

How Do Caregivers Select Preschools? A Study of Children With and Without Disabilities

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Abstract

Background Little is known about how parents and other caregivers conceptualize preschool quality, or what factors they prioritize when selecting a preschool. Caregivers of children with disabilities have the additional challenge of finding a preschool that can address their children's special needs.

Objective We explored the factors caregivers valued when selecting a preschool for their children, how these factors categorized into structural, process, and familial quality, and how caregiver characteristics related to preschool selection factors. We also compared caregivers' preschool selection factors with the observed quality of their children's preschool classroom.

Methods In this study, 407 caregivers with children in 54 early childhood special education classrooms completed surveys regarding how they selected their children's preschool. Classroom quality was assessed for each classroom, and compared to caregivers' preschool selection factors.

Results Findings showed that caregivers prioritized interpersonal teacher characteristics and safety when selecting preschools. Caregivers' felt that process elements of quality were more important than structural or familial elements of quality. Caregivers whose child had a disability were more likely to prioritize structural elements of quality than caregivers whose child did not have a disability. No relationship was found between

This study was originally completed as part of the lead author's dissertation research, *Caregivers' Preschool Selection Factors and Their Degree of Agency in Selecting High Quality Preschools* (Glenn-Applegate 2011).

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caregivers' preschool selection factors and the quality of the classrooms in which their children were enrolled.

Conclusion These findings provide insight for those wishing to make preschool programs more amenable to the needs of caregivers, particularly those of children with disabilities. Understanding caregivers' preschool selection factors also deepens the theoretical understanding of preschool quality.

Keywords Preschool selection factors · Preschool quality · Parents · Caregivers · Structural quality · Process quality · Familial quality

Introduction

High quality preschool¹ is beneficial for children and families, as well as society-at-large. Cost-benefit analyses estimate that over time, every dollar publically-invested in high quality preschool returns up to 16 dollars to society (Barnett 2008; Schweinhart 2005). High quality preschool has been linked to stronger literacy, language, and math skills (Center on the Developing Child at Harvard University 2007; Gormley et al. 2005), and increased high school and college graduation rates. Graduates of high quality preschool are also more likely to be home owners, have steady family relationships, and are even less likely to be smokers (Center on the Developing Child at Harvard University 2007; Karoly et al. 1998; National Institute of Child Health and Human Development Early Child Care Research Network (NICHD-ECCRN) 1999; Schweinhart and Weikart 1983).

While the benefits of quality preschool education extend far beyond children's individual families, it is typically children's caregivers (i.e., parents and others with primary responsibility of children) who decide what preschool their children will attend. This study seeks to understand what caregivers, and caregivers of children with special needs in particular, consider when selecting a preschool. A stronger understanding of caregiver's selection factors will enable decision-makers to better tailor preschool experiences to the needs and desires of caregivers, potentially expanding high-quality preschool to a wider range of families. We also examine how these choices relate to the quality of their children's preschool classrooms. The results of this work will guide preschool programs, policy makers, and researchers in shaping quality programs to be more amenable to the needs of caregivers, and more cognizant of the many perspectives that contribute to the common goal of preschool quality.

This introductory section summarizes the prior literature relevant to this study. First, we define and explain *preschool selection factors*, a key variable in this study with minimal prior research. Next we provide a brief theoretical statement of the dynamic nature of preschool quality. Then we introduce family characteristics, including the child's disability status, that influence caregivers when making a preschool decision. Next we summarize the

¹ The early childhood special education (ECSE) programs attended by children in the present study are all referred to as preschools, therefore *preschool* is the term used here. Research on child care is included in the literature review as preschool and child care share many relevant characteristics. Many organizations (e.g., National Association for the Education of Young Children [NAEYC] 1983, rev. 1997) and researchers (Bassok et al. 2008; Fuller and Liang 1996; Hirshberg et al. 2005; Kisker et al. 1991) do not distinguish between preschool and child care. Particularly relevant to this study, caregivers (i.e., parents and others with primary responsibility of children) also refer to child care and preschool interchangeably (Martinez-Beck and Goerge 2009). The background studies referenced here use the term employed by that particular study. Otherwise, *preschool* is used.

extant literature on commonly regarded components of preschool quality, and introduce the construct of *familial quality* as an important category not typically considered in studies of preschool quality. Last, we share the limited prior research on the alignment between caregivers' perceptions of preschool quality, and the observed quality of those environments. This leads to our research questions and hypotheses.

Caregivers' Preschool Selection Factors

Caregivers' *preschool selection factors* are the qualitative and practical elements caregivers consider when deciding among their range of preschool options. Unlike caregivers' pure perceptions of quality or ideals for their children's schooling, preschool selection factors also include pragmatic elements most caregivers need to consider as well (e.g., cost, location, hours). In addition, preschool selection factors include unique considerations that are not represented in broad conceptualizations of quality, such as the degree of "match" between the individual child's needs and the program structure, the program's willingness to accept children in diapers, the presence or absence of a religious curriculum, or the program's ability to adhere to a family's restricted diet. Such personal considerations are typically not considered in broad conceptualizations of preschool quality, yet they are likely to be important to families deciding where to enroll their children. If high quality programs do not also address caregivers' desires and practical needs, caregivers will be less likely to enroll their children.

Research on caregivers' preschool selection factors is limited. Studies on preschool quality are prevalent, but typically focus on theory and child outcomes. While this work is important, families' needs and perspectives are less frequently solicited, and even less well understood. Simply educating caregivers about what they *should* value in a preschool will not be enough if those suggested criteria do not include (or are contradictory to) caregivers' needs. To truly best serve caregivers (and children via their caregivers), caregivers' needs and desires must be considered when designing, funding, and promoting preschool programs.

Caregivers of children with disabilities are particularly important in this regard. Under federal law, all preschool-aged children with special needs are entitled to free public education (Individuals with Disabilities Education Act 1990). However, young children with disabilities participate in preschool at lower rates than their peers without disabilities (Booth-LaForce and Kelly 2004). When they do, caregivers report more difficulty finding a placement (National Association of Child Care Resource and Referral Agencies (NACCRRA) 2008). Understanding the preschool selection factors of this important population will aid in removing barriers that discourage or prevent caregivers from enrolling their children with special needs in preschool.

Theoretical Framework

Caregivers, researchers, and other stakeholders in early childhood education will naturally have various opinions on what constitute preschool quality, as "...quality in early childhood services is a constructed concept, subjective in nature and based on values, beliefs and interest, rather than an objective and universal reality" (Pence and Moss 1994, p. 172). Furthermore, the relative nature of quality applies not only to interpersonal perspectives, but extends to temporal and situational contexts as well (Bush and Phillips 1996). As children age, families' priorities shift, and professionals garner more information, individuals' perceptions of quality will change.

Caregivers, as one set of stakeholders invested in early childhood education, have both histories and desires for the future that shape their understanding of quality and their preschool selection factors. In line with Bronfenbrenner's Ecological Systems Theory (1979), the context of the culture, policy environment, community, and family impacts caregivers' needs and desires. Broad policy that may have been written before the child was born impacts the family's desires and needs. For example, the placement of the Federal Poverty Guideline may determine if a family can receive subsidized care or not. The presence of public transportation may open up preschool options that would otherwise not be considered.

The present study is presented with the understanding that while caregivers with similar qualities or circumstances (e.g., children with the same disability) may have related needs and desires in a preschool program, they also vary in a myriad of ways.

Characteristics Related to Caregivers' Preschool Selection Factors

Caregivers' preschool decisions are influenced by their personal beliefs, needs and desires for their family, and goals for their children. For example, in a qualitative study of 32 mothers (approximately half White 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 preschool selection factor. 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). Parents also consider more nebulous factors such as how well their child "fits" with a particular program (Glenn-Applegate et al. 2011). These unique considerations are likely to take precedent over global ratings of quality when individual caregivers are making preschool decisions.

Prior research also shows that sometimes caregivers' perceptions of quality do align with those of experts (Cryer and Burchinal 1997; Knoche et al. 2006; Shlay et al. 2005). However, many of these studies utilize researcher-generated elements, rather than asking caregivers to share their own perceptions of preschool quality. Therefore, the finding that caregivers agree with professionals' opinions of preschool quality may only tell part of the story (Holloway and Fuller 1999) a shortcoming we aim to address here.

Child's Disability Status

A child's disability status (i.e., the presence or absence of a disability) has been shown to influence caregivers' preschool decision-making. The available research suggests they value the same characteristics as caregivers of children who are typically developing, such as safety, opportunities for learning, and other more contextual elements such as flexibility and a match with their personal values. Other elements are likely to be considered in addition to these, such as 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). Families with children with disabilities are also disproportionately represented in poverty samples, so cost of child care is likely a key consideration for many families (Booth and Kelly 1998; Booth-LaForce and Kelly 2004; Knoche et al. 2006).

In a study of children at risk of developing a disability or diagnosed with a disability, researchers found that 35.4 % parents using child care reported having at least "some-what" of a problem finding quality care, though only 24.1 % cited the child's special needs as a factor (Booth and Kelly 1998). Many caregivers of children with disabilities report ultimately needing to abandon or compromise on certain elements they initially desired in

a preschool in order to secure a placement for their child. Specifically, 21 % of parents of children with disabilities report that they have had to compromise their standards of teacher training, compared to 6 % of parents of children without disabilities. Sixteen percent of parents of children with disabilities say they have had to compromise on cleanliness, and 15 % say they have had to compromise their standards on a safe environment, compared to 4 and 5 % of parents of children without disabilities, respectively (NACCRRRA 2008).

Conceptualizing Preschool Quality

Although the concept of preschool quality is subjective, there are elements that are commonly regarded among early childhood professionals as components of or indicative of preschool quality. For the sake of positioning this work within the extant literature on preschool quality, however, quality is conceptualized generally as the practices and policies that foster positive child outcomes, child development, or school readiness (Layzer et al. 1993; Layzer and Goodson 2006). These elements are typically designated as either structural or process elements of quality (e.g., Bigras et al. 2010; Hayes et al. 1990; Helburn 1995; Layzer and Goodson 2006; Li-Grining and Coley 2006; Magnuson and Waldfogel 2005; Mocan 2007; NICHD-ECCRN 2002a). Structural quality typically refers to those components of the preschool environment which are or can be regulated, such as teacher education and class size (Cassidy et al. 2005; Cryer et al. 1999; Helburn 1995; Howes et al. 1992; NICHD-ECCRN 2006). Process quality refers to the intangible, relational components of preschool quality. This includes specific instruction, conversation, play, and guidance among the teachers and children (Cassidy et al. 2005; Helburn 1995; NICHD-ECCRN 2006).

As structural and process quality must, in theory, encompass all elements of quality, these categories are necessarily defined broadly. Perhaps as a result, some components of structural and process quality tend to drift from one category to the other. Structure and process may be inconsistently defined in part because they need to encompass so many characteristics that inevitably vary from classroom to classroom. For example, the specific materials available to children are at times considered structural characteristics, as toys, books, and writing utensils can be directly observed and counted. However, the degree to which such objects are regulable (or enforceable) is ambiguous. Some states list how many toys of a specific type a classroom should provide, for example, at least three sets of sorting materials (Bright From the Start: Georgia Department of Early Care and Learning 2014, p. 65). Yet whether these three sets are “teacher store” sorting toys, or found materials is dependent on the decisions and philosophy (i.e., process components) of the preschool teacher or program.

Likewise, the research world is equally in flux over how the terms structural quality and process quality are used. The Early Childhood Environment Rating Scale-Revised (ECERS-R; Harms et al. 2005) and its infant/toddler and family day child versions are among the most widely used assessments in studies of preschool quality (Clarke-Stewart 1987; Kontos and Fiene 1987; Mashburn 2008; Phillips et al. 1987). The specific intentions of the ECERS tests are ambiguous; it seems to be a measure of global or overall quality, but the creators of the ECERS refer to the measure as an assessment of process quality alone (Clifford et al. 2010). Yet a content analysis by Cassidy et al. (2005) found that only 44 % of the items on the ECERS-R to be components of process quality. This adds evidence that structural and process quality are inconsistently defined, even in widely-cited measures with good reliability and validity (Frank Porter Graham Child Development Institute 2005). Cassidy et al. write that “it may be unwise to assume that structural and process quality are the only two components of quality” (2005, p. 506). Others also have posited that the categories of structural and process quality may not be sufficient to

effectively represent all components of quality for all stakeholders (Buell and Cassidy 2001; Cryer 1999; Dahlberg et al. 1999, 2007; Lerner and Phillips 1994; Moss 1994; Penn 1994). In their study of preschool quality, Li-Grining and Coley (2006) separately considered structural quality, developmental (i.e., process) quality, and “maternal views of child care” as three modes through which to evaluate program quality.

Familial Quality

Building on the work of Li-Grining and Coley (2006), Glenn-Applegate et al. (2011) also designated a third category of quality elements based on families’ unique needs, circumstances, and goals for their children. *Familial quality* allows a place for family-specific preferences that do not fit into structural or process realms. These elements include practical considerations such as the program’s distance from home/work, hours, and cost. Familial components of quality also include families’ personal or values-based ideas of quality, such as if the family agrees with the preschool’s approach to discipline or religious instruction (Glenn-Applegate et al. 2011). These elements that vary from family to family are not frequently considered “quality,” yet such factors can significantly influence a caregiver’s perception of a program, making it more or less appealing. The degree to which caregivers and providers agree on how children should be cared for is likely to influence how caregivers perceive the quality of their children’s care. Because caregivers are the population of interest here, familial quality is a key variable along with structural and process quality to better reflect the range of factors caregivers consider when selecting a preschool.

Caregivers’ Perceptions of Preschool Quality and Alignment to Observed Quality

Findings are mixed regarding the degree to which caregivers’ understandings of preschool quality align with the criteria that experts find most important in preschools (Cryer and Burchinal 1997; Knoche et al. 2006; Shlay et al. 2005; Uttal 1997). While some researchers suggest that “the dimensions of high quality care may need to be taught to parents before they can assume the role of effective advocates for high quality care that will help to optimize their children’s development” (Cryer and Burchinal 1997), others suggest that parents choose lower-quality programs simply because high quality options are not available (Shlay et al. 2005).

Both arguments are theoretically sound. It stands to reason that caregivers would desire program elements specific to their child’s and family’s needs, which would likely vary from expert opinions of what is best for children generally. At the same time, most care in the United States is not high quality (Helburn 1995; for a summary of several studies see Espinosa 2002), leaving caregivers with few good options from which to choose. Furthermore, because caregivers vary widely in their needs, desires, and range of available preschool options, it may be that caregiver and family circumstances correlate to both possibilities (i.e., caregivers do not value the same preschool components that experts do, and thus caregivers choose “low-quality” programs; caregivers do not have high quality programs available or accessible to them, so they choose low-quality programs). Understanding these selection factors could potentially allow policies and programs to adjust to the needs and desires of caregivers, by overcoming obstacles that discourage or prevent caregivers from enrolling their children in high quality preschools.

Perhaps more important is the relationship between caregivers’ preschool selection factors, and the quality of their children’s ultimate preschool arrangement. Such

information has the potential to indicate the nature and degree of disconnect or agreement between caregiver and expert conceptions of what makes a preschool desirable.

Research Questions and Hypotheses

With the aforementioned theory and research serving as a gateway, the following research questions are posed:

1. What preschool selection factors are considered by caregivers who enroll their children in early childhood special education preschools? Based on prior studies of caregivers' perceptions of quality and a completed pilot study of caregivers' preschool selection factors (Glenn-Applegate et al. 2011), it is hypothesized that caregivers' preschool selection factors will be numerous and diverse, but will also reflect a preference for positive, interpersonal teacher characteristics (e.g., caring teachers, responsiveness).
2. To what extent do caregivers who enroll their children in special education preschools prioritize structural, process, and familial quality among their preschool selection factors? Given the limited research on caregivers' selection factors, no hypothesis is made. Instead, this question is largely exploratory.
3. Among caregivers who enroll their children in early childhood special education preschools, to what extent do caregiver characteristics relate to their preschool selection factors? Previous research shows that caregivers' demographic features relate to caregivers' access to preschool programs (Fuller et al. 2004), the type of preschool their children attend (Schnur et al. 1992), and the quality of that preschool (Fuller and Liang 1996; Fuller et al. 2004). Therefore, it is hypothesized that caregiver characteristics will significantly predict caregivers' preschool selection factors. In particular, it is hypothesized that caregivers of children with disabilities will put greater emphasis on structural characteristics.
4. To what extent do caregivers' preschool selection factors relate to the quality of their children's early childhood special education preschool, when controlling for caregiver characteristics? Research shows that caregivers and experts tend to value the same qualities in a preschool (Knoche et al. 2006). Yet other studies show that caregivers are not adept at judging the quality of their children's preschool care, when compared to expert observers (Cryer and Burchinal 1997). Complicating this relationship is the fact that preschool quality in general tends to be poor to average (e.g., Helburn 1995), and therefore is unlikely to reflect caregivers' high desires. Furthermore, caregivers typically pick their child's preschool, but they do not typically pick their child's specific classroom. Several classrooms within the same preschool program are likely to have common features, but also may vary substantially in quality. Given this information, it is hypothesized that caregiver's preschool selection factors will not relate to their children's preschool quality when caregiver characteristics are controlled.

Methods

Sample

As a population, "caregivers" are extremely diverse. Previous studies of how caregivers perceive preschool quality have focused on populations defined by race or socioeconomic circumstances (e.g., Meyers and van Leuwen 1992; Shlay et al. 2005). In contrast, this

study is tailored, albeit broadly, to those caregivers who enrolled their children in ECSE preschools. This allows the diversity of caregiver characteristics and preferences to be seen among the confines of those who ultimately select ECSE preschools.

The present study is an offshoot of a larger, IRB-approved study called Sit Together and Read-2 (STAR-2). (For more information on the larger study, see for example Sawyer et al. 2014 and Piasta et al. 2012). As part of the larger study, preschool programs and teachers in those programs were recruited and consented, followed by the caregivers of children in those classrooms. All relevant parties provided informed consent. Approximately 10 children from each classroom were enrolled. The 54 ECSE classrooms in the focal study were located in small towns, suburban, and urban areas in the mid-west; 52 classrooms were in one state, and two were in another. The programs included Head Start, state-funded early intervention, and public school programs. All but two classrooms were inclusive, in that they enrolled both children with disabilities and children developing typically. The two exceptions were self-contained ECSE classrooms.

Data was collected from 407 caregivers. All children were already enrolled in ECSE preschools by the time the relevant measures were completed. The vast majority of caregivers had one child in the larger study, though three caregivers had multiple children each. In these cases, one set of questionnaires was randomly selected to be included in the present study, and any others were excluded. Thus, each caregiver is represented only once.

Analyses of participant characteristics indicate that there is significant heterogeneity among caregivers with respect to education, socioeconomic status, and ethnicity. In addition, about 58 % of the caregivers have children with disabilities or delays. This diversity, discussed in more detail in the next subsections, contributes to the study's external validity, allowing findings to be broadly relevant and useful for decision-makers hoping to learn from the study's findings.

Caregiver Characteristics

Of the 390 caregivers who provided income information, the average family income was approximately \$50,000 annually. The lowest income range reported was \$5000 or less ($n = 33$, 8.46 %), and the highest was \$85,000 or more ($n = 97$, 24.87 %). Eighty-four caregivers (22.52 %) provided income and family size information indicating that the family was in poverty (US Department of Health and Human Services 2010).

Of the 404 caregivers providing maternal education data, the modal response was “some college but no degree” ($n = 97$, 24.01 %), and responses ranged from “eighth grade or less” ($n = 3$, .74 %) to “doctoral degree” ($n = 23$, 5.69 %). Maternal education and total family income were significantly correlated, $r = .30$, $p < .001$.

Child Characteristics

Children ranged in age from 33 months to 68 months upon their entry into the study. (Birthdays were not available for 7 children.) The average age was about 52 months ($SD = 7.24$). More than half the children were boys ($n = 255$, 64.39 %), and more than half of the children had been in preschool for a least 1 year prior to the study ($n = 243$, 61.99 %).

Two hundred thirty-seven children (58.23 %) had a disability or delay; the remainder were developing typically. For most children with a disability or delay, the only pertinent information available was that they had an IEP ($n = 177$). Specific diagnoses were

available for 60 children. The most common diagnosis was Autism (12 children), followed by Cerebral Palsy and Pervasive Developmental Disorder (6 each). Reflecting the overrepresentation of males in special education programs (e.g., Oswald et al. 2003), 71.73 % of the children with disabilities were boys.

Race/ethnicity data was provided for 402 children. The majority of the children were White/Caucasian ($n = 321$, 79.85 %). Twenty-nine children (7.21 %) were Black/African American, and 11 (2.74 %) were identified as Mexican–American/Chicano. Ten caregivers specified that their children were Black/African American and White/Caucasian (2.46 %). Other race/ethnicities represented were Argentinean, Bi-Racial, Ethiopian, Haitian, Jordanian, Kenyan, Korean, Mexican–American, and Hispanic.

All but two caregivers provided information on the language spoken at home. Almost all of the children spoke English or English and another language at home ($n = 391$, 96.54 %). Other languages represented were Arabic, American Sign Language, Chinese, Creole, Spanish, Telugu (Indian), and Vietnamese.

General Procedures

Caregivers completed two questionnaires in the fall of the academic year: the Caregiver Questionnaire including demographic information, and the Preschool Selection Questionnaire. Caregivers were assured confidentiality, including that none of teachers or school staff would see the forms, and that all names would be removed. The n of 407 reflects caregivers who returned at least the Preschool Selection Questionnaire. In the fall of the same year, the quality of each child's preschool classroom was assessed using the Classroom Assessment Scoring System Pre-K (CLASS: Pre-K; Pianta et al. 2007), an established observational measure of preschool classroom quality. The questionnaires and the measure of classroom quality are each discussed below.

Caregiver Questionnaire

Caregivers completed a demographic questionnaire based on the fall and spring caregiver interview forms used by the Early Childhood Longitudinal Study—Kindergarten Cohort (National Center for Education Statistics 1999). The family and child characteristics shared above were derived from this survey. This questionnaire was most often completed by the child's mother ($n = 351$, 87.75 %), followed by the child's father ($n = 35$, 8.75 %), and grandmother ($n = 7$, 1.75 %).

Preschool Selection Questionnaire

The Preschool Selection Questionnaire is of primary interest to this study. It was developed specifically to align to the research questions here, though portions were derived from previous related research (Glenn-Applegate et al. 2011). Prior to distribution, the survey was vetted by impartial researchers in education and psychology, and piloted among a group of caregivers of preschoolers not involved in the larger study (Lewin 2006; Lincoln and Guba 1985).

The survey assessed caregivers' preschool selection factors using two task formats, as multiple modes of data collection often yield greater validity (Jick 1979). Caregivers were asked to first rate the importance of several predetermined factors on a scale of one to four (close-ended), and then identify the three most important selection factors they considered

when choosing a preschool (open-ended). This dual-response approach is particularly important as prior research suggests that caregivers may respond differently in different formats (Glenn-Applegate et al. 2011). This may be due to the dissonance many caregivers feel when caught between conflicting needs and desires (such as a program cost versus program quality). Other studies of caregivers' perceptions of their children's care have also theorized that caregivers' may experience emotional conflict or denial when their desires and priorities conflict (Cryer and Burchinal 1997; Cryer et al. 2002). Caregivers may value factors different than those of researchers, and an open-ended format enables these preferences to be shared (Holloway and Fuller 1999). The survey used in the present study, then, bridges this gap by including both a close-ended response format to ensure consistency across caregivers and alignment with prior research, as well as an open-ended format to enable caregivers to include factors that may not be represented in prior research.

Degree of Choice Caregivers were first asked if they had complete, some, or no choice in where their child attended preschool. A prior study of the preschool selection factors of caregivers of children with special needs found that approximately 30 % of caregivers felt they did not have any degree of choice in where their children attended preschool (Glenn-Applegate et al. 2011). This first item explores this trend among a different and larger sample of caregivers.

Rated Items Caregivers who indicated that they had at least some choice over their child's preschool arrangement were asked to rate 20 preschool selection factors from 1 ("This was not at all important to me") to 4 ("This was very important to me"). The 20 factors were derived from previous studies of parents' perceptions of quality in early childhood programs (Ceglowski 2004; Glenn-Applegate et al. 2011; Hagen and Davis 1996; Vandenbroeck et al. 2008). The items include nine structural, three process, and eight familial elements of quality; items were selected based solely on their prevalence in previous studies, without regard to how they would be categorized. Caregivers who indicated that they had no choice in where their child attended preschool were instructed to skip this portion.

Open-Ended Items Caregivers were asked to list three elements they considered when choosing a preschool (open-ended). This item noted that responses "may or may not be listed [among the rated items]" and "may or may not be represented in your current preschool." Following Barbarin et al. (2008) and Glenn-Applegate et al. (2011), open-ended responses were subsequently coded into discrete, meaningful categories. Caregivers who indicated that they had no choice in where their child attended preschool were asked to skip this portion as well.

Classroom Quality Assessment

The Classroom Assessment Scoring System Pre-K (CLASS: Pre-K; Pianta et al. 2007) is an observational measure of classroom quality. The criteria primarily assess process quality (Hamre et al. 2009). The CLASS: Pre-K was selected for use in the larger study as this measure has demonstrated strong reliability and validity across coders, states, and 4000 preschool classrooms (Pianta et al. 2007). The CLASS: Pre-K is a valid differentiator of high- and low-quality preschool classrooms in terms of relation to children's pre-academic growth (LoCasale-Crouch et al. 2007; Pianta et al. 2005). In addition, CLASS: Pre-K scores have been shown to significantly predict children's academic achievement

and positive social functioning in preschool (Howes et al. 2008), kindergarten (Pianta et al. 2002), and first grade (NICHD-ECCRN 2002b). Therefore, this measure was deemed a highly appropriate measure of preschool classroom quality.

The CLASS: Pre-K was conducted in all preschool classrooms via analysis of classroom video (see below). Following the CLASS: Pre-K protocols, coders rated the classroom on a scale of 1 (low) to 7 (high) in each of 10 dimensions. These ten dimensions aggregate to form three domains of classroom quality—Emotional Support, Classroom Organization, and Instructional Support (Pianta et al. 2007). The three domains were averaged to form an overall score of classroom quality.

All CLASS: Pre-K coding was completed by certified CLASS: Pre-K coders. Coders included the first author and other members of the larger research project. All coders were trained, reliable coders per CLASS:Pre-K protocols (Pianta et al. 2007; Teachstone 2010).

In the fall of the academic year, digital video was collected in each classroom. Approximately an hour and a half of classroom time was recorded. Observers began taping at the beginning of the school day, and aimed to capture free play/center time, a large group time, and a group book reading, subject to the class's schedule and flexibility. Observers did not follow the class to recess, gym, or any "specials" outside of the classroom.

Coding

Preschool Selection Questionnaire

Caregivers' open-ended responses to "When choosing a preschool, what were the three most important elements you considered?" were typed verbatim into a list. Then, following Barbarin et al. (2008) and Glenn-Applegate et al. (2011), content analysis was used to assign numerical codes to the literal meaning of each caregiver's responses. Coding began by applying the codes used in Glenn-Applegate et al. (2011). Codes were added as necessary and inapplicable codes were removed. If a statement was similar to a previous response (e.g., "Cost" and "Price") it was assigned the same numerical code as the previous response. All other responses were assigned a unique code. The first author carried out the initial coding, revising the coding scheme as necessary. Codes were shared with seven other researchers (including a co-author) who provided feedback, and further revisions were made. This process resulted in 41 codes.

To assess the reliability of the coding process, 10 percent of the open-ended responses were recoded by a second, naive coder, 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, $\kappa = .82, p < .001$.

Preschool Quality Assessment

Each 90-min video-taped classroom observation was segmented into six 15-min cycles, and three were randomly selected for coding. Once the three cycles were coded, the scores were averaged across each of the 10 CLASS: Pre-K dimensions (Pianta et al. 2007) to create an overall score of classroom quality.

Twenty percent of the classrooms were assigned for double-coding. After the two coders had separately coded the observation, they came together and discussed any disagreements, rewatching the observation and referring to the CLASS: Pre-K manual as

needed. The two coders then developed a single set of consensus codes for that observation; codes were subsequently entered into a master database for analyses. The two original sets of codes also were entered into a separate reliability database. Percent agreement was used for CLASS: Pre-K reliability analyses (Early et al. 2006; Justice et al. 2008; LoCassale-Crouch et al. 2007). Following the protocol of the original CLASS: Pre-K certification process, “agreement” was defined as a match within one (Pianta et al. 2007; Teachstone 2010). Percent agreement equaled 91.67 %, demonstrating that coders were reliable.

Analyses

Caregivers’ Preschool Selection Factors

The first research question asks what preschool selection factors caregivers considered when choosing a preschool for their children. This question was answered by analyzing caregivers’ ratings of 20 provided factors, and caregivers’ written-in responses.

First, caregivers were asked to indicate if they had complete, some, or no choice in where their children attended preschool. Those caregivers who indicated that they had no choice did not complete the rating or the open-ended portion, and therefore are not included in these analyses.

Among the caregivers who did complete the rating (and therefore felt they had at least some choice in where their children attended preschool), responses were analyzed for each of the 20 rating items. The average rating, modal rating, and standard deviation of each of the items were computed and ordered from most-to-least important according to their mean ratings. Caregivers’ open-ended responses were organized following the coding procedures described above.

Question two asks to what extent do caregivers prioritize structural, process, and familial quality among their preschool selection factors. To address this, the average structural, process, and familial rating was computed for each caregiver, based on their responses to the rating portion of the Preschool Selection Questionnaire. Each of the 20 rating items had been categorized as a structural (nine items), process (three items), or familial (eight items) element of quality. These averages constitute caregivers’ structural, process, and familial scores. A repeated measures analysis of variance (ANOVA) test was used to determine if the means of caregivers’ structural, process, and familial scores were significantly different from each other. All assumptions were met prior to analysis.

Appropriate post hoc tests were used to determine which of caregivers’ scores significantly varied from the others. Pairwise comparisons (*t*-tests) were used to compare the variables, applying a Bonferroni correction to the probability level used as the criterion for statistical significance.

The Influence of Caregiver Characteristics on Preschool Selection Factors

Question three explores the extent to which caregiver characteristics relate to their preschool selection factors. The caregiver characteristics analyzed are child disability status, maternal education attainment, and poverty status (independent variables). Caregivers’ preschool selection factors are structural, process, and familial scores (dependent variables), as figured in response to the second research question. This question was answered using multiple regression analyses. All assumptions were assured prior to analysis.

Three multiple regressions were used, one with each a dependent variable. The regression equation for these analyses is as follows, where \hat{Y} equals caregivers' structural score, process score, and familial score:

$$\hat{Y}_i = b_0 + b_1(\text{disability status}_i) + b_2(\text{maternal education}_i) + b_3(\text{poverty status}_i) + \varepsilon_i$$

The Relationship Between Classroom Quality and Caregivers' Preschool Selection Factors

Question four explores the extent to which the observed classroom quality relates to caregivers' preschool selection factors, when caregiver characteristics are held constant. Here, caregivers' preschool selection factors, as represented by caregivers' structural, process, and familial scores are regressed on classroom quality as measured by the CLASS: Pre-K. Child disability status, maternal education attainment, and poverty status are held constant.

In this analysis, the focal unit is the classroom, whereas in prior analyses the unit has been the caregiver. Therefore, caregivers' structural, process, and familial scores were averaged within each classroom, to make a classroom structural score, a classroom process score, and a classroom familial score. Likewise, caregiver characteristics were averaged to form a single classroom child disability score, a classroom maternal education attainment score, and a classroom poverty status score. These are the values used in analyses, and shared below.

Three multiple regressions were used, one each with a dependent variable of the classrooms' average structural, process, and familial scores. All assumptions were met prior to analysis. In order to illuminate any unique variance accounted for by classroom quality, the averaged caregiver characteristics were entered in the first step, and classroom quality was entered in the second step. The regression equation for these analyses is as follows, where \hat{Y} equals classrooms' averaged structural, process, and familial scores:

$$\text{Step 1 : } \hat{Y}_i = b_0 + b_1(\text{classroom disability status}_i) + b_2(\text{classroom maternal education}_i) + b_3(\text{classroom poverty status}_i) + \varepsilon_i$$

$$\text{Step 2 : } \hat{Y}_i = b_0 + b_1(\text{classroom disability status}_i) + b_2(\text{classroom maternal education}_i) + b_3(\text{classroom poverty status}_i) + b_4(\text{classroom quality}_i) + \varepsilon_i$$

Results

Caregivers' Preschool Selection Factors

Question one asks what preschool selection factors caregivers considered when choosing a preschool for their children. This question was answered by analyzing caregivers' ratings of 20 provided factors, and caregivers' written-in responses. Prior to analyzing these data, caregiver responses were tabulated for the initial question of, "When you were first choosing a preschool for your child, did you have complete choice, some choice, or no choice?" Of the 407 caregivers, about 79 % felt they had at least some choice (see Table 1). Caregivers who did not respond to this initial choice question but did complete the rating and/or open-ended portions were included in the analyses for the rating/open-

Table 1 Caregivers' degree of choice in selecting their child's preschool

Response	<i>n</i>	%
Complete choice	226	59.01
Some choice	75	19.58
No choice	82	21.41

n = 383

Table 2 Average importance ratings of preschool selection factors

Item	<i>n</i>	<i>M</i>	<i>SD</i>
1. If the teachers were caring, stable, and responded to children's individual needs	321	3.85	.42
2. If the preschool seemed safe	320	3.75	.51
3. If the teachers communicated well with families	322	3.61	.58
4. If I got a good feeling from the preschool; if it felt right	322	3.44	.68
5. If the provider was someone I trusted, either personally or through recommendation	319	3.44	.68
6. The amount of time the teachers spent teaching children new things	320	3.38	.63
7. The number of children in each classroom, or the child-to-adult ratio	321	3.31	.71
8. The match between my values and the program's values	320	3.28	.68
9. If the building and classrooms were clean, appealing, and had a nice look	321	3.26	.74
10. The amount of education the teachers had	320	3.23	.73
11. The program's ability to serve children with special needs	319	3.16	.97
12. If the program was at a center/school, or in someone's home	320	2.96	.94
13. If the location was convenient to my home or work	321	2.87	.97
14. If the program was affiliated or connected to a school	321	2.83	.91
15. If the hours were convenient for my schedule	321	2.69	1.01
16. The amount I would have to pay, or if I would have to pay	321	2.67	.95
17. The amount of diversity among other families, children, and teachers	317	2.47	.95
18. If the preschool was publicly-supported or licensed by a government agency	322	2.44	.99
19. If the staff were offered good wages and benefits	320	2.35	.86
20. If the school provided transportation	322	2.21	1.11

Only caregivers who felt they had at least some degree of choice in where their child attended preschool are reflected here. Total *N* = 407. Items were rated on a scale of 1 ("This was not at all important to me") to 4 ("This was extremely important to me"). Variations in *n* values reflect caregiver omission of items

ended portions. This resulted in an *n* of 322 for the rating portion of the questionnaire, and an *n* of 265 for the open-ended portion of the questionnaire. Findings for each are shared in turn. The 20 rated items, means, and standard deviations are listed in Table 2. The highest rated item was "If the teachers were caring, stable, and responsive" (*M* = 3.85, *SD* = .42). The next highest rated items were "If the preschool seemed safe" (*M* = 3.75, *SD* = .51), and "If the teachers communicated well with families" (*M* = 3.61, *SD* = .58). The lowest rated item, "If the school provided transportation or bussing," had a mean rating of 2.21, and the largest standard deviation of the set, at 1.11. All 20 items reflected the full range of responses (i.e., 1–4).

Frequencies, percentages, and examples of caregivers' open-ended responses are listed in Table 3. Of the 407 total caregivers, 265 responded to this portion of the questionnaire. Most

caregivers provided 3 responses ($M = 3.08$, $SD = .78$), and the number of responses ranged from 1 to 7. Analyses showed that the most common caregiver responses were those reflecting interpersonal teacher characteristics such as “Friendliness of teachers and staff.” Sixty-seven caregivers (16.46 %) provided such responses. The next most common caregiver responses were those relating to safety ($n = 63$, 15.48 %). Codes and examples are listed in Table 3.

Caregivers’ Priorities Among Structural, Process, and Familial Quality

Question two asks to what extent caregivers prioritize structural, process, and familial quality among their preschool selection factors. Descriptive information on these three variables is shared in Table 4. Process scores had the highest average rating, and all three variables reflected the full range of possible responses, with a minimum score of 1.00 and a maximum score of 4.00.

The results of a repeated measures ANOVA showed that caregivers prioritized process, structural, and familial items to significantly different degrees, $F(1.97, 631.58) = 468.164$, $p < .001$. To explore where the significance lied, three pairwise comparisons were made. Results revealed that process scores ($M = 3.61$, $SD = .43$) were significantly higher than both structural scores ($M = 2.95$, $SD = .48$) and familial scores ($M = 2.98$, $SD = .51$), with p -values of less than .001 (see Table 5). However, structural scores and familial scores were not significantly different from each other ($p = .66$).

The Influence of Caregiver Characteristics on Preschool Selection Factors

The third research question sought to determine the extent to which caregiver characteristics (child disability status, maternal education attainment, and poverty status) relate to their preschool selection factors (structural quality, process quality, and familial quality). Three multiple regressions were carried out, one each with structural quality, process quality, and familial quality as the dependent variable. Child disability status, maternal education attainment, and poverty status were entered in a single step (forced entry). The results of these analyses are presented in Table 6.

The first regression, with structural quality as the dependent variable, showed that a modest portion of the variance in caregivers’ structural scores could be explained by the predictor variables ($R^2_{adj} = 5.6\%$). The overall model was significant, $F(3, 289) = 6.81$, $p < .001$, but child disability status was the only meaningful predictor, $t = 3.94$, $p < .001$. In the second regression, with process quality as the outcome variable, child disability status was not a significant predictor, $t = .69$, $p = .489$. This model did not show significance, $F(3, 289) = .21$, $p = .892$, indicating that the independent variables are not influential in predicting caregivers’ ratings of process quality. Familial quality was the last dependent variable to be analyzed. Here again, none of the predictors were significant, $F(3, 289) = 1.30$, $p = .276$. This suggests that child disability status, maternal education attainment, and poverty status are not significant predictors of caregivers’ ratings of familial quality.

The Relationship Between Classroom Quality and Caregivers’ Preschool Selection Factors

The final research explored the extent to which variation in classroom quality explained caregivers’ preschool selection factors, when controlling for caregiver characteristics. To answer this question, three hierarchical regressions were carried out. The average, standard

Table 3 Caregivers' preschool selection factors—open-ended responses

Selection factor <i>Explanation (code)</i>	<i>n</i>	<i>%</i>	Example
Interpersonal teacher characteristics <i>Caring, friendly teachers; positive interactions with children; teacher likes children (9)</i>	67	16.46	"How the teacher was with my daughter" "Friendly staff"
Safe <i>School is safe; safety; safe environment (21)</i>	63	15.48	"Was a safe environment" "Safety"
Ability to meet child's needs <i>Reference to child's need, delay, or disability, generally or specifically; ability to help child; ability to work with child on needs; ability to provide therapy/services for child (4)</i>	60	14.74	"Would help her with her speech" "That my son would get the personal help he needed"
Location <i>Close to home/work; convenient; close by (2)</i>	51	12.53	"Location" "Close to home"
Cost <i>Affordability; price; rates; amount to pay; reference to scholarship or funding source (34)</i>	44	10.81	"Cost" "Amount I would have to pay"
Teacher-child ratio and class size <i>Number of children/teachers in the classroom; small classes; class size; not crowded; student/child to teacher/adult ratio (23)</i>	44	10.81	"The child-to-adult ratio" "The number of children in the classroom"
Teacher Knowledge/Experience <i>teacher education or experience; knowledgeable teachers; qualified teachers (32)</i>	38	9.34	"Ability and education of staff" "How educated they were about developmental delays"
Hours <i>schedule; full-day or part-day; morning or afternoon; alignment with work/school schedule; number of days per week (8)</i>	33	8.12	"Times during the day" "Preschool hours, schedule, not a K-12 schedule"
Neutral references to teachers/staff <i>Unspecific responses about teachers, staff (39)</i>	29	7.13	"Teachers and therapists" "Teacher"
Teaching <i>good teachers and teaching; teaching methods; teachers' abilities; time spent teaching; what is taught (12)</i>	28	6.88	"Quality of teachers" "The level of teaching at the school"
Teacher/Caregiver Communication <i>Communication with teacher; communication with families/parents; giving/receiving information with teacher; opportunities to talk about school or child (22)</i>	27	6.63	"Communication with staff and teachers—felt comfortable" "Preschool that communicates well with parents"
Curriculum <i>Reference to a desire for a curriculum; preference for a type of curriculum; general references to curriculum (17)</i>	25	6.14	"The curriculum being taught" "Curriculum"
Transportation <i>Availability of transportation to/from program; bussing (7)</i>	25	6.14	"Transportation" "Bus"
Child learning <i>Child learning/growth/development; references to education; quality education; enrichment (36)</i>	24	5.90	"That the work would keep her learning new things" "My child's chance to grow and learn"

Table 3 continued

Selection factor <i>Explanation</i> (code)	<i>n</i>	<i>%</i>	Example
Special needs program <i>Offered program for or able to serve children with special needs/disabilities; offered services/therapy for children with disabilities; accepted children with disabilities</i> (1)	23	5.65	“If they could serve my child since she was special needs” “Ability to serve children with special needs”
Atmosphere <i>Caring, positive, understanding, welcoming environment; good impression; good feeling; felt right</i> (13)	22	5.41	“The feeling I got from the preschool” “Has to feel right”
Child’s comfort <i>Child is comfortable, happy; child feels good; child likes the teacher/school; child enjoys being there; the child connects with teacher; child is with sibling</i> (15)	19	4.67	“How my child liked the teacher when first meeting him/her” “Comfortability to my child, would she feel safe”
Diversity <i>program teaches anti-bias/diversity; students and/or others reflect diverse backgrounds; exposure to diversity</i> (29)	17	4.18	“Diversity among kids” “Diversity/Anti-bias curriculum”
Program and Child/Family fit <i>Program and child match; family/parent agreed with program; program matches family/child needs; how program would handle the child; match between program and family values; religious/not religious curriculum</i> (30)	16	3.93	“No religion (didn’t want a church preschool)” “A good fit for my child’s abilities and disabilities”
Reputation/Recommendation <i>Good reputation; recommendation from friend/family/other parent; general reference to reputation or recommendation</i> (3)	16	3.93	“Reputation of school” “Recommended by people I trusted”
Clean <i>Clean; neat, tidy, sanitary; cleanliness; clean building, classroom, school, facilities, or environment</i> (24)	14	3.44	“Classroom cleanliness” “Clean”
Neutral references to program/school structure <i>Program; school; structure; program structure; programming; programs for kids</i> (38)	13	3.19	“Programming” “Program structure”
Individual attention <i>One-on-one attention; time with child; time with teacher</i> (27)	11	2.70	“Amount of time with each student” “One-on-one availability”
Neutral references to environment/setting <i>Environment; setting; classroom; room; classroom environment; school environment; classroom setting</i> (40)	11	2.70	“School environment” “Classroom”
School readiness <i>Preparing children for school or kindergarten; school readiness</i> (19)	11	2.70	“Learning routine for school” “Preparation for kindergarten”
School affiliation <i>Connected to or affiliated with a school; in same building that child will go to later; in the child’s school district</i> (37)	10	2.46	“School district” “Located and run like/with school”

Table 3 continued

Selection factor <i>Explanation</i> (code)	<i>n</i>	<i>%</i>	Example
Caregiver comfort <i>Caregiver likes program, teacher; caregiver feels good about arrangement; positive interactions between caregiver and staff</i> (20)	9	2.21	“I feel comfortable with it” “I felt good about the teacher”
Facilities/Materials <i>References to facilities; materials; equipment; grounds; building size; room size; space; toys; supplies</i> (16)	9	2.21	“Appropriate gross motor facilities” “If the school has an air conditioner and heater”
Active learning <i>“Hands-on” learning; activities; play; movement</i> (11)	7	1.72	“Hands-on learning” “Activities”
Program/school qualities <i>Quality or good program/school/district; school functioning; type of program; preference for a type of program</i> (35)	7	1.72	“Had a program for three-year-olds” “Quality of program”
Social skills <i>Social development; socialization; interacting/ relating/getting along with others</i> (5)	7	1.72	“Be able to communicate with other children” “My child learning empathy”
Academic skills <i>Cognitive development; literacy; learning numbers/ letters; academics</i> (10)	6	1.47	“Strong literacy focus” “Academics”
Other <i>Responses too vague to otherwise categorize</i> (41)	5	1.23	“Quality” “Kids”
Trust <i>Trustworthy; trusted the program; trusted the teacher</i> (33)	5	1.23	“Provider was someone I trusted” “Trusted teachers”
Inclusion <i>Children both with and without disabilities sharing a classroom; reference to peer models/typical peers; exposure to different abilities</i> (25)	4	.98	“Peer role models for —” “Opportunity to work with typical peers”
Personal contact <i>Caregiver/family already knew program; prior personal experience with program</i> (28)	4	.98	“Same program her twin brother was in” “My daughter attended this one”
Discipline <i>Discipline; management of misbehavior</i> (31)	3	.74	“Discipline” “Treatment received if child acts out”
Availability <i>Program had an opening; length of waiting list</i> (6)	2	.49	“Availability” “How long the waiting list was”
Child-centered <i>Child-focused; child-directed</i> (14)	2	.49	“Educational philosophy (child-directed)” “Students’ needs come first”
Curricular balance <i>Whole child; desire for both play and academics</i> (26)	2	.49	“How it nurtures/develops the whole child (not just academic)” “Balance of academics and play”
Licensed/accredited <i>Licensed by state; program accredited by NAEYC or other standard</i> (18)	2	.49	“NAEYC accreditation” “If preschool was publicly supported or licensed by a government agency”

Data reflects the 265 caregivers who responded to this portion of the Preschool Selection Questionnaire

Table 4 Descriptive statistics for caregivers' structural, process, and familial scores

	<i>M</i>	<i>SD</i>
Structural scores ^a	2.95	.48
Process scores ^b	3.61	.43
Familial scores ^c	2.98	.51

n = 322

^a Structural scores were derived by averaging caregivers' responses to the structural items on the rating portion of the Preschool Selection Questionnaire (items 3, 5, 6, 8, 9, 11, 14, 19, and 20)

^b Process scores were derived by averaging caregivers' responses to the process items on the rating portion of the Preschool Selection Questionnaire (items 4, 7, and 15)

^c Familial scores were derived by averaging caregivers' responses to the familial items on the rating portion of the Preschool Selection Questionnaire (items 1, 2, 10, 12, 13, 16, 17, and 18)

Table 5 Pairwise comparisons of caregivers' structural, process, and familial scores

Variables	<i>t</i> (322)	Sig. ^a	95 % confidence interval ^a	
			<i>LL</i>	<i>UL</i>
Structure–process	−.66*	.000	−.72	−.61
Structure–familial	−.03	.659	−.09	.03
Process–familial	.63*	.000	.57	.70

LL lower limit, *UL* upper limit

* *p* < .001

^a The significance value reflects the Bonferroni adjustment for multiple comparisons

Table 6 Multiple regression analyses predicting caregivers' structural, process, and familial scores from child disability status, maternal education attainment, and poverty status

Predictor	<i>B</i>	<i>SE B</i>	β
Structural scores ^a			
Constant	2.871	.082	
Child disability status	.226*	.057	.234*
Maternal education	−.007	.011	−.035
Poverty status	.050	.072	.042
Process scores ^b			
Constant	3.623	.074	
Child disability status	.036	.051	.042
Maternal education	−.003	.010	−.019
Poverty status	−.017	.065	−.017
Familial scores ^c			
Constant	3.101	.086	
Child disability status	−.105	.060	−.106
Maternal education	−.012	.012	−.063
Poverty status	.005	.075	.005

n = 293

* *p* < .001

^a $R^2 = .066$, ^b $R^2 = .002$,

^c $R^2 = .013$

Table 7 Classroom Average Quality Scores

Variable	<i>M</i>	<i>SD</i>	Range
Classroom quality ^a	4.05	.63	2.77–5.40
Structural scores ^b	2.96	.22	2.39–3.83
Process scores ^b	3.62	.20	3.07–4.00
Familial scores ^b	3.00	.23	2.60–3.81

N = 54 for classroom quality, reflecting all classrooms. For structural scores, process scores, and familial scores, *n* = 53, as all sampled caregivers within one classroom indicated that they had no choice in where their child attended preschool, and therefore this classroom did not have an average structural, process, or familial score

^a Possible range is 1–7, ^b Possible range is 1–5

deviation, and range for classroom quality and each of the classroom quality scores are listed in Table 7. Each of the three regression models had a separate dependent variable: classroom structural scores, classroom process scores, and classroom familial scores. Classroom disability status, classroom maternal education attainment, and classroom poverty status were entered in the first step, and classroom quality was entered in the second step (both forced entry).

The results of the regressions are shown in Table 8. In the first regression, with classroom structural quality as the dependent variable, classroom quality was not a significant predictor, $t = 1.43$, $p = .159$, though the overall model was significant, $F(4, 48) = 4.13$, $p = .006$. As in the results for the third question, classroom disability status carried the significance of the model, $t = 2.52$, $p = .015$. The addition of classroom quality in the second step did not explain a significant portion of the variance in the classroom structural quality score.

Classroom quality was not a significant predictor of classroom process quality, $t = .03$, $p = .980$. The full model did not show significance either, $F(4, 48) = .92$, $p = .464$, indicating that none of the predictors were effective in estimating the classroom process quality score.

Classroom familial quality was the final dependent variable to be analyzed. Here too, classroom quality was a non-significant indicator of the classroom familial quality score, $t = .63$, $p = .529$. None of the predictors were significant, $F(4, 48) = .62$, $p = .649$. Table 8 provides further information about each analysis.

Discussion

Major Findings

This paper contributes to what is known about how caregivers select preschools in three primary ways. First, this paper shares the factors that caregivers consider when selecting a preschool, including not only elements of quality but also practical elements such as hours and cost. This gives a more complete picture of how caregivers do the real-life work of selecting a preschool. Second, this paper illuminates both the multiple and diverse factors caregivers consider when selecting a preschool, and also the factors

Table 8 Hierarchical multiple regression analyses predicting classroom structural, classroom process, and classroom familial scores from classroom disability status, classroom maternal education attainment, classroom poverty status, and classroom quality

Predictor	<i>B</i>	<i>SE B</i>	β	<i>ΔR</i> ²
Classroom structural scores				
Step 1				.225
Constant	2.933***	.189		
Child disability status	.408*	.162	.318*	
Maternal education	−.042	.026	−.222	
Poverty status	.187	.128	.201	
Step 2				.032
Constant	2.659***	.268		
Child disability status	.451**	.163	.352**	
Maternal education	−.047	.026	−.246	
Poverty status	.225	.130	.242	
Classroom quality	.066	.046	.190	
Classroom process scores				
Step 1				.071
Constant	3.779***	.185		
Child disability status	.173	.158	.151	
Maternal education	−.042	.025	−.247	
Poverty status	−.047	.126	−.057	
Step 2				.000
Constant	3.774***	.268		
Child disability status	.174	.163	.152	
Maternal education	−.042	.026	−.247	
Poverty status	−.047	.130	−.056	
Classroom quality	.001	.046	.004	
Classroom familial scores				
Step 1				.048
Constant	2.982***	.217		
Child disability status	.191	.185	.144	
Maternal education	−.019	.030	−.100	
Poverty status	.093	.147	.097	
Step 2				.002
Constant	2.918***	.313		
Child disability status	.201	.190	.152	
Maternal education	−.021	.030	−.105	
Poverty status	.102	.151	.106	
Classroom quality	.016	.054	.043	

n = 53* *p* < .05; ** *p* < .01;*** *p* < .001

caregivers tend to prioritize. This paper describes how these factors do, and do not, vary by caregiver characteristics. Third, we compare caregivers' selection factors to preschool quality. Prior research has compared caregivers' and experts' ratings of preschool quality (Cryer and Burchinal 1997), but to our knowledge this is the first study that compares how caregivers *select* a preschool—a more authentic task—to how experts assess quality.

Caregivers Prioritize a Variety of Preschool Selection Factors, Most Notably Interpersonal Teacher Qualities and Safety

As a whole, the caregivers in this study considered a variety of preschool selection factors. Caregivers valued commonly acknowledged elements of quality such as high teacher–child ratios, positive relationships between children and adults, and meaningful, intentional programming. Caregivers also valued factors specific to their child, such as “[The] comfort level—had with teachers.” Caregivers’ also prioritized practical elements such as cost, location, program hours, and the availability of transportation.

As a group, caregivers most highly prioritized elements relating to interpersonal teacher qualities. This was the most popular factor among both the rated responses (“If the teachers were caring, stable, and responded to children’s individual needs”) and the open-ended responses (“Interpersonal teacher characteristics”). This finding replicates previous research that has likewise shown that caregivers value caring, sensitive teachers (Cryer and Burchinal 1997; Knoche et al. 2006; Shlay et al. 2005). Caregivers and experts, then, are in agreement on the value of positive teacher–child interactions.

Interpersonal teacher qualities are harder to identify and control than more objective elements (such as class size), but these relational elements may be more critical to positive child outcomes than other, more programmatic characteristics (NICHD-ECCRN 2002a). There are relatively few observational measures of teacher–child interactions. The measure of classroom quality used here, the CLASS: Pre-K, aims in part to reflect the quality of teacher–child interactions through scores on several dimensions, including Teacher Sensitivity and Regard for Student Perspective (Pianta et al. 2007). Other studies that specifically examined teacher–child interactions have also used the CLASS: Pre-K as a central measure (Downer et al. 2009; Hamre et al. 2010; Thomason and La Paro 2009). While teacher–child interactions can be difficult to assess with validity and reliability, such efforts should persist as teacher–child interactions appear to be a particularly valuable component of quality preschool programs, for experts and caregivers alike.

The second most prioritized element in both the rated and open-ended formats was safety. Previous studies have also shown that caregivers prioritize safety when evaluating preschool quality (Basta 2007; Shlay et al. 2005). Program safety is also recognized as an important element by experts, professional organizations, and government agencies (American Academy of Pediatrics 2005; Ritchie and Willer 2008; US Government Accountability Office 2004; US Department of Health and Human Services, Administration for Children and Families 2010). Here again, caregivers and experts are in agreement.

Despite the seemingly obvious importance of basic safety in preschool programs, basic licensing standards are often not as complete as they could be. Furthermore, caregivers are often not aware of the limitations in state oversight. Most caregivers with young children assume that all child care programs must be licensed and that all staff must complete a background check (NACCRRRA 2008), yet many states specifically exempt licensing in certain settings or small-group programs. Safety is a foundational component of quality, yet even basic measures sometimes are not consistently met. For example, only thirteen states require complete background checks of all staff (NACCRRRA 2013). Caregivers prioritize safety, yet cannot reasonably check teachers’ criminal records. States are licensing agencies and yet do not completely fulfill this role, potentially giving caregivers a misplaced sense of trust. It is beholden to states to require that these basic structural elements of safety, valued by caregivers and experts alike, be ensured in all settings.

In contrast, only two caregivers mentioned licensure or accreditation among their preschool selection factors in the open-ended portion of questionnaire. Many caregivers, though, mentioned common components of licensure or accreditation (e.g., teacher–child ratio). Two caregivers each mentioned child-centered characteristics, curricular balance, and simple availability. Only three caregivers mentioned components specific to guidance and discipline.

Caregivers Prioritized Elements of Process Quality Significantly More Than Elements of Structural or Familial Quality

When caregivers' selection factors were grouped into structural, process, and familial categories, caregivers demonstrated a significant preference for process factors, in that their average rating for process items was significantly higher than their ratings for structural or familial items. This shows that as a whole, caregivers prioritized factors they related to children's interactions with teachers, materials, and other children. The factor that caregivers valued most, interpersonal teacher characteristics, also falls into the process category. Such interpersonal, relational components of the environment may be particularly important for children with disabilities, as these children may require extra or specific kinds of attention.

Caregivers are wise to value such elements that are closely related to their child's day-to-day experiences. Research has indicated that process elements have more direct influence on child outcomes than structural elements (NICHD-ECCRN 2002a). However, process elements such as teachers' relationships with children are also harder for caregivers to observe. Most caregivers are not present during the preschool day to witness how teachers interact with children. Caregivers may only see their child's teacher at pick-up and drop-off times, and not even then if programs provide transportation. While caregivers value these important elements of process quality, caregivers may not have the opportunity to recognize the presence (or absence) of such qualitative aspects. As discussed below, this may be an explanation for the lack of relationship between caregivers' structural, process, and familial scores and the observed quality of their children's classrooms.

Caregivers of Children with Disabilities Demonstrate a Preference for Structural Characteristics

This study shows that having a child with a disability led caregivers to prioritize structural characteristics of preschool classrooms. This mirrors the finding of a previous study which showed that caregivers of children with disabilities prioritize structural components relating to their children's basic acceptance and care (Glenn-Applegate et al. 2011). Prioritization of structural characteristics likely occurs because caregivers desire facilities, staff, and programs that specifically support the inclusion of children with special needs. For example, a caregiver whose child has a language delay may make sure that the program has a speech therapist, or a caregiver whose child has cerebral palsy may be interested in the preschool's motor spaces. These caregivers are also more likely to consider if the preschool has basic structures in place that allow children with disabilities to participate (e.g., ramps; accessible playground structures). These elements are essential to caregivers of children with disabilities, but may not even arise in the minds of caregivers whose children are developing typically.

This finding is of note because prior research has shown that children with disabilities tend to start preschool later, and their caregivers have more difficulty securing a high-

quality placement (Booth-LaForce and Kelly 2004; NACCRRRA 2008). Caregivers of children with disabilities also report more stress related to their child's care arrangement than caregivers of children developing typically, even after controlling for income (Knoche et al. 2006). Improving structural quality may be the keystone to making preschool more appealing to children with disabilities and their caregivers. Caregivers of children with disabilities may find they have few options after they eliminate from consideration programs that do not have the basic structural components in place to properly care for their children. If this is the case, giving heed to the preschool selection factors of caregivers of children with disabilities, and structural characteristics in particular, may make programs more accessible and amenable to the needs of these children and their families, and thus, potentially increase the enrollment of children with special needs in high quality programs.

The Observed Preschool Quality was Not a Predicting Factor of Caregivers' Structural, Process, or Familial Scores

It is noteworthy that analyses revealed that observed program quality was unrelated to caregivers' structural, process, or familial scores after controlling for caregiver characteristics. This suggests that there is not a relationship between the factors caregivers consider when selecting a preschool and actual preschool quality. Further research will be needed to replicate or refute this finding.

Here, caregivers were asked to share what they considered when selecting a preschool, with the instruction that those factors may or may not be present in their current preschool. It may be that caregivers desire the same or similar elements of quality valued by experts, but could not find programs that met their standards. The factors caregivers tended to value in this study were representative of high levels of quality, yet classrooms were assessed to be largely within the middle range of quality, rather than high. It may be that caregivers' options included few, if any, truly high quality preschools. Shlay et al. (2005) posited a similar conclusion.

For caregivers, and caregivers of children with disabilities in particular (who comprised 58 % of this sample), options may be so limited that the elements of quality which caregivers value become null. Caregivers' preschool selection factors may be no more than desires, rather than desires fulfilled in their preschool choice. Further, caregivers may be limited by the prohibitive cost of preschool, lack of transportation, misalignment of work schedules to preschool schedules, or other circumstantial reasons. Aspects of availability may explain why caregivers' selection factors were unrelated to actual program quality.

Process elements in preschool can be nuanced and subtle. The process elements caregivers regarded as most important are harder to observe, particularly when caregivers' are not present to witness if such quality is being maintained (see Mocan 2007). Caregivers desire elements of quality similar to those valued by experts, but may not have the opportunity to determine if optimal process elements occur in their child's classroom. As a consequence, caregivers may incorrectly assess the quality of their children's preschool.

Alternately, it may be that caregivers simply are not adept at identifying quality, despite their intentions or opportunities to do so. Caregivers may not select higher quality programs because they are unskilled at distinguishing between average- and high-quality programs. This possibility has been suggested in prior research as well (Cryer and Burchinal 1997; Sosinsky et al. 2007; also see Helburn 1995). Regardless of the explanation, the finding that caregivers' selection factors did not relate to preschool quality indicates that there may be a disconnect between caregivers' reported desires and the quality of the preschool care their children receive.

Unfortunately, most preschool options available to caregivers are not high quality (see Espinosa 2002). Even though data from this study indicate that 59 % of caregivers feel they had complete choice of what preschool their child attended, caregivers do not have an optimal range of options. This places an unfair responsibility on caregivers to select high quality preschools for their children, when high quality options are not widely available. This can place caregivers in an emotional bind as well as a practical one.

In this study, caregivers' priorities were not in direct opposition with expert conceptions of quality, but caregivers also valued factors not typically recognized by experts. With this information, preschool programs and policies could be adjusted to reflect those elements of quality which caregivers value most (e.g., sensitive teachers, safety), as well as the factors caregivers must consider in order for the program to fit their lives (e.g., location, cost). A more ecumenical, inclusive approach to preschool quality is likely not only to improve preschool programming, but also to aid preschool access and thus extend the benefits of high quality preschool to a larger population of children and families.

Limitations

There are three primary limitations of this study that warrant mention. First, children were already enrolled in preschools when caregivers completed the measures for this study. Findings may have been different if caregivers were in the process of selecting a preschool for their children when data were collected, as the preschool program and classroom may influence caregivers' rating of their preschool selection factors. This should be considered when interpreting the findings of this study. Future studies of caregivers' preschool selection factors should aim to collect caregiver data before caregivers have enrolled their children in a preschool. In addition, caregivers typically select a preschool program for their children, but not the specific classroom. Based on the teacher and a variety of other factors, the quality of one classroom may be significantly different from another classroom within the same program. The preschool selection factors a caregiver desires may be reflected in the preschool program as a whole, but not the individual classroom to which the child is assigned.

Second, this study provides unique insight on preschool selection factors among those caregivers who specifically enroll their children in ECSE preschools. However, this limits the generalizability of the findings. Care should be taken when considering these results in relation to other, non-ECSE settings. Similarly, almost all children and classrooms were located within a single state, so findings may reflect state-specific conditions such as the availability of preschool subsidies, state licensing standards, and state-funded referral agencies. Replication among other populations will be necessary to confirm the validity of these findings.

Third, as with any study, the methodological design has strengths and drawbacks. A strength of this study is the use of both rated and open-ended responses to explore caregivers' selection factors. However, the provided rating responses may have artificially influenced caregivers' open-ended responses. Similarly, the twenty items provided in the rating section may not encompass the selection factors of all caregivers. The twenty rating items were selected based on their prominence in prior research, resulting in an imbalance between structural, process, and familial items. While inclusion of the rating items in this way is theoretically sound, the resulting imbalance among the three categories may skew the analyses. The open-ended portion of the questionnaire had lower response rate than did the rating portion, presumably because the open-ended portion is more labor intensive. While the open-ended portion allows caregivers to provide unique responses that otherwise

would not be heard, the format may also disincline caregivers to respond. Caregivers were assured that their responses would not be shared with school staff and their anonymity would be maintained, but nonetheless caregivers may have responded with descriptors of their current preschool, or what they felt they should have considered, rather than what they actually considered when selecting a preschool.

Implications

In this study, we focus on the components of preschool prioritized by caregivers when doing the real-life work of selecting a program for their children. Several valuable studies have examined the implications of attendance in high quality preschool programs, and which components of these programs are the strongest determiners of positive child outcomes. These studies tend to focus on expert or research-based assertions of quality. Those which involve caregivers tend to compare their perceptions of quality to a standard established by experts or prior research on child outcomes. When considering preschool selection factors, though, caregivers are the definitive source, as those with firsthand knowledge of the criteria they consider when selecting a preschool for their children and family.

Quality is dynamic and relative. Conceptions of preschool quality have evolved with mothers' increased participation in the workforce, the introduction of developmentally appropriate practices, and inclusion of children with disabilities. This study contributes to the literature on preschool quality as one of the few to examine what caregivers consider when selecting a preschool. Many of these considerations align with established understandings of quality, and others are unique or less well documented. The compilation of these factors encourages broadly conceived notions of quality to grow and change.

All caregivers in this study enrolled their children in ECSE preschools. These findings demonstrate the diversity of selection factors caregivers consider, even among those who ultimately choose similar types of programs. As ECSE programs target enrollment of children with disabilities (58 % of the sample here), this study is of particular relevance to programs wishing to better understand the needs of families of children with disabilities.

The results here indicate that caregivers' preschool selection factors resemble the elements of quality advocated by researchers, but also include practical consideration such as location, cost, and hours. Future studies of caregivers' ability to select or recognize quality preschool programming should acknowledge that most caregivers must also weigh these practical considerations, even when doing so may mean compromising on other factors they value. Likewise, policy makers and others who have power to influence preschool funding and licensing must recognize caregivers should not need to sacrifice elements of quality, particularly those relating to their children's basic care and safety, in order to secure an affordable, accepting, preschool placement.

Caregivers placed high importance on interpersonal teacher characteristics—elements which research has shown to be influential in children's short- and long-term well-being. However, caregivers have limited opportunities to observe these relationships firsthand. Caregivers may instead be relying on the opinion of others more familiar with the preschool, the feeling they have when at the preschool, or their children's demeanor and comments about the teacher and classroom. Caregivers often do not have or do not take opportunities to observe for themselves the nature and frequency of these important, interpersonal relationships. Preschool programs should establish open-door policies, allowing and encouraging caregivers to visit and participate in the life of the classroom. When possible, caregivers should have the opportunity to observe their children's

classroom, or classrooms in which they are considering enrolling their children, through non-intrusive means. This allows a more natural and perhaps more accurate picture of the classroom quality. If caregivers are made aware of opportunities to observe and participate in the classroom, caregivers will likely be more familiar with the day-to-day workings of the classrooms, and potentially be more secure and confident of their children's wellbeing.

Conclusion

High quality preschool education can prepare children from even the most disadvantaged backgrounds for school and later success (Barnett 2008; Center on the Developing Child at Harvard University 2007; Gormley et al. 2005; Karoly et al. 1998; NICHD-ECCRN 1999; Schweinhart 2005; Schweinhart and Weikart 1983). This study contributes to this literature by analyzing the desires and practical considerations caregivers took into account when selecting a preschool for their children. The elements caregivers value in preschools, and specifically the elements they consider when selecting a preschool, have not been well researched. As it is caregivers who typically select those preschools, caregivers' selection factors should be valued as part of complete understanding of preschool quality. These selection factors can inform researchers, preschool providers, and policy makers of what caregivers value as key stakeholders in their children's wellbeing.

The majority of caregivers in this study had children with disabilities. Prior research has shown that this significantly complicates the process of finding a preschool. As such, these findings provide important insight particularly for those interested in making preschool education more accessible and desirable for caregivers of children with disabilities. Understanding the specific factors caregivers of children with disabilities value may help policy makers and programs recognize ways in which they can be more amenable to the unique needs of these families.

The preschool selection factors of caregivers who enrolled their children in ECSE programs are shared in this study. Results indicate that while caregivers value important elements of quality when selecting preschools, more can be done to ensure the programs available to them meet high standards of quality. This study has potential to influence how programs present themselves to caregivers. A more inclusive approach to preschool quality—one which includes the elements caregivers value as well as the elements validated by research—will help make preschool programs both better and more amenable to children and families.

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