

Parents' Selection Factors When Choosing Preschool Programs for Their Children with Disabilities

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Abstract Parents, including parents of children with disabilities, are often challenged to find preschools that meet their families' various needs and desires. Research on preschool quality is prevalent, but these studies rarely consider how parents perceive quality. This descriptive study asked what parents value most when choosing a preschool for their child with disabilities. Results showed that while parents and experts value many of the same elements, parents value additional elements as well. Many parents felt their current preschool was their only option. When parents' responses were categorized as structural, process, and familial elements of quality, no definitive preference was found. The conclusion shares implications and avenues for further research.

Keywords Preschool · Parent selection factors · Process quality · Structural quality · Familial quality

Introduction

Researchers and theorists have written extensively about what they value in early childhood education; however, far less is known about what parents value. As those most likely to determine what program their children will attend, parents' perspectives are invaluable to the larger conversation about what makes a preschool desirable. Efforts to shape and implement quality preschool programming will likely be more successful if parents' logistical needs and desires for their children are taken into account. On a conceptual level, this means expanding the definition of quality beyond the categories of structural quality (i.e., regulable, programmatic elements) and process quality (i.e., interactional, experiential

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elements), to include components that are valued on a family- or parent-level basis. Practically, this means respecting and endorsing parents' views of what is needed in order for their children to receive the best possible care.

Some studies show that parents desire quality in early childhood education as it is generally defined by those working and researching in the field [National Association of Child Care Resource and Referral Agencies (NACCRRA) 2008; Pearlmutter and Bartle 2003; Shlay et al. 2005], yet some studies show that parents desire different factors in preschool programs (e.g., Helburn et al. 1995; Mocan 2007). Regardless, due to constraints such as cost and availability, parents cannot always enroll their children in what they perceive to be an ideal setting. Therefore, in this study we examine parents' preschool selection factors, including both elements parents desire for their children's education and wellbeing, and also practical elements parents need in order for the program to fit their lives.

Here, we focus on parents of children with disabilities, as this population in particular has been impacted by constraints in the child care and preschool market. Parents of children with disabilities often have difficulty finding a provider capable of and willing to take care of their children and their unique needs (Axtell et al. 1995; Bailey et al. 1992; Freedman et al. 1995; Herman and Thompson 1995; NACCRRA 2008). Locating a program that further supports the family's approach to discipline, beliefs about how children learn, or other personal factors can be even more challenging.

To explore these topics, we begin with a review of how the ambiguous construct of quality is typically operationalized. We next discuss what parents in general value in preschool programs, with special attention given to the unique needs and challenges parents of children with disabilities face. Then we ask what factors parents consider when choosing a preschool for their children with disabilities. By looking at selection factors, rather than parents' desires or ultimate preschool arrangements, a more practical understanding is gained of how parents perceive quality, and the nature of the factors that may impede their ability to select desirable programs for their children.

Defining "Quality"

The construct of quality is defined variably within and among the many stakeholders in the early childhood community. Early childhood education is a dynamic, context-dependent institution, so this variation is to be expected. Nonetheless, many individuals, programs, organizations, and governing bodies are interested in a definition of quality that can be shared across circumstances. Moreover, programs considered to be "high-quality" can have remarkable short- and long-term effects on children and families' lives (Campbell et al. 2008; Fontaine et al. 2006; Frank Porter Graham Child Development Center 1999; Reynolds et al. 2002; Schweinhart and Weikart 1983).

Quality has been generally defined as the practices and policies that foster positive child outcomes, child development, or school readiness (Layzer et al. 1993; Layzer and Goodson 2006), though this definition describes the results of child care quality, and not how quality is "done." Although preschool quality is a subjective concept, there are elements which are commonly regarded as components of or indicative of quality by both researchers and policy-makers. These elements are typically designated as either structural or process elements of quality (e.g., Hayes et al. 1990; Helburn et al. 1995; Layzer and Goodson 2006; Li-Grining and Coley 2006; Magnuson and Waldfogel 2005; Mocan 2007). Here we include a third category, familial quality, which we consider separately from structural and process quality. For the purposes of sharing a common vocabulary with readers, and

situating the present study within the larger body of work on preschool quality, we will describe how structural, process, and familial quality are defined for this study, and how these categories apply specifically to children with disabilities.

Structural Quality

Structural elements of quality are defined as those that can be regulated and plainly observed [Cryer et al. 1999; Helburn et al. 1995; National Institute of Child Health and Human Development (NICHD) 2006]. These include elements such as teacher education and training, group size, and staff-to-child ratios (Bigras et al. 2010; Helburn et al. 1995; Phillips and Howes 1987). Structural quality also includes facilities or services provided, such as transportation, meals, and health screenings (Ackerman and Barnett 2006; Li-Grining and Coley 2006; Mocan 2007; NICHD 2006). Safety and cleanliness are also categorized as structural elements of quality, as these can be and are regulated by organizations and government agencies (Ritchie and Willer 2008; American Academy of Pediatrics 2005; U. S. Government Accountability Office 2004; U.S. Department of Health and Human Services, Administration for Children and Families 2010).

Many structural elements are likely to be of particular import to parents of children with special needs. For example, parents may prefer teachers who have training in early childhood special education, or a particular disability or condition (Knoche et al. 2006; NACCRRRA 2008). Staff-to-child ratios are likely to be important for parents whose children need more personalized care (Schriber 2010). Other structural elements include the facilities available, such as sensory or gross motor rooms appropriate for particular services (Schriber 2010). Parents may prefer a program that employs a speech-language pathologist or psychiatrist (Hemmeter and Salcedo 2005). These and other elements make structural quality an important consideration for parents of children with disabilities.

Process Quality

Process elements of quality are defined as those that reflect interactional or relational elements, such as the teacher's responsiveness to the children's needs, the frequency with which the teacher smiles, laughs, and engages with children, and the nature of the relationships shared among the children, adults, and relevant others (NICHD 2006). Other components of process quality include the teacher's or program's educational philosophy; the cognitive, motor, and social stimulation of the environment; and the specific materials and activities to which children have access. Process elements directly relate to children's daily experiences in the physical and emotional environment of the classroom (Ackerman and Barnett 2006; Cryer et al. 1999; NICHD 2006). Some studies have asserted that process quality is the primary mediator of the impacts of structural quality on child outcomes (Bigras et al. 2010; NICHD Early Child Care Research Network 2002).

Process quality relates specifically to children with disabilities and their parents, as this category includes the relationships between the children and their teachers and therapists. These relationships can be imperative for successful interventions, and therefore are likely to be important considerations for parents (Hemmeter and Salcedo 2005). Process quality includes the specific tools, resources, and strategies that adults decide are most appropriate for the children in their care. Process quality also includes the ways in which teachers adapt and respond to children's individual needs and behaviors, which is likely to be a priority for parents of children with atypical development (Downing and Peckham-Hardin 2007).

Familial Quality

Familial elements of quality are less frequently considered in prior literature. Following Li-Grining and Coley (2006), we designated a third category of quality elements which apply variably based on families' unique needs, circumstances, and desires for their children. Throughout this study these elements are considered "familial quality." This category allows a place for family preferences that do not fit in structural or process categories. These elements include logistical considerations such as the location of the program relative to the parent's home or work, the hours or flexibility of the program, and the overall cost. Familial elements of quality also include personal or values-based ideas of quality, or if the family agrees with the preschool's philosophy. For example, parents might view a program as more desirable if they know the provider, or if they receive a recommendation from someone who knows the provider. Parents may also have varying perceptions of programs that include a religion-based curriculum, or serve ethnically diverse families. Such elements are likely to be considered highly desirable to some parents, and unimportant or highly undesirable to others. These situational elements are not frequently considered components of quality by professionals or experts, yet such factors can significantly influence a parent's perception of a program, making it more or less appealing (also see Honig 2002).

The meaning of familial quality will be highly variable across families and will include many similarities and differences. This variability may especially be prominent for those parents of children with disabilities. For instance, parents may be especially concerned that the tools, activities, and physical environments be appropriately adapted to match their child's abilities and needs (Hemmeter and Salcedo 2005). Parents are likely to look for a program that will be receptive to their family's goals for their children development (Hemmeter and Salcedo 2005). Parents of a child with a disability may place greater value on a program able to reduce their family's stress, and increase their family's overall sense of well-being (Hemmeter and Salcedo 2005).

Familial quality is somewhat distanced from definitions of quality that view the child as the sole recipient of quality care: familial elements prioritize the needs and desires of the *family*—the context in which the child is rooted. Familial elements consider parents' needs such as cost, convenience, and other practical aspects that parents must consider in varying degrees. Familial elements also contribute indirectly to the child's wellbeing, by taking into account the parents' beliefs about the most appropriate environment for their child.

Parents' Preschool Needs and Preferences

Some research suggests that many parents value the same elements of preschool quality that child development experts do (Cryer and Burchinal 1997; Cryer et al. 2002; NAC-CRRA 2008; Pearlmutter and Bartle 2003; Shlay et al. 2005). For example, when asked to rate the importance of multiple elements of quality commonly valued by early childhood professionals (e.g., attentive caregivers, variety of materials), parents consistently assigned high importance to all elements. In fact, Cryer and colleagues found that parents did not assign any one of over 30 elements an average score under 2.25 when rating the items on a scale of one ("not important") to three ("very important") (Cryer and Burchinal 1997; Cryer et al. 2002; also see Walsh and Deitchman 1980). Open-ended studies or those with more nuanced design find more variability (Leslie et al. 2000; Shlay et al. 2005; Vincent and Ball 2001), but parents still demonstrate at least some alignment with widely

conceived notions of preschool quality. For example, a nationwide study of over 1,000 parents commissioned by the National Association of Child Care Resource and Referral Agencies (2008) found that safety was the most important factor when choosing a child care for 36% of the parents surveyed, followed by a learning environment and learning activities for 17% of parents. The results of another study found that parents transitioning off of public assistance also valued their children's safety first and foremost when considering the quality of a potential preschool, followed by an attentive and caring provider, and one who would help their child learn (Pearlmutter and Bartle 2003). In a study in which low-income African American parents were asked to rate hypothetical child care situations with randomly assigned attributes, parents rated highest the scenarios which included caregivers who gave a lot of individual attention to children, maintained a clean and safe environment, had a lot of experience caring for children, had specialized training or education in child development, and were warm in their interactions with children. The researchers concluded that the parents in the study did not need instruction or encouragement to use high-quality care, but rather needed more and affordable options that met their standards (Shlay et al. 2005).

In contrast, other studies indicate that parents may not value the same elements which experts find to be most important, or parents may value other factors in addition to these (Helburn et al. 1995; Mocan 2007). Some studies have asked parents if they agree with a preconceived set of quality standards (e.g., Cryer and Burchinal 1997; Cryer et al. 2002; also see Holloway and Fuller 1999; Knoche et al. 2006), rather than asking parents what (or what else) they value, independent of prompts or expert opinion. This method allows little opportunity for parents to express factors dependent upon cultural or personal preferences, an individual child's needs and talents, and the circumstances under which the parents decide to use child care or preschool in the first place.

It stands to reason that parents may value preschool components that experts with a more global perspective would not typically consider. For example, parental considerations such as flexibility and reliability are likely to be particularly important for low-income families, single parents, or parents with inconsistent or irregular work schedules (Van Horn et al. 2001). These programmatic elements of preschool may have little to do with developmental outcomes for children, but they certainly affect parents' decisions of where their children will be cared for, which in turn could impact their children's development. The results of one study showed that the broad category of "services and facilities" was the most frequently cited reason that parents chose their child's preschool (27% of 139 parents); this category included factors such as hours open, location, and the provision of meals (Stipek et al. 1992). Similarly, Li-Grining and Coley (2006) found that mothers' satisfaction with their child care arrangements was determined by more than developmental aspects of quality. For example, low-income mothers in Li-Grining and Coley (2006) rated licensed and non-licensed home-based care to be more accessible and flexible than center-based programs. Relative care was also reported to be more reliable and dependable, and mothers reported better communication with relative care when compared to center-based care (Li-Grining and Coley 2006).

In a qualitative study of 32 mothers (approximately half Anglo American and half African, Guamanian, or Mexican-American), researchers found that the presence of shared values between the family and the care provider was a particularly important selection factor for the mothers interviewed (Uttal 1997). Depending on what those values are, this criterion may or may not align with widely accepted standards of quality. Several mothers also said that they wanted a program that would respect family preferences, such as the decision to continue breast-feeding or use cloth rather than disposable diapers (Uttal 1997).

Such personal factors are likely to be prominent considerations for individual families, but are less likely to be considered as components of “quality” by experts or preschool programs. A high-quality program might not be providing a high-quality experience to any given individual child, given that child’s interests and needs (Clawson and Luze 2008). These unique considerations are likely to take precedent over global ratings of quality when parents are making preschool decisions.

Parents of Children with Disabilities

Parents of children with special needs occupy a unique space in the preschool discussion. Parents of children with disabilities commonly cite child care problems as among the most challenging issues they face (Axtell et al. 1995; Bailey et al. 1992; Booth and Kelly 1998; Freedman et al. 1995; Herman and Thompson 1995). Parents of children with disabilities experience stressors common to families in general, but they are likely to have additional concerns, such as acquiring mid-day transportation between care settings and advocating for services for their child. Parents may also be partnering with teachers who do not have a complete understanding of their children’s disability (Dinnebeil et al. 1998; Fewell 1993; Warfield and Hauser-Cram 1996). Parents of children with disabilities report more child care related stress than parents of children without disabilities, even after controlling for income (Knoche et al. 2006).

Under the Individuals with Disabilities Education Act (IDEA), young children are entitled to “free appropriate public education” with their peers (U. S. Department of Education, n.d.). Yet children with disabilities are more likely to enter child care at an older age, compared to children who are developing typically (Booth and Kelly 1998; Booth-LaForce and Kelly 2004). The research is unclear, however, if access is a problem or if parents of children with disabilities self-select out of formal care arrangements. The results of one study revealed that, on average, children with disabilities began some form of non-maternal care at 11.5 months of age, compared to 5.3 months in the general population. Once they were enrolled, children with disabilities spent less time per week in non-maternal care, even though they had more simultaneous child care arrangements than their typically developing peers. At 14, 29, 37, and 44 months of age, the most common form of non-maternal care for children with disabilities was father or relative care, whereas young children in general were most likely to be in center care. For children with disabilities who remained in mother-only care, parents most commonly cited their child’s disability as the reason. Parents were also more likely to give this response as their child grew, ranging from 36% at 15 months, to 46% at 45 months (Booth-LaForce and Kelly 2004). Furthermore, in a study of children at risk of developing a disability or diagnosed with a disability, researchers found that 35% of parents using child care reported having at least “somewhat” of a problem finding quality care, though only about a fourth cited the child’s special needs as a factor (Booth and Kelly 1998).

Many parents of children with disabilities who do enroll their children in preschool report ultimately needing to abandon or skimp on certain factors they initially desired in order to secure a placement for their child. Specifically, 21% of parents of children with disabilities report that they compromised their standards of teacher training, compared to 6% of parents of children without disabilities. Sixteen percent of parents of children with disabilities have had to compromise on cleanliness, and 15% have had to compromise their standards on a safe environment, compared to 4 and 5% of parents of children without disabilities, respectively (NACCRRRA 2008).

Less is known about what specific factors parents of children with disabilities look for when selecting a preschool or child care. These parents may value the same characteristics as parents in general, such as program safety, flexibility, the degree of match between their and the program's values, certain factors are likely to be considered in addition to these. These aspects may include the provider's willingness to accept a child with a disability, the provider's willingness to accept subsidies, and the provider's training (Knoche et al. 2006).

Preschool quality as broadly defined is certainly relevant to special needs populations, and is sure to have commonalities with what parents' desire in preschool programs. Yet given the diversity of considerations and supports that children with disabilities may need, there are likely to be other factors that influence parents' preschool choices that are not represented in expert conceptions of quality. The limited amount of research on what parents, and in particular parents of children with disabilities, consider when choosing a preschool deserves to be further explored. Such information will be especially valuable to those developing and implementing preschool programs which serve children with disabilities and their families. To address this gap, we asked two questions in this study. First, what do parents of young children with disabilities consider when selecting a preschool? Second, to what extent do these parents focus on structural, process, or familial features of quality when selecting a preschool?

Methods

Participants

Fifty-four parents of preschool-aged children with disabilities participated. Parents and their children were among the first cohort of an on-going, three-cohort study analyzing book-reading practices in preschools serving children with special needs and their typically developing peers. Approximately 600 families were or are currently involved in the larger study, though only parents of children with disabilities within the first cohort are discussed here, given the purposes of the present study. As part of the larger study, programs, then teachers, and then families were recruited as consent was granted for each. Programs were initially contacted through informational packets sent through the mail, followed by a phone call or e-mail. Once access was granted, a project staff member either mailed informational packets to the teachers, or gave a brief informational talk at the school, typically as part of a staff meeting. Teachers voluntarily enrolled in the study. The following fall, after classroom assignments had been made, parents of children in those teachers' classrooms were given information on the study, and the opportunity to opt-in.

The 25 early childhood special education classrooms involved in the current study were located in urban and suburban areas in a mid-western state. The centers included parochial, Head Start, state-funded early intervention, and public school programs. Most classrooms were inclusive, in that they also enrolled typically developing peers.

Fifty-one of the 54 parents provided income information. The average family income was approximately \$60,000 annually. The lowest income range reported was \$5,000 or less ($n = 2$), and the highest was \$85,001 or more ($n = 18$). Of the 53 parents providing maternal education data, the modal response was some college but no degree ($n = 14$), and responses ranged from no high school degree ($n = 3$) to a master's degree or higher ($n = 9$).

Children ranged in age from 3 years 1 month to 5 years 3 months at the start of the study in the fall of 2008. The average age was 4 years 3 months ($SD = 6.7$ months).

Thirty-four children (63%) had been in preschool for a least 1 year prior to the study. Reflecting the overrepresentation of males in special education programs (e.g., Oswald et al. 2003), 40 of the 54 children were boys (74.1%). The majority of children were White/Caucasian (75.9%, $n = 41$), and 11 children (20.4%) were Black/African American, one was Puerto Rican, and one child was identified as “other.” All of the children spoke English at home. Information about children’s disabilities was derived from their Individualized Education Plans (IEPs). For the 54 children, 17 were identified as having general speech/language delays, 18 as having developmental or cognitive delays, five as having Autism, and two as having learning disabilities. One child each had Stickler Syndrome, FG Syndrome, Prader-Willi Syndrome and Down Syndrome (For descriptions of these conditions, see the U.S National Library of Medicine’s website, *Genetics Home Reference* at <http://ghr.nlm.nih.gov>). The only data available for 8 children was that they had an IEP; two of these children did not have an IEP at the end of the school year.

Measures

As part of their involvement in the larger study, parents completed a questionnaire designed to measure their perceptions of preschool quality. The questionnaire was completed and returned during a scheduled home visit in the winter of the academic year. Research staff collected child-level data for the larger project while parents completed the questionnaire in private. Parents were assured that no teachers or school staff would see the form.

Two sets of items from the questionnaire are examined within the current study, the first open-ended, and the second close-ended. The first question read, “Think back to when your child first entered preschool. Please list **3** aspects you considered when **choosing** a preschool (for example, ‘I looked for a program that served healthy snacks, was open when I needed to work, and accepted children with special needs.’).” Space was provided for parents to write in their responses. The second question read, “Think back to when you were selecting a preschool for your child. Many parents say they consider some of the elements below. Please rank the following elements from 1 to 16, with 1 being the element that was MOST important to you when you were CHOOSING a preschool. If you didn’t consider one of the elements at all, do not assign it a number—Instead, check the box under ‘Did Not Consider At All.’ For example, you may rank all the items 1–16 with no checks, or you may rank 10 elements 1–10, with the remaining 6 checked as ‘did not consider.’” The survey items were derived a priori from previous studies of parent perceptions of quality in early childhood programs (Ceglowski 2004; Hagen and Davis 1996; Vandenberg et al. 2008). In addition, parents could also check a separate box which read, “I didn’t or couldn’t consider ANY of these things because my current preschool arrangement was the only option available to me.” In this case, parents did not complete the ranking at all.

Coding

Open-Ended Data

Two researchers with significant coding experience (the first and third authors) worked together to code the open-ended responses. In an initial stage of data preparation, parents’ responses were typed verbatim into a list. Then, following Barbarin et al. (2008), content analysis was used to assign codes to the literal meaning of each of the parents’ responses. If

a statement was similar to a previous response (e.g., “We wanted a program with a great reputation” and “good rep”) it was assigned the same numerical code as the previous response. All other responses were assigned a unique code. Most statements were assigned only one code, though some were assigned two based on the specific content of the statement. For example, “His school was the closest with [a special education] program” was assigned two codes—“location” and “offered a special needs program.” After all statements had been coded according to this process, a simple data reduction was done to combine similar codes which had common practical understanding. For example, the five responses relating to knowledge of letters, reading, writing, numbers, and math skills were grouped to form one “academic skills” code. All responses referring generally to school or kindergarten readiness were coded as “school readiness.” This was done judiciously in order to maintain the integrity of parents’ responses. In total, less than half of the codes were regrouped. Data reduction resulted in 32 codes (listed in Table 1).

To assess the reliability of the coding process, a third coder not involved in the content analysis or data reduction processes assigned one of the 32 codes to each of the parent responses, and these codes were then paired item-for-item to the initial codes. Cohen’s Kappa was used to determine intercoder reliability for the coding system. Based on the benchmarks set forth by Landis and Koch (1977), the two sets of codes demonstrated that the coding system was reliable, $\kappa = 0.90$, $p < 0.001$.

Each of the 32 codes was then categorized as a structural, process, or familial element of quality. As described earlier, structural elements of quality are those which can be regulated and easily observed (e.g., teacher-child ratio), process elements of quality are those which refer to the daily experiences of children in the classroom, and their interactions with children, adults, and materials (e.g., teacher warmth), and familial elements of quality are those which vary depending on the needs, circumstances, and desires of the family (e.g., cost). These designations were mutually exclusive, in that each code could be assigned to only one of the three categories. The two coders separately assigned each item as a structural, process, or familial element of quality, and then compared. Agreement matched for 29 of the 32 items (91%), $\kappa = 0.86$, $p < 0.001$, indicating that category assignment was reliable across coders (Landis and Koch 1977). Disagreements were resolved through discussion and review of the definitions of structural, process, and familial quality used here. Upon completion, the 32 codes were categorized as 11 structure elements, 11 process elements, and 10 familial elements.

Ranked Data

The rank of each of the 16 items for each of the respondents was entered into a database. Items checked as “did not consider at all” were entered as their own unique value. For those parents who did not complete the ranking, but instead checked the box indicating, “I didn’t or couldn’t consider any of these things because my current preschool arrangement was the only option available to me,” data were entered as a unique missing value. All statistics and frequencies were figured using only those parents who ranked at least one item.

The 16 items were selected based solely on previous studies of parents’ perceptions of preschool quality. Each was here categorized as a structural, process, or familial element of quality. The two researchers separately assigned each item to one of the three categories, and compared. Agreements matched for all 16 items, resulting in six structural items, three process items, and seven familial items.

Table 1 Parents' most important preschool selection factors—open-ended responses ($N = 54$ parents)

Category	Code	Frequency ^a	Percent ^b	Examples ("Please list 3 aspects you considered when choosing a preschool")
Structure	Provided therapy/help with specific disability	27	50.0	"Somewhere with the therapy he would need" "— needed a preschool offering PT, OT, and speech help"
Structure	Offered a special needs program, accepted children with special needs	20	37.0	"Helped children with special needs" "I looked for a program that would accept special needs"
Familial	Program location	12	22.2	"It is located close to my workplace" "I wanted the area"
Process	Interpersonal teacher qualities	11	20.4	"I looked for caring teachers" "The teacher needed to be involved and interested in —'s wellbeing"
Familial	Program hours	8	14.8	"Flexible schedule" "Was open when I worked"
Structure	Program availability or referral	6	11.1	"Early intervention picked for her" "Was the only preschool available"
Process	Promoted social/behavioral skills	6	11.1	"A place where—could improve her social skills" "Coping with his behavior"
Familial	Atmosphere	5	9.3	"That they had an atmosphere that we liked" "Warm, nurturing environment"
Familial	Good reputation	5	9.3	"A program I trusted b/c of word of mouth" "We wanted a program with a great reputation"
Familial	Program-child fit	5	9.3	"Somewhere he could fit in" "I needed a school that I felt my child would do well in"
Process	Promoted academic skills	5	9.3	"We wanted the good basics of education to be offered" "Focused on literacy"
Process	Promoted socialization	5	9.3	"A school that would help her come out of her shell" "Being around other kids"
Familial	Child's comfort	4	7.4	"He was already used to the school" "—'s comfort in the environment"
Process	Child-centered	4	7.4	"A program built around the kids, not a set program w/o flexibility" "I loved...how child-centered it was"
Process	Promoted active learning	4	7.4	"They did a lot of fun stuff" "Provided many opportunities for hands-on learning (very limited worksheets)"
Structure	Teacher/child ratio, class size	4	7.4	"I looked for the ratio of children to teachers" "Small class size"
Process	Variety of activities	4	7.4	"How the teachers give options" "We wanted a variety of activities—art and music"

Table 1 continued

Category	Code	Frequency ^a	Percent ^b	Examples (“Please list 3 aspects you considered when choosing a preschool”)
Structure	Inclusion	3	5.6	“Served kids with special needs and had typical peer models” “Combination of special needs and regular children”
Structure	Teacher descriptive qualities	3	5.6	“—’s preschool needed to offer staff who had right training” “The school seemed to have adequate teachers on staff”
Structure	Offered transportation	3	5.6	“Bus services” “We needed transportation to be provided”
Process	Promoted physical/motor development	3	5.6	“I looked for a program that addressed kids’ physical needs (play games, outside recess)” “Facility offered a place for large muscle play”
Structure	Cleanliness	2	3.7	“Classroom’s tidy and well-kept”
Structure	Offered healthy food	2	3.7	“Healthy meals and snacks”
Familial	Parents are welcome	2	3.7	“I wanted a classroom that I could go into and feel welcome”
Familial	Personal contact	2	3.7	“Knew people who worked in preschool”
Structure	Presence of a curriculum	2	3.7	“We wanted programs and curriculum”
Process	Promoted school readiness	2	3.7	“Help prepare—for school”
Process	Variety of educational styles	2	3.7	“Offered variety in the educational style”
Familial	Accepted children in diapers	1	1.9	“— was not potty trained; I needed a school to accept children in diapers”
Familial	Diversity	1	1.9	“Diverse kids in classroom”
Structure	Safe	1	1.9	“Safe environment”
Process	Teacher/parent communication	1	1.9	“Speak with teachers and go over ideas to better his delays”

^a Parents were asked to list 3 factors they considered; parents listed between 1 and 5 factors ($M = 3.05$). All 165 responses are reflected here

^b Percentages will equal more than 100% as parents could list multiple factors

Results

Parents’ Preschool Selection Factors

The first aim of this study was to describe the factors parents considered when selecting a preschool for their young children with special needs. To address this aim, we coded and analyzed parents’ open-ended responses. Next, we considered the order of parents’ priorities by analyzing the data from the ranking portion of the survey.

Open-Ended Responses

Parents listed between one and five different factors they considered when choosing a preschool ($M = 3.05$). The resulting 165 responses were coded into 32 unique response categories. The 32 unique responses, with frequencies, percentages, and examples of each are listed in Table 1. As can be seen, the most common response referred to the ability of the program to provide therapy or help for a child's specific disability or need. Twenty-seven (50%) of the respondents indicated this aspect. Twenty parents (37%) responded that the presence of a special needs program or the program's acceptance of children with special needs was a primary consideration. Location was the third most popular response, with 12 parents (22.2%) identifying it as an important factor. Eleven parents (20.4%) named interpersonal teacher qualities such as "friendly teachers and staff" as important considerations.

Ranking Responses

Parents also ranked 16 predetermined preschool selection factors. Of the 54 parents represented in this sample, 17 (31%) did not rank any of the items, and instead checked the box that read, "I didn't or couldn't consider any of these things because my current preschool arrangement was the only option available to me." Among the remaining 37 respondents, there was substantial variation in the number of factors considered. Two parents (5.4%) considered only one factor, and six (16.2%) considered all 16 factors (see Table 2). The average number of items considered was 11.89, and the median number of items considered was 13.

Likewise there was also a high degree of variability among the rankings for each of the 16 items. Rankings for 12 items spanned the entire available spectrum, from most important to "did not consider at all," and rankings for an additional 3 items ranged from second most important to "did not consider at all." Stated differently, 15 of the 16 items were both top priorities and irrelevant factors among this sample of parents. Only one item was markedly different from this trend. Rankings for "I considered if the staff were offered good wages and benefits" spanned from seventh most important to "did not consider at all." This was also the item that parents considered the least when choosing a preschool, if it was considered at all.

In contrast, "I considered if the teachers were caring, stable, and responded to children's individual needs," was the item parents found most important when choosing a preschool; this item had the lowest average ranking, i.e., was the most important, at 3.84. (Parents ranked items from 1 [most important] up to 16 [least important], therefore, lower rankings indicate greater importance.) This item corresponds to parents' open-ended responses which were coded as "interpersonal teacher qualities," the fourth most popular open-ended response. The specific wording for each of the 16 items, the number of parents who ranked each item among their top three considerations, and additional data are found in Table 2.

Parents' Consideration of Structural, Process, and Familial Components of Quality

The second aim of this work was to examine the degree to which parents consider structural, process, and familial aspects of quality when choosing a preschool for their children with disabilities. To address this aim, we again analyzed both parents' open-ended and ranked responses.

Table 2 Parents' most important preschool selection factors—ranked

Category	Item ("When I was selecting a preschool for my child, I considered...")	Parents who ranked item 1st, 2nd, or 3rd		Parents who did not consider item at all		Modal rank ^b	Response range ^c
		Frequency	Percent ^a	Frequency	Percent		
Process	If the teachers were caring, stable, and responded to children's individual needs	27	72.9	2	5.4	3.84	1—DNC
Structure	How safe the preschool seemed to me	12	32.4	1	2.7	5.59	1—DNC
Structure	How many children were in each classroom	12	32.4	6	16.2	7.59	2—DNC
Familial	If I got a good feeling from the preschool; if it felt right	11	29.7	4	10.8	6.27	5—DNC
Familial	The match between my values and the program's values	9	24.3	9	24.3	8.84	DNC—DNC
Process	If the teachers communicated well with families	6	16.2	4	10.8	7.68	7—DNC
Process	How much time the teachers spent teaching children new things	6	16.7	4	10.8	8.06	5—DNC
Structure	How much education or training the teachers had	5	13.5	7	18.9	9.32	DNC—DNC
Familial	If the provider was someone I knew and/or trusted	4	10.8	5	13.5	8.73	7—DNC
Familial	How convenient the hours were for my schedule	3	8.1	9	24.3	10.49	DNC—DNC
Familial	The amount of diversity among other families, children, and staff	3	8.1	19	51.4	12.86	DNC—DNC
Familial	How much it cost	3	8.1	17	45.9	13.27	DNC—DNC
Structure	If the building and classrooms were clean, appealing, and had a nice look	2	5.4	3	8.1	8.08	8—DNC
Familial	How convenient the location was to my home or work	2	5.4	12	32.4	11.59	DNC—DNC
Structure	If the preschool was publicly-supported or licensed by a government agency (like Head Start)	2	5.4	21	56.8	14.27	DNC—DNC
Structure	If the staff were offered good wages and benefits	0	0.0	28	75.7	15.68	DNC—7—DNC

Values are derived from only those surveys in which the ranking portion was completed ($n = 37$). The remaining 17 respondents checked a separate box which read, "I didn't or couldn't consider ANY of these things because my current preschool arrangement was the only option available to me."

^a Percentages will equal more than 100% as parents' three top-ranked items are included here

^b A mode of "DNC" indicates that parents most frequently did not consider the item

^c Numbers correspond to place in ranking, e.g., 1 = most important consideration, 2 = 2nd most important consideration, etc. "DNC" indicates that at least one parent did not consider the item at all

Open-Ended Responses

Of the 32 unique responses, 11 were considered elements of structural quality, 11 of process quality, and 10 of familial quality. Table 3 shows the frequencies and percentages of parents who included these categories in their open-ended responses. Interesting to note is that about one-half of parents included at least one process element, and about one-half included at least one familial element; in comparison, nearly all (about 98%) included at least one structural element of quality in their open-ended responses. Although the two former categories were well represented, parents were more likely to include at least one structural characteristic among their open-ended responses. This suggests that structural characteristics are salient selection factors for parents of young children with disabilities.

Ranking Responses

As previously stated, parents were asked to rank in order of importance 16 preschool selection factors, checking a separate “I did not consider this at all” box as applicable. Six of the items were categorized as structural elements of quality, three were categorized as process, and seven as familial. For this portion of the analyses, we utilized only the items that parents ranked as the first, second, and third most important factors they considered when choosing a preschool for their children with disabilities (Fowler 1995). These three items were considered equal in importance. Rather than the item itself, its category is considered here.

In contrast to the open-ended data, the ranked data suggests that parents considered structural, process, and familial elements in relatively equal degrees. This is a particularly notable given that distribution of the 16 items did not group evenly into the three categories. Table 3 provides the frequencies and percentages of respondents whose top three rankings included structural, process, and/or familial elements.

Discussion

Understanding the preschool selection factors of parents of children with disabilities is important for several reasons. First, high-quality preschool programs, as defined by research on child outcomes, will likely be more desirable to parents (and thus attract more

Table 3 Parents’ preschool selection criteria by category and response type

Category	Open-ended responses ^a		Ranking responses ^b	
	Frequency	Percent	Frequency	Percent
Structure	49	90.75	26	70.27
Process	32	59.26	30	81.08
Familial	30	55.56	26	70.27

^a Open-ended responses are derived from the total sample, $N = 54$. Frequency totals will equal more than 54, and percentages will equal more than 100% as most parents listed more than one factor

^b Ranking responses are derived only from those respondents who ranked at least one item, $n = 37$. The remained 17 respondents checked a separate box which read, “I didn’t or couldn’t consider ANY of these things because my current preschool arrangement was the only option available to me.” Frequency totals will equal more than 37, and percentages will equal more than 100% as most parents ranked more than one item

children) if they also consider what parents want and need from a preschool. Second, definitions of “quality” tend to omit parents’ unique perspectives, despite parents’ central role in preschool decision-making. Third, in comparison to the general population of parents with preschoolers, parents of preschoolers with disabilities have more difficulty finding a program they like, and experience more stress related to their children’s out-of-home care (Knoche et al. 2006; NACCRR 2008). Parents of children with disabilities warrant specific attention on this topic.

The present study adds two key findings to the current literature: (1) parents of children with disabilities considered multiple and heterogeneous preschool selection factors, though notable patterns did emerge; and (2) parents of children with disabilities did not demonstrate a clear preference for structural, process, or familial elements of quality. Each of these findings is discussed in turn.

Parents’ Preschool Selection Factors

Number of Factors Considered

Exclusive of what specific factors parents considered, findings suggest there is substantial variability in simply the number of factors different parents consider when selecting a preschool. In the ranking portion, some parents reported that they considered all 16 of the quality factors provided, other parents considered only one, and most parents fell somewhere in between.

Still other parents did not (or felt they did not) have any degree of choice in their children’s preschool arrangement. A full 30% of parents indicated that their current program was the only option available to them. Vouchers, the Child Care and Development Fund, the Child Care Tax Credit, and other programs are designed to give parents a greater expression of demand in the preschool and child care market. Yet in the current sample, many parents felt they did not have choices from which to select. This may be a result of unequivocal referrals and placements, or circumstantial constraints if, for example, a family did not own a car and the preschool they selected was the only one which provided transportation. As all children in this study had a delay or disability, it is likely that parents’ choices were limited by where early childhood special education programs were located and what programs had available space.

Diversity of Factors Considered

Parents also demonstrated heterogeneity in what factors they considered. The open-ended portion of the survey resulted in 32 unique responses, which indicates a substantial variety of responses from a relatively small sample of parents. These 32 codes were applied to varying degrees, though, with some being mentioned by more than 20 parents, and others being mentioned by only one.

In fact 15 of the 32 codes were mentioned by three or fewer parents, suggesting that parents’ preschool selection factors are highly personal. For example, one parent responded that a primary consideration was if the preschool accepted children in diapers (an element of familial quality). Many preschool classrooms are not equipped with the furnishings necessary for diapering (e.g., changing table) and so admittance to the program is dependent in part on children being toilet-learned. This response is reflective of child- and family-level factors that may be critical to some parents, but irrelevant to others. Even though such considerations may heavily influence parents’ preschool decisions, they rarely

come up in formal discussions of what constitutes high-quality preschool. Likewise, responses for 15 of the 16 ranked items spanned almost the entire range, from most or second most important, to “did not consider at all.” Almost all the items were both top priorities for some parents, and irrelevant considerations for others.

The most common open-ended responses, though, referred to the ability of the program to provide therapy or help for a child’s specific disability or need. The second most common responses referred to the simple presence of a special needs program or the program’s acceptance of children with special needs. Although the sample was composed entirely of parents of children with special needs, these responses are notable. Presumably parents of children with disabilities desire the components and high-levels of quality that parents of children without disabilities want. Yet here parents felt the need to establish entry and a basic level of service (e.g., “Accepted children with special needs;” “I looked for a program that [would] tend to my child’s need”) before considering more commonly acknowledged components of quality. Under Part B of the Individuals with Disabilities Education Act, preschool-aged children are entitled to free and appropriate public education (U. S. Department of Education, n.d.). Yet data here show that parents are still concerned that preschools will turn them away, or their children’s needs will not be properly addressed. These findings align with previous studies which show that parents of children with disabilities often need to lower their standards or “skimp” on factors of quality such as safety and teacher education in order to find a placement for their child (NACCRRRA 2008).

Among the 37 parents who completed the ranking, the most common item to appear among parents’ top three considerations was, “if the teachers were caring, stable, and responded to children’s individual needs.” “How safe the preschool seemed to me” was a relatively distant second. These findings mirror previous research of both experts’ (NICHD 2006; American Academy of Pediatrics 2005) and parents’ (NACCRRRA 2008; Pearlmutter and Bartle 2003) perceptions of high quality care.

Furthermore, both the open-ended responses and rankings show that relational teacher qualities are important considerations to parents of children with disabilities. Responses referring to interpersonal elements of teacher quality were the fourth most common open-ended response, and caring, stable, responsive teachers was the item most frequently mentioned among parents’ top three rankings. Both formats, then, suggest that a sensitive teacher is an important characteristic for these parents when choosing a preschool. Parents, professionals, and prior research are in agreement on this criterion (NICHD 2006; Pearlmutter and Bartle 2003; Shlay et al. 2005). An important avenue for future research will be what specific interpersonal qualities parents desire in their children’s teachers, and if these qualities vary significantly from those of parents of children developing typically.

Parents’ Preferences for Structural, Process, and Familial Quality

The 32 open-ended codes distributed quite evenly among the three categories of structural, process, and familial quality, though codes reflecting structural quality were applied to parents’ responses with substantially greater frequency. This suggests that structural elements of quality as defined here may be more important to parents of children with disabilities than process or familial elements of quality. The two most popular responses overall were elements of structural quality—the program’s ability to provide help or therapy for a child’s specific need, and the presence of a special needs program or the admittance of children with special needs. These two essential criteria were likely powerful determiners in the overall popularity of the structural category. Among the ranked

responses, however, parents considered structural, process, and familial elements of quality at comparable rates. It may be that if acceptance of children with disabilities and attention to their unique needs were ensured, parents' open-ended responses would more closely resemble the ranked data. Parents of children with disabilities may value elements of structural, process, and familial quality in relatively equal proportions, but find that structural characteristics, namely the program's ability to provide appropriate care and the presence of a special needs program, must dictate their preschool choice.

What is known is that parents do not explicitly consider structural, process, familial, or any other quality grouping in isolation when doing the real-life work of choosing a preschool. Unlike experts who may tease apart the components of quality, and perhaps isolate these by design or through analysis, dozens of factors may be at play when parents are selecting a preschool for their children. A parent of a child with a disability may simultaneously consider safety (a structural element), teacher warmth (a process element), and affordability (a familial element), but such an option simply may not exist for that family. Therefore parents must negotiate what may be conflicting needs and desires from the range of preschool options available to them, regardless of how the components are categorized.

Professionals and researchers, though, have good reason for developing these categories of quality. The field of early childhood is eager to understand what components of quality are most essential for children's development, what amount or intensity of such components are optimal, and how those components work together to produce desired outcomes. This is important work, but it is still parents, not researchers, who typically place their children in one preschool rather than another. Therefore, what parents look for and consider in a preschool is important to understand if researchers are to put their findings to use. Studies conflict on whether or not parents and experts agree on the meaning of "high-quality preschool" (Cryer et al. 2002; Mocan 2007). Therefore, future research should continue to explore how parents perceive quality, and more practically, what they consider when choosing a preschool for their children with disabilities.

Limitations and Future Research Directions

The limitations of this research warrant mention. First, the sample was about three-fourths White/Caucasian and relatively affluent; future research should seek a more diverse, representative sample. A lower-income or more diverse sample may demonstrate a different pattern of results. For example, program cost was not a strong selection factor in either the open-ended or ranking portions of this study, but may be for a less affluent sample. Cost may not be a prominent selection factor for parents of children with disabilities in general, perhaps because children with disabilities are entitled to receive "free and appropriate public education" (U. S. Department of Education, n.d.) through their public school. While parents could choose (and pay for) private or other alternatives, many parents may perceive the early childhood special education program offered through their school district to be their only option making cost an irrelevant consideration. Nonetheless, this point will need to be revisited in future studies.

A second limitation is the survey implementation and format. It is possible that responses may have been different if parents were given the survey when they were actively choosing a preschool, rather than several months later. Though the surveys were dispersed and collected discretely, with assurance that no school staff would see them, some parents may have responded with what they felt best described their current preschool arrangement. Other parents may have provided what they felt to be the "correct"

response, or even what they wished they had considered when choosing a preschool, rather than what they actually prioritized. Parents may experience heart-wrenching dissonance if their current arrangement does not live up to their initial preschool intentions, such as when the ideal preschool is unaffordable, or incongruent with a parent's work schedule. Acknowledging such a discrepancy is painful, and may seem futile if the ideal option is still out of reach.

Also as related to the format, parents' preschool selection factors were not always consistent across open-ended and ranking portions. Research has found that survey participants may respond differently to the same question when posed in open- and close-ended formats, though neither is necessarily preferable (Ivis 1997; Tourangeau and Smith 1996). Such discrepancies highlight the importance of cautious interpretation, and the value of disconfirming evidence that can only be acquired through multiple modes of data collection. This is especially important when the respondent is asked to recall information, or share information about personal or emotionally-charged topics, as was the case in the present study (Fowler 2009). Future research should seek both alignment and deviation from this and previous studies.

As this study was largely descriptive, questions remain about what circumstances lead parents to value the preschool selection factors they do. Future studies should examine how the factors parents value vary by cultural, family, and child factors. In addition, more information is needed about the circumstances under which parents do and do not have a choice in their child's preschool education.

Conclusion

In recent years, governments have increased funding for both expanding public preschool, and improving preschool quality (Barnett et al. 2008). These are certainly worthy efforts, but when designing and funding early childhood education, professionals and policy makers must acknowledge parents' perceptions of quality and, more specifically, what parents consider when choosing a preschool. Preschool programs serve both children and their families, either directly or indirectly, and programs must take into account parents' practical needs and desires for their children if preschools are to successfully attract and serve a critical mass of young children. The powerful and lasting benefits of high-quality preschool are only as meaningful as the children who have such experiences. Including parents in the quality discussion will bring greater insight and accessibility to early childhood education for children with and without disabilities alike.

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References

- Ackerman, D. J., & Barnett, W. S. (2006). *Increasing the effectiveness of preschool programs* (Report No. 11). New Brunswick, NJ: National Institute for Early Education Research. Retrieved from <http://nieer.org/resources/policybriefs/11.pdf>.
- American Academy of Pediatrics. (2005). Quality early education and child care from birth to kindergarten. *Pediatrics*, 115(1), 187–191.

- Axtell, S. A. M., Garwick, A. W., Patterson, J., Bennett, F. C., & Blum, R. W. (1995). Unmet service needs of families of young children with chronic illnesses and disabilities. *Journal of Family and Economic Issues*, 16(4), 395–411. doi:[10.1007/BF02353690](https://doi.org/10.1007/BF02353690).
- Bailey, D. B., Blasco, P. M., & Simeonsson, R. J. (1992). Needs expressed by mothers and fathers of young children with disabilities. *American Journal on Mental Retardation*, 97(1), 1–10.
- Barbarin, O. A., Early, D., Clifford, R., Bryant, D., Frome, P., Burchinal, M., et al. (2008). Parental conceptions of school readiness: Relation to ethnicity, socioeconomic status, and children's skills. *Early Education and Development*, 19(5), 671–701.
- Barnett, W. S., Epstein, D. J., Friedman, A. H., Boyd, J. S., & Hustedt, J. T. (2008). *The state of preschool 2008*. New Brunswick, NJ: The National Institute for Early Education Research, Rutgers.
- Bigras, N., Bouchard, C., Cantin, G., Brunson, L., Coutu, S., Lemay, L., et al. (2010). A comparative study of structural and process quality in center-based and family-based child care services. *Child & Youth Care Forum*, 39(3), 129–150.
- Booth, C. L., & Kelly, J. F. (1998). Child-care characteristics of infants with and without special needs: Comparisons and concerns. *Early Childhood Research Quarterly*, 13(4), 603–621.
- Booth-LaForce, C., & Kelly, J. F. (2004). Childcare patterns and issues for families of preschool children with disabilities. *Infants & Young Children: An Interdisciplinary Journal of Special Care Practices*, 17(1), 5–16.
- Campbell, F. A., Wasik, B. H., Pungello, E., Burchinal, M., Barbarin, O., Kainz, K., et al. (2008). Young adult outcomes of the Abecedarian and CARE early childhood educational interventions. *Early Childhood Research Quarterly*, 23(4), 452–466.
- Ceglowski, D. (2004). How stake holder groups define quality in child care. *Early Childhood Education Journal*, 32(2), 101–111.
- Clawson, C., & Luze, G. (2008). Individual experiences of children with and without disabilities in early childhood settings. *Topics in Early Childhood Special Education*, 28(3), 132–147.
- Cryer, D., & Burchinal, M. (1997). Parents as child care consumers. *Early Childhood Research Quarterly*, 12(1), 35–58.
- Cryer, D., Tietze, W., Burchinal, M., Leal, T., & Palacios, J. (1999). Predicting process quality from structural quality in preschool programs: A cross-country comparison. *Early Childhood Research Quarterly*, 14(3), 339–361.
- Cryer, D., Tietze, W., & Wessels, H. (2002). Parents' perceptions of their children's child care: A cross-national comparison. *Early Childhood Research Quarterly*, 17, 259–277.
- Dinnebeil, L. A., McInerney, W., & Fox, C. M. (1998). An analysis of the perceptions and characteristics of childcare personnel regarding inclusion of young children with special needs in community-based programs. *Topics in Early Childhood Special Education*, 18(2), 118–128.
- Downing, J. E., & Peckham-Hardin, K. D. (2007). Inclusive education: What makes it a good education for students with moderate to severe disabilities? *Research and Practice for Persons with Severe Disabilities*, 32(1), 16–30.
- Fewell, R. R. (1993). Child care for children with special needs. *Pediatrics*, 91(1), 193–198.
- Fontaine, N. S., Torre, D. L., & Grafwallner, R. (2006). Effects of quality early care on school readiness skills of children at risk. *Early Child Development and Care*, 176(1), 99–109.
- Fowler, F. J. (1995). *Improving survey questions: Design and evaluation* (Vol. 38, *Applied Social Research Methods Series*). Thousand Oaks, CA: Sage Publications.
- Fowler, F. J. (2009). *Survey research methods* (4th ed., Vol. 1). Thousand Oaks: Sage Publications.
- Frank Porter Graham Child Development Center. (1999). Early learning, later success: The Abecedarian Study. Chapel Hill, NC: Author. Retrieved from <http://www.fpg.unc.edu/~abc/ells-04.pdf>.
- Freedman, R. I., Litchfield, L. C., & Warfield, M. E. (1995). Balancing work and family: Perspectives of parents of children with developmental disabilities. *Families in Society*, 76(8), 507–514.
- Hagen, J. L., & Davis, L. V. (1996). Mothers' views on child care under the JOBS program and implications for welfare reform. *Social Work Research*, 20(4), 263–273.
- Hayes, C. D., Palmer, J. L., & Zaslow, M. J. (Eds.). (1990). *Who cares for America's children? Child care policy for the 1990s*. Washington, DC: National Academy Press.
- Helburn, S. W., Culkin, M. L., Morris, J., Mocan, N., Howes, C., Clifford, R., et al. (1995). *Cost, quality and child outcomes in child care centers: Technical report*. Denver: Colorado University Department of Economics.
- Hemmeter, M. L., & Salcedo, P. S. (2005). DEC recommended practices in early intervention/early childhood special education: Parent checklist. In S. Sandall, M. L. Hemmeter, B. L. Smith, & M. E. McLean (Eds.), *DEC's recommended practices: A comprehensive guide for practical application* (pp. 277–280). Missoula, MT: Division for Early Childhood.

- Herman, S. E., & Thompson, L. (1995). Families' perceptions of their resources for caring for children with developmental disabilities. *Mental Retardation*, 33(2), 73.
- Holloway, S. D., & Fuller, B. (1999). Families and child care: Divergent viewpoints. *The Annals of the American Academy of Political and Social Science*, 563(1), 98–115.
- Honig, A. S. (2002). Choosing childcare for young children. In M. H. Bornstein (Ed.), *Handbook of parenting: Practical issues in parenting* (2nd ed., Vol. 5, pp. 375–405). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Ivis, F. J. (1997). The effect of question structure on self-reports of heavy drinking: Closed-ended versus open-ended questions. *Journal of Studies on Alcohol*, 58(6), 622–624.
- Knoche, L., Peterson, C. A., Edwards, C. P., & Jeon, H. (2006). Child care for children with and without disabilities: The provider, observer, and parent perspectives. *Early Childhood Research Quarterly*, 21(1), 93–109.
- Landis, R. J., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174.
- Layzer, J. I., & Goodson, B. D. (2006). The “quality” of early care and education settings. *Evaluation Review*, 30(5), 556–576.
- Layzer, J. I., Goodson, B. D., & Moss, M. (1993). *Final report volume 1: Life in preschool: Observational study of early childhood programs* (No. EALC890980). Cambridge, MA: Abt Associates.
- Leslie, L. A., Ettenson, R., & Cumsille, P. (2000). Selecting a child care center: What really matters to parents? *Child & Youth Care Forum*, 29(5), 299–322.
- Li-Grining, C. P., & Coley, R. L. (2006). Child care experiences in low-income communities: Developmental quality and maternal views. *Early Childhood Research Quarterly*, 21(2), 125–141.
- Magnuson, K. A., & Waldfogel, J. (2005). Early childhood care and education: Effects on ethnic and racial gaps in school readiness. *The Future of Children*, 15(1), 169–196.
- Mocan, N. (2007). Can consumers detect lemons? An empirical analysis of information asymmetry in the market for child care. *Journal of Population Economics*, 20(4), 743–780.
- National Association of Child Care Resource and Referral Agencies. (2008). *Parents' perceptions of child care in the United States* (No. 377-0117). Arlington, VA: Author. Retrieved from <http://www.nacccra.org/publications/nacccra-publications/parents-perceptions-of-child-care>.
- National Institute of Child Health and Human Development. (2006, January). *The NICHD study of early child care and youth development: Findings for children up to age 4 1/2 years* (No. 05-4318). Rockville, MD: Author. Retrieved from <http://www.nichd.nih.gov>.
- National Institute of Child Health and Human Development Early Child Care Research Network. (2002). Child-Care Structure > Process > Outcome: Direct and Indirect Effects of Child-Care Quality on Young Children's Development. *Psychological Science*, 13(3), 199–206.
- Oswald, D. P., Best, A. M., Coutinho, M. J., & Nagle, H. A. L. (2003). Trends in the special education identification rates of boys and girls: A call for research and change. *Exceptionality*, 11(4), 223–237.
- Pearlmutter, S., & Bartle, E. E. (2003). Participants' perceptions of the childcare subsidy system. *Journal of Sociology & Social Welfare*, 30(4), 157–173.
- Phillips, D. A., & Howes, C. (1987). Indicators of quality in child care: Review of research. In D. A. Phillips (Ed.), *Quality in child care: What does research tell us?* (pp. 1–19). Washington, DC: National Association for the Education of Young Children.
- Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 cost-benefit analysis of the Title I Chicago Child- Parent Centers. *Educational Evaluation & Policy Analysis*, 24(4), 267–303.
- Ritchie, S., & Willer, B. (2008). *Health: A guide to the NAEYC early childhood program standard and related accreditation criteria* (Rev ed.). Washington, DC: National Association for the Education of Young Children.
- Schriber, S. N. (2010). Pre-school and the special needs child: How to find the school that is right for you and your child. *Exceptional Parent*, 40(2), 62–63.
- Schweinhart, L. J., & Weikart, D. P. (1983). The effects of the Perry Preschool Program on youths through age 15: A summary. In The consortium for longitudinal studies, (Ed.), *As the twig is bent: Lasting effects of preschool programs* (pp. 71–101). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Shlay, A. B., Tran, H., Weinraub, M., & Harmon, M. (2005). Teasing apart the child care conundrum: A factorial survey analysis of perceptions of child care quality, fair market price and willingness to pay by low-income African American parents. *Early Childhood Research Quarterly*, 20(4), 393–416.
- Stipek, D., Milburn, S., Clements, D., & Daniels, D. H. (1992). Parents' beliefs about appropriate education for young children. *Journal of Applied Developmental Psychology*, 13(3), 293–310.
- Tourangeau, R., & Smith, T. W. (1996). Asking sensitive questions: The impact of data collection mode, question format, and question content. *Public Opinion Quarterly*, 60(2), 275–304. doi:10.1086/297751.

- U. S. Government Accountability Office. (2004). *Child care: State efforts to enforce safety and health requirements* (No. GAO-04-786). Washington, DC: Author. Retrieved from <http://www.gao.gov>.
- U.S. Department of Health and Human Services, Administration for Children and Families. (2010). *Child care and development fund fact sheet*. Retrieved from <http://www.acf.hhs.gov/programs/ccb/ccdf/factsheet.htm>.
- U.S. National Library of Medicine. (2010). *Genetics home reference*. Retrieved from <http://ghr.nlm.nih.gov/>.
- U. S. Department of Education. (n.d.). *Free appropriate public education under section 300.101*. Retrieved from <http://idea.ed.gov>.
- Uttal, L. (1997). "Trust your instincts": Racial ethnic and class-based preferences in employed mothers' childcare choices. *Qualitative Sociology*, 20(2), 253–274.
- Van Horn, M. L., Ramey, S. L., Mulvihill, B. A., & Newell, W. Y. (2001). Reasons for child care choice and appraisal among low-income mothers. *Child & Youth Care Forum*, 30(4), 231–249.
- Vandenbroeck, M., De Visscher, S., Van Nuffel, K., & Ferla, J. (2008). Mothers' search for infant child care: The dynamic relationship between availability and desirability in a continental European welfare state. *Early Childhood Research Quarterly*, 23(2), 245–258.
- Vincent, C., & Ball, S. J. (2001). A market in love? Choosing pre-school childcare. *British Educational Research Journal*, 27(5), 633–651.
- Walsh, K. K., & Deitchman, R. (1980). Evaluation of early childhood programs: The role of parents. *Child Care Quarterly*, 9(4), 289–298.
- Warfield, M. E., & Hauser-Cram, P. (1996). Child care needs, arrangements, and satisfaction of mothers of children with developmental disabilities. *Mental Retardation*, 34(5), 294–302.