicated routes on public transportation to get to workplaces or child care providers, or relied on others for a ride.

Limited affordable options. High child care costs constrain families' options, particularly for families who do not qualify for child care assistance or subsidized early care and education programs and have limited financial resources to purchase high quality care. Results from the Canadian National Child Care Survey show that the price of various care types (i.e., center-based, nanny care, relative care) predicts the probability of whether mothers work and use these types of care. Specifically, working mothers with lower wages were less likely

than higher-wage mothers to use center-based care or nanny care and more likely to use relative or father care (Powell, 2002). Additionally, Davis and Connelly (2005) found families to be more likely to use family child care when the average price of center-based care was high and the average price of family child care was low. Qualitative interviews with low-income and immigrant parents in the Child Care Choices of Low-Income Working Families study (Chaudry et al., 2011) and the New Americans Study (Ward, Oldham LaChance, & Atkins, 2011) underscore families' challenges with waiting lists—for Head Start and other early care and education programs—and that the lack of affordable alternatives results in many parents choosing relative care or other home-based care arrangements.

Arranging care on a limited budget, and in some cases, in the context of a constrained supply, sometimes results in the use of multiple care arrangements. Due to scarce economic and social resources—specifically, financial and work constraints, difficulties accessing subsidies, changes in provider availability, and inflexibility of providers—women in Ohio who recently left welfare for work used multiple arrangements that were highly unstable (Scott et al., 2005). Morrisey's (2008) analysis of data from the NICHD Study of Early Child Care suggests that the availability (or lack thereof) of affordable, full-time early care and education programs is highly associated with the use of multiple child care arrangements, particularly for full-time working mothers with preschool-age children.

Limited awareness of options. Parental awareness of child care options, regardless of the supply, also influences the decision-making process. Studies have found that some parents have limited sources of information and are unaware of how to search for available options (Sandstrom et al., 2012; Ward et al., 2011). For example, in two recent qualitative studies, immigrant and refugee families sought referral information from their personal contacts and social networks rather than formal sources, which limited their awareness of available opportunities, including their potential eligibility for Head Start and child care subsidies (Chaudry et al., 2011; Ward et al., 2011). Specifically, Ward et al. (2011) found that some immigrant and refugee families in Maine did not know Head Start was free and so they did not apply, even though they were eligible. Most families in that study used relatives as caregivers in part because of the high costs of alternative options—as well as the mismatch between their work hours and child care hours (Ward et al., 2011).

Facilitators to Accessing and Selecting Preferred Care Arrangements

A number of supports are available to alleviate constraints and support parents in selecting their preferred care arrangement. These supports include state resource and referral services, consumer education programs, Quality Rating and Improvement Systems (QRIS), and Child Care and Development Fund child care subsidies and scholarship programs.

Resource and referral, consumer education, and QRIS. Child care resource and referral services are a primary connection point through which parents access child care listings and receive educational materials about what to look for in child care settings. In addition, if available, a QRIS provides parents with information about program quality ratings (Tout et al., 2010). A small but growing body of research is available on how well these efforts are working to facilitate child care decision-making (see forthcoming brief by Child Trends for a synthesis of research on QRIS).

Resource and referral and consumer education. Research indicates that parents do know about resource and referral agencies and other consumer education initiatives, though these are not the primary sources of information most parents seek when selecting a care arrangement. In a household study of parents conducted in Minnesota, nearly two-thirds of parents (62%) reported awareness of child care resources and referral services (Chase & Valerose, 2010). Among low-income families in this study, those receiving child care subsidies were significantly more likely to be aware of resource and referral services than those not receiving

subsidies (92% compared to 64%), however, across groups only a small proportion actually learned about their child's care arrangement through resource and referral services (21% subsidy, 7% non-subsidy; Chase & Valerose, 2010). Additionally, regardless of subsidy status or income, most parents (90%) reported that they learned about their child's primary arrangement through sources other than resource and referral (Chase & Valerose, 2010).

Awareness of QRIS. Though a primary goal of QRIS is to provide information to parents, many systems are new and may be unfamiliar to parents. In many states, funds have not been set aside to support marketing efforts, so states are limited in the strategies they can use to promote their QRIS to parents (Tout et al., 2010). To date, a few studies have addressed parents' awareness of pilot or state-wide QRIS. For example, Elicker and colleagues (2011) led an evaluation of Indiana's QRIS, Paths to Quality (PTQ). In a phone survey of parents living in Indiana, Elicker and colleagues (2011) found a small increase in the number of parents that had heard of PTQ from one year to the next (12% vs. 19%, respectively). Among parents whose children were enrolled in PTQ-rated child care programs, the majority (78%) knew that their child's provider was participating in PTQ. Most parents who were aware of PTQ had heard about it from their own child care provider (Elicker et al., 2011). Tout and colleagues conducted a multi-year evaluation of Minnesota's pilot QRIS and found that the majority of parents whose children were enrolled in QRIS-rated programs did not recognize the QRIS's name (Parent Aware) (Tout et al., 2011). Yet recognition of Parent Aware among parents whose children were enrolled in rated programs increased steadily across the pilot period from 20% to 34% (Tout et al., 2011). Finally, as a part of the Kentucky STARS for KIDS NOW evaluation, Starr and colleagues (2012) conducted a household survey of 400 parents across the state. This survey was similar to the PTQ survey in Indiana because it was conducted with parents statewide in Kentucky, regardless of whether they had a child participating in a rated program. However, while Indiana's PTQ and Minnesota's Parent Aware were both newly created QRIS, Kentucky STARS for KIDS NOW has been implemented for over a decade. Nevertheless, results indicated that only 17% of parents had heard of Kentucky's statewide QRIS (Starr et al., 2012). Overall, parental awareness of QRIS in each state noted here was lower than expected by program administrators.

Parents' perceptions and use of QRIS. In addition to awareness of QRIS, it is also important to understand parents' perceptions of quality rating systems in general and the extent to which they would use QRIS in their decision-making. Data from household child care surveys in Minnesota (Chase, Arnold, Schauben, & Shardlow, 2005) and Missouri (Thornburg et al., 2010) indicated that the majority of parents were interested in information from a quality rating system (88 percent of parents in each state). In addition, the studies in Indiana and Kentucky noted above also queried the importance parents ascribe to QRIS when selecting a child care arrangement. In Elicker et al.'s (2011) Indiana study, 67% of the 450 surveyed parents who were using a provider rated by PTQ reported that when making child care decisions in the future, PTQ would be important or very important and half (50%) said they would agree to pay higher costs for providers with higher PTQ levels. Elicker et al. (2011) conducted phone surveys with a different sample of parents in the state from 2009 through 2011 and found the value parents ascribed to Indiana's QRIS when making a child care choice increased over time, as did the proportion of parents who would be willing to pay more for providers at a higher level of PTQ. In the household survey conducted for the Kentucky STARS for KIDS NOW evaluation, Starr and colleagues (2012) found that though parents had low overall awareness of STARS, the majority (73%) of parents indicated that a provider's quality rating would be somewhat or very important in their child care decision-making after hearing a brief description of STARS.

Utah recently concluded a public awareness project to introduce their QRIS, Care About Child Care. Care About Child Care has been operational since April 2012 and allows parents to view the licensing records of child care providers. Data as of February 2013 indicates a 33% overall participation rate in Care About Child Care by child care providers (35% center, 30% family child care), close to 6,000 visitors have been to the website, and 2,392 parents have conducted a referral.

As part of the public awareness project, parent focus groups were conducted. The thoughts and feelings of parents in these focus groups mirrored the findings in this review. The Utah parent groups identified nurturing/loving environment as their number one concern, safety and cleanliness second, followed by cost of care, educational experiences, staff-to-child ratio, flexible hours and staff first aid/CPR training.

In a survey of 403 parents conducted in 2012, almost 80% of respondents who had visited the Care about Child Care website found it to be helpful (Richter, 2013). Based on data conducted before and after the public awareness project, the survey results indicated that fewer children were being cared for by friends or neighbors following the public awareness campaign and fewer respondents indicated a desire to change something about their child care (Richter, 2013). At the same time, the gap between the importance respondents ascribed to education and their feelings about their own children's current educational widened (Richter, 2013).

To learn more about Care About Child Care, visit careaboutchildcare.utah.gov.

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Child care subsidies. A few studies have explored the association between receipt of a child care subsidy, designed to reduce the price of care, and parental satisfaction with care. Using data from a small state-specific sample in a mixed-method study, Forry (2009) found some eligible parents who received a child care subsidy after being on a waiting list to switch from informal arrangements to their preferred care arrangement (formal care). Likewise, in an experimental study, Michalopoulos et al. (2010) found increasing access to child care subsidies through expanded income eligibility resulted in increased satisfaction with care for moderate-income families using regulated center- and home-based child care arrangements, compared to families denied subsidy eligibility. Based on telephone surveys with 580 current or past subsidy recipients, Weber and Grobe (2011) found education and skill of the provider and support for children's learning were parents' highest ranked reasons for parents using a subsidized provider, but not for parents using unsubsidized providers.

In addition to child care subsidies, some states have developed scholarship programs to support the selection of care with high quality ratings by reducing cost constraints. Gaylor and colleagues (2011) conducted an evaluation of the Saint Paul Early Childhood Scholarship Program and found that before entering the Scholarship Program, most children (57%) attended unlicensed care. Upon receiving a scholarship to attend a program with high quality ratings, the majority of children (57%) enrolled in center-based facilities, about one-third (30%) selected a Head Start program, and the remaining children (13%) chose a family child care or public school-based program (Gaylor et al., 2011).

RESEARCH HIGHLIGHTS

This review of the literature provides detailed evidence about the context of child care decision-making and the factors that facilitate or challenge the process. Looking across the review, key findings emerged that can inform state child care administrators and other policymakers:

- Across multiple states, low-income parents' search process is relatively short (2-4 weeks), with few options considered and many parents relying on informal sources such as friends and family to learn about care options.
- It is difficult to synthesize findings on parents' preferences in child care searches due to different methods used in research studies. On balance, the literature indicates that parents value "quality" in child care arrangements, though definitions of quality vary. Additionally, features related to the promotion of health and safety, warmth and sensitivity in relationships and support for children's learning have been noted across studies as aspects of quality that parents value.
- Multiple characteristics of the child, parent and community are related to the child care decision-making process. However, the reasons underlying these associations are not always clear.
 - Parents of infants tend to prefer care by relatives or parents, while parents of preschoolers prefer center-based care.
 - Parents who have concerns about their child's social skills or temperament may value individualized supports over other aspects of curriculum.
 - Associations between ethnicity and child care decision-making preferences are detected in some studies but not in others.
 - Parents who are employed full time and parents who report high levels of stress may focus more on practical features of the care arrangement (cost and schedule) than features related to quality.
 - Parents' beliefs about family roles and education, household income, and family structure are related to child care preferences.
 - Parents in metropolitan areas may prefer more structured learning opportunities for their children than parents in rural areas.
- Families' unique situations are reflected in their child care decision-making process. For example, among immigrants, country of origin and social networks are important factors in child care decision-making process. Additionally, families with children who have special needs emphasize finding providers or programs that can accommodate their children's medical and physical needs.
- The decision-making process can be constrained in low-income families by a number of factors, including limited availability of child care options for children with particular characteristics (for example, infants and toddlers) or that are consistent with parents' work schedules (for example, night and weekend schedules and fluctuating and unpredictable hours); limited accessibility due to transportation issues; lack of affordable options; and limited knowledge of information sources about child care and financial supports.
- Resource and referral agencies, QRIS, and child care subsidies can facilitate the child care decision-making process, though these systems and supports currently serve a small proportion of eligible families.

EMERGING ISSUES AND UNANSWERED QUESTIONS

Research on child care decision-making has expanded our knowledge of the critical factors playing a role in the process. Further research and demonstration projects are needed to identify and test features of decision-making that could be enhanced through policy and program improvements and to understand any unintended consequences of these initiatives. In this section, we discuss several key questions that would benefit from further research and evaluations.

- What are the options for designing child care subsidies that are linked to the quality of child care? Research findings on the effectiveness of various tiered reimbursement options are not yet available. In future work, it will be important to identify whether higher reimbursement rates for higher-rated programs are benefitting both families who use subsidies as well as the programs who receive them. In addition to tiered reimbursement rates, states have a number of options for supporting quality programs, such as contracts for slots available only to programs with a documented level of quality or bonuses (one-time or annual) to help highly-rated programs sustain quality. Tiered rates may not be sufficient for covering the cost of certain program with rates that are above the maximum reimbursement rate and may be out of reach for low-income families.
- How should QRIS be designed to work effectively for families? Though some research has been conducted to know whether families would use a QRIS if available, researchers and program administrators are still at an early understanding of the best process for designing “family-friendly” QRIS. For example, do families want information at a summary level or would they also prefer information about the various components of quality that make up a star level? What are the words that families understand best in descriptions of various features of quality?
- What happens to families for whom high quality programs identified in a QRIS are not accessible? As efforts expand to promote the use of high quality programs, it will be important to track the consequences of limited access among families whose work schedules, finances or other factors do not allow them to enroll in high quality programs. What arrangements do these families use? What additional supports could be provided to promote access?
- What is an appropriate balance for states with respect to investments in promoting program quality improvement and ensuring families’ access to services? States make policy decisions about the balance of investments in quality and access. What demonstration projects could be conducted to illuminate the tradeoffs and benefits of various investment profiles?

APPLICATIONS OF FINDINGS TO POLICY AND PRACTICE

Research on child care decision-making is characterized primarily by studies of families with particular characteristics or living in certain geographical areas. Findings from this work emphasize the importance of considering the individual circumstances of families’ lives when trying to understand how they make decisions. Yet even with this focus on individual profiles, findings from this body of research can inform policy and programs to support child care decision-making across low-income families. In this section, we highlight several broad conclusions from the literature that are relevant for policy and practice.

- The child care search process may be constrained in a variety of ways for low-income families. Resources to support child care decision-making should acknowledge the multitude of inter-related factors that shape how decisions are made and the fact that preferences for different features of child care arrangements may vary by the characteristics of the families. Studies suggest that friends, families and, in some cases, trusted professionals (such as case workers and pediatricians) play a role in decision making. Creating a cadre of trusted child care advisors who can listen to families' unique circumstances and provide guidance that is culturally sensitive would be a potentially valuable service to families. Additionally, community or neighborhood-based initiatives, such as provider open houses and yard signs, could be used to increase community members' awareness of the child care options, and particularly options that have been rated as high quality through QRIS, available in a neighborhood.
- Several studies found that families do not report high levels of awareness of the Quality Rating and Improvement System in their state. A focus on effective marketing and engagement strategies is needed to increase the awareness and utility of QRIS, especially for low-income families. States may choose to market QRIS as a system that rates providers on specific quality indicators that will likely resonate with parents. For example, states could highlight how their QRIS includes indicators of quality identified as important by parents in extant literature (e.g., provider background checks, small group sizes, and training on learning activities that can support children's growth). Research on social networks suggests that information dissemination may be most successful if marketing strategies make use of key informants and network members (Chaudry et al., 2010). The timing of these efforts should consider the participation rates of programs so that parents responding to marketing efforts will encounter a sufficient supply of rated programs. This "tipping point" of QRIS participation density is not yet known. Efforts to track availability of slots in high-need areas can inform marketing decisions.
- Research has shown that a substantial portion of parents prefer center care for their 3- and 4- year old children. Child care subsidies and other sources of financial supports (such as scholarships) can enable parents to access these preferred settings when they are available. Interactions with families to provide informational resources at the point of application for child care subsidies may support families' search process. Depending on priorities at the state or local level, these interactions with families may also provide a point of entry to programs such as Head Start or pre-kindergarten programs which are free or low-cost to families.

From Research to Policy and Practice: Perspectives from State Administrators

The subject of parent choice is simultaneously a whole and independent issue of its own and a vital component of other issues with which State Child Care Administrators must struggle. Within this review are data concerning what have been daunting or controversial policy decision points Administrators face related to the child care decision-making process and constraints parents experience during this process. As is often true when addressing child care policy, these decisions points seldom address only one issue at a time. Policy decisions developed to influence parents' child care decision-making process will, of necessity, overlap with policies concerning child care access, quality, and availability. With limited funding, it isn't possible for State policymakers to effectively do everything that would benefit parents regarding their child care decision-making. Instead, Administrators must select the few most effective among many choices for interventions to support parents.

State Administrators must also consider possible unintended consequences of policy choices. For example, parents may choose a license-exempt opportunity because they prefer it, but it is also possible that they know they can better afford it, compared to a high quality licensed child care center. If a State child care initiative requires parents to choose a high quality licensed child care center, are they more likely to change the arrangement because they fall behind on the more expensive payments? As continuity of care is an essential issue in early learning and development, this is an important consideration. To address this constraint, Administrators must work to develop policies that support low-income families to afford high quality child care arrangements. For example, in NH, we have reduced the amount of the parents' co-pay so that parents can more easily afford to maintain their child in a high quality child care center.

Economic conditions can also affect the implementation of child care policies. A child care center's enrollment vs. its licensed capacity fluctuates with the economy. During a positive economic environment, parents may find waiting lists for child care spaces. States can address such shortages through incentives and supports for high quality child care programs to increase their enrollment capacity. During an economic downturn, child care programs may have reduced enrollments. The literature is clear that specific groups of parents seek close and supportive relationships with their child care providers. This finding supports State investment in initiatives to improve child care teachers' relationship-building skills. For example, since 2005, NH has been disseminating Strengthening Families training to child care programs to improve their ability to develop relationships with and support families. Between 2009 and 2011, child care programs implementing Strengthening Families had higher enrollment rates than many other programs.

Parents may only take a few days to choose a child care arrangement due to their life circumstances. For example, families that cannot afford child care when they have recently immigrated or experienced long term joblessness may have only days to find child care provider once they receive a job offer. Changing the role of child care resource and referral programs (CCRR) staff from child care referral to child care advisor could assist families in determining the most appropriate child care arrangement option for their child within the parent's limited timeframe. From 2009-2011, NH CCRR provided intensive child care advisor services to families entering and being released from the child care subsidy wait list so that parents would not miss employment opportunities while waiting for child care assistance. In addition to State Child Care Programs supporting parents, many other child/family services and supports can provide timely information. Partnerships with obstetricians, who see parents before the birth; home visitors, who see parents and infants through the first year; and pediatricians, who regularly see parents of children birth through 12 years and with greatest frequency in the early years, could result in parents receiving vital information regarding available supports such as child care subsidy and decision making tools, including QRIS, at the time when they most need it.

Special populations, such as immigrant families and children with special needs, may benefit from targeted training and technical assistance services. For example, to meet the needs of immigrant families, targeted training, education and technical assistance in the immigrant community could produce teachers/child care providers from this community. Additionally, parents whose children have special needs are constrained by a lack of competence in many licensed child care programs regarding their child's needs. This is an obvious training and technical assistance need, which presents Administrators with another conundrum. Considering the reality of limited funding, where should funds targeted for teacher education be spent?

While, as reported here, parents of infants prefer relative or other informal child care arrangements, infancy is when the achievement gap between low-income and higher-income children begins. In addition, the quality of infant care in child care programs is generally not as high as in the preschool classrooms. State Administrators need to look beyond parent education regarding QRIS to address this issue. In NH, we recently completed Infant/Toddler Professional Competencies and added the Infant/Toddler Credential Endorsement to the Early Childhood Professional Development System. Institutions of higher education and training and technical assistance providers will use these resources to improve quality in infant/toddler classrooms.

Questions regarding some of the issues that State Administrators face concerning parents' decision-making process remain, particularly questions about the accessibility of child care arrangements and constraints parents may experience. For example, in rural communities, where there may be zero or only one licensed child care program, there is no public transportation and often little or no employment. Parents obtain employment outside of their communities, sometimes driving long distances to work. How do parents in this situation decide between informal care close to home and licensed child care close to work?

Additionally, it is important to understand that parents of young children may be tech savvy enough to use the Internet and social media for learning about and choosing most of the goods and services they need. The Internet has become an inexpensive and easily accessible tool and parents who do not already have an understanding regarding what to look for in a child care arrangement can easily be led astray. As Administrators, the challenge is to adjust consumer education efforts to meet parents where they are searching for the information we want them to have. We don't know, however, how much Internet searches are influencing parent decision-making regarding child care arrangements.

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This research reinforces the need for States to promote and support a large number of high quality child care options from a variety of auspices – including Family, Friend and Neighbor care, licensed family child care homes, faith-based programs and a variety of licensed centers. Because there are so many different reasons why families make the choices that they make, there must be a wide variety of high quality care available so that families can find care that meets their unique needs and preferences.

This, of course, is difficult when budgets are tight and quality spending must be carefully prioritized. Often funding in Indiana gets allocated based on number of children impacted, so larger centers may have more supports than smaller family child care homes or FFN care. However, larger centers are often not viable in rural areas or during non-traditional hours. Thus, smaller, locally-based quality improvement projects and initiatives should be promoted in order to build the number of high quality choices for families throughout all areas of states including rural communities.

Quality Rating and Improvement Systems that are open to a variety of provider types can assist with this by not only providing quality supports for different provider types, but by also giving families an easy to recognize symbol of quality by which to reliably compare different choices. Given this, states must carefully consider how they communicate information about QRIS. For example, in Indiana, parent surveys have shown that health and safety is rated as the most important quality indicator for families. Within Indiana's QRIS, the entry level (level 1), is defined by programs that are meeting health and safety standards. By using the term "health and safety" as the indicator for the lowest level, are we inadvertently promoting level one to families instead of the higher levels?

In the face of many unknowns about parental choice, how can we better use what we do know? We know that recommendations from friends and family members are essential to families when choosing care. Research in Indiana indicated in the early phase of our QRIS (Paths to QUALITY™), families whose children were enrolled in a Paths to QUALITY (PTQ) program were not always aware that their provider was even participating. We had to consider what approaches we could take to ensure that every family attending a PTQ program knows about it and talks about it with their friends and families. In response, Indiana created a marketing tool kit for providers that includes templates of newsletters and flyers for use with families and community members.

We offered free training sessions on the use of the toolkit to providers to assist them in marketing themselves. We provide signage for higher rated programs (banners, yard signs and garden flags) and arrange for local media recognition for QRIS level advancements. We are also looking at other low cost, high impact ways for child care programs to inform their enrolled families about PTQ and their own program's commitment to quality improvement. More and more families are asking both the CCR&R offices and providers for a Paths to QUALITY provider, but more details are needed about how the information is impacting parental choice.

More information is needed on how Administrators apply research to best serve the low-income families in their State. For example, how do States respond to the fact that families often choose child care in a very short timeframe with limited visits to available options? How do we get information out in a timely way that recognizes the challenges families face? (Indiana is hoping that our robust on-line child care search may help with this as families can obtain a wide range of information on child care options without leaving their home or workplace.) What other social media options can States capitalize on to get the most important information out to families? How do we empower parents to make the best choices possible and support their role as their child's most important advocate? These are complex issues that could be addressed in future research.

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