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## Parents' Choice of Pre-Kindergarten: A Transactional Ecological Approach

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PARENTS' CHOICE OF PRE-KINDERGARTEN: A TRANSACTIONAL ECOLOGICAL  
APPROACH

by

KATHRYN E. GROGAN

Under the Direction of Dr. Chris Henrich

ABSTRACT

Empirical research on parents' decision making process and parents' actual criteria when considering preschool is critical when considering its relationship to early educational experiences and subsequent outcomes for children. Research has consistently demonstrated that the type and quality of preschool program children attend has implications for future academic success. A review of past research suggests parents often have difficulty assessing quality and include a wide range of considerations that include both practical and educational features of care. The current study utilized a transactional ecological framework to examine parent considerations and related family, child and cultural factors. A series of focus groups and interviews were conducted with parents to identify parent considerations and inform creation of a survey measure designed to assess these considerations. Surveys were then completed by 203 parents from varying socioeconomic and ethnic backgrounds who had a child that qualified for state-funded preschool the following year. Parents were recruited from 20 centers including

Head Start programs, private-for profit programs, religiously affiliated programs and one YMCA center. Exploratory factor analysis identified two highly correlated categories of considerations: 1) characteristics that designate several types of quality indicators and 2) characteristics that designate a program's practical features. A series of hierarchical regressions indicated a combination of cultural, family and child factors are important when assessing parents' considerations for pre-kindergarten. In particular, socioeconomic status, parents' beliefs about childrearing and involvement and children's prosocial skills and family structure were uniquely related to parental endorsement of quality and practical considerations. These findings have important implications for policymakers and practitioners.

INDEX WORDS: Pre-Kindergarten, Parent beliefs, Parent choice, Transactional theory

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Georgia State University

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## INTRODUCTION

Despite a wealth of research on the effects of early educational experiences for children, there remains a problematic lack of research regarding the decision making process parents employ when choosing early education and preschool for their children. This lack of information stands in stark contrast to the rise in public policies that provide parents with choice amongst varying subsidized preschool and pre-kindergarten programs. These policies treat parents as informed free market consumers who are knowledgeable about factors related to quality early education, informed about the broad range of options available and free to choose the appropriate center for their child (Cryer & Burchinal, 1997; Henry & Gordon, 2006). In this free market view of early education, an increase in public funds for preschool programs and reliance on parental choice will result in increasing demand for high quality centers and better educational opportunities for all children (Cryer & Burchinal, 1997; Henry & Gordon, 2006). However many of these assumptions have been challenged by studies of parents' proficiency at assessing quality, considerations when choosing preschool, and range of early education choices (Burchinal & Nelson, 2000; Cryer, Tietze, & Wessels, 2002; Gamble, Ewing, & Wilhlem, 2009; Johansen, Leibowitz, & Waite, 1996; Kim & Fram, 2009; Rose & Elicker, 2008).

In reality, research indicates parents have difficulty assessing program quality. Parents consistently inflated ratings of quality in their children's preschool classrooms versus trained observers in a series of studies among American and German parents (Cryer & Burchinal, 1997; Cryer et al., 2002). These gaps became even more pronounced among items that were highly valued among parents suggesting that parents' views are likely influenced by their beliefs and may reflect unfounded perceptions of care rather than actual quality (Cryer & Burchinal, 1997). These findings may explain high levels of parent satisfaction with their children's early

education placement despite evidence that the majority of early education programs are low quality (Cryer & Burchinal, 1997; LoCasale-Crouch et al., 2007). Another study found significant gaps in parental knowledge of their child's preschool program. Parents in this study were unable to correctly answer questions about specific school policies, quality indicators and structural elements of their child's program (Shpancer et al., 2002).

Parents also vary in the value they assign to varying aspects of care (Burchinal & Nelson, 2000; Gamble et al., 2009; Kim & Fram, 2009; Shlay, Tran, Weinraub, & Harmon, 2005). Previous research has identified a long list of characteristics that parents value when choosing preschool programs (See Table 1).

Table 1.1

*Characteristics Care that Parents Value by Source*

Characteristic	Source
Practical	
Program hours	Gamble, Ewing, & Wilhelm, 2009; Johansen, Leibowitz & Waite, 1996; Rose & Elicker, 2008; Kim & Fram, 2009; Peyton et al., 2001
Location	Barbarin et al., 2006; Johansen, Leibowitz & Waite, 1996; Kim & Fram, 2009; Peyton et al., 2001
Cost	Fuller et al., 1996; Johansen, Leibowitz & Waite, 1996; Kim & Fram, 2009; Peyton et al., 2001
Stability of care	Fuller et al., 1996; Kim & Fram, 2009; Lowe & Weisner, 2004
Transportation	Gamble, Ewing, & Wilhelm, 2009; Fuller et al., 1996
Sick policies	Early & Burchinal, 2001
Structural	
Teacher-child ratios	Gamble, Ewing, & Wilhelm, 2009
Teacher training and education	Barbarin et al., 2006; Early & Burchinal, 2001; Rose & Elicker, 2008; Shlay et al., 2005; Peyton et al. 2001
Comprehensive services	Barbarin et al., 2006; Fuller et al, 1996
Equipment	Peyton et al., 2001
Safety	Cryer & Burchinal, 1997
Process	
Teacher warmth	Rose & Elicker, 2008
Trust, know caregiver	Fuller et al., 1996; Johansen, Leibowitz & Waite, 1996
Comfort with atmosphere	Fuller et al., 1996; Li-Grining & Coley, 2006; Peyton et al., 2001
Teacher-child relationship	Barbarin et al., 2006; Cryer & Burchinal, 1997; Shlay et al., 2005
Peer relationships	Kim & Fram, 2009
Home school collaboration	Barbarin et al., 2006
Instructional	
Child-centered orientation	Gamble, Ewing, & Wilhelm, 2009
Academic emphasis	Fuller et al., 1996; Gamble, Ewing, & Wilhelm, 2009; Kim & Fram, 2009
School readiness component	Fuller et al., 1996; Gamble, Ewing, & Wilhelm, 2009
Play-based curriculum	Rose & Elicker, 2008
Diversity	Shlay et al., 2005
Cultural fit	Uttal, 1997

These characteristics range from concrete practical considerations to more educationally focused concerns. Not surprisingly, convenience factors such as program hours, location, transportation and cost are often cited by parents as key considerations for childcare and preschool (Barbarin et al., 2006; Johansen et al., 1996; Li-Grining & Coley, 2006). Research has also indicated that low-income families are more likely to consider aspects of care that affect daily life (cost, location, hours) than features related to positive child development (Early & Burchinal, 2001; Johansen et al., 1996; Peyton, Jacobs, O'Brien, & Roy, 2001). In one study parents who valued convenience factors were significantly more likely to choose care at home, relative or family day care which they likely view as more flexible and convenient than formal center care (Johansen et al., 1996).

In addition to practical aspects of care, parents also cite a wide variety of educational aspects of care that range from specific school policies to more amorphous requirements for caregiver personality characteristics. Structural indicators are one set of programmatic considerations that have been linked to program quality and increased child achievement (Pianta, Barnett, Burchinal, & Thornburg, 2009). These indicators describe explicit elements of program organization, management and training that create a supportive learning environment for young children. These elements include teacher-child ratios, teacher training and health and safety considerations, all of which have been cited by parents when describing quality or preferred preschool programs (Johansen et al., 1996; Kim & Fram, 2009; Rose & Elicker, 2008). Process indicators of quality are also cited by parents and early childhood researchers. These indicators describe interactions between the child, people and objects within the school settings and include child-teacher interactions, socialization with peers and staff responsiveness (Barbarin et al., 2006; LoCasale-Crouch et al., 2007). Research suggests that parents are very often interested in

aspects of the caregiving environment and caregiver characteristics. Teacher warmth, trustworthy staff and comfort with the atmosphere are highly valued (Gamble et al., 2009; Johansen et al., 1996; Rose & Elicker, 2008). Again retrospective reports suggest that parents who value comfort, supportive environment and relationship to the caregiver are more likely to choose relative or home care (Johansen et al., 1996; Li-Grining & Coley, 2006; McAllister, Wilson, Green, & Baldwin, 2005).

Beyond practical considerations and educational aspects of care, specific instructional environments or curricula have also been cited in past research (Gamble et al., 2009). Several studies have noted parents' preference for programs that emphasize school readiness and academic skills. (Bruckman & Blanton, 2003; Early & Burchinal, 2001; Fuller, Holloway, Rambaud, & Eggers-Pierola, 1996; Gamble et al., 2009; Rose & Elicker, 2008). Other parents emphasize a more child-centered approach to the classroom that favors child-directed learning, and encourages play-based classroom activities (Gamble et al., 2009).

Lastly, research indicates the importance of cultural sensitivity and diversity for certain groups of parents. Fit between parents' cultural background and the caregiving environment has been cited as important factor for low-income parents choosing care (Lowe & Weisner, 2004). Another study of low-income African American parents found that parents' definitions of quality child care did not include the type of facility, a characteristic that has been associated with varying child achievement outcomes (Gamble et al., 2009; Shlay et al., 2005). Instead, these parents equated quality programming with racial and economic diversity (Shlay et al., 2005). Collectively, these range of considerations identified in past research seriously question policies that assume that parents' considerations are universal and parallel to quality indicators identified by early childhood researchers and professionals.

In addition there is often a wide gap between parental preferences and the actual choices they have at their disposal (Rose & Elicker, 2008, 2010). Disadvantaged families often have more limited options than their higher income counterparts and may face considerable challenges in their quest to find quality childcare (Riley & Glass, 2002; Shlay et al., 2005). Low-income families are often not able to afford or access the high quality centers they prefer (Riley & Glass, 2002; Uttal, 1997). For these parents, there is an even greater need for early education programs to fit within previously established routines that allow for parental employment and family routines (Lowe & Weisner, 2004). These challenges may not be limited to low-income families. Many families, regardless of income, must limit their search to programs that align with work schedules and are located close to home or work and have open enrollment. As a result many families utilize child care arrangements that may not conform to their ideal preference (Barbarin et al., 2006; Fuller, Holloway, Rambaud et al., 1996; Morrissey, 2008; Rose & Elicker, 2010).

Collectively, these findings suggest that current policies are likely based on inaccurate and overly simplified estimations of parental knowledge, priorities and breadth of choices in regard to preschool. Empirical research on parents' decision making process and parents' actual criteria when considering preschool is critical when considering its relationship to early educational experiences and subsequent outcomes for children. Currently parents choose among programs that vary in terms of setting (public schools, private for-profit centers, family day cares, church or temple affiliated programs etc.), funding (state, federal, private non-subsidized), curriculum (High Scope, Montessori, mixture) and most importantly levels of quality (Barnett, 1995; Li-Grining & Coley, 2006; Pianta et al., 2009). These differences also have implications for children. Past research has consistently demonstrated that the type and quality of preschool program children attend has implications for future academic success (Barnett, 1995; Li-Grining

& Coley, 2006; Reynolds, Wang, & Walberg, 2003; Vandell et al.). Quality programming is essential for young children's development and there is considerable evidence that children who attend high quality centers are more prepared for school and have better academic outcomes than children in lower quality early education programs. (LoCasale-Crouch et al., 2007; Pianta et al., 2009; Reynolds, Wang et al., 2003; Tran & Weinraub, 2006). Thus, parents' considerations and eventual choice of preschool and pre-kindergarten programs may be a key determinant in children's subsequent development.

The current study seeks to build on past research and examine parents' decisions about pre-kindergarten within a developmental science framework. Findings could inform policy makers about parent needs, priorities and how these may differ based on family or child relationships. They could also suggest important areas for parent education that could instruct parents about the full range of options, identify quality centers, and better advocate for their children. Administrators and teachers could better tailor their programs to meet parents' needs and increase public awareness of features identified as desirable (Lara-Cinisomo, Fuligni, Ritchie, Howes, & Karoly, 2008). This knowledge could benefit children and optimize their preschool placement and subsequent early learning experiences. Preschool is often among children's first experiences with school and more formalized education. Demographic characteristics such as socioeconomic status, ethnicity and gender as well as children's school readiness skills and interests likely affect their preschool placement and future development (Burchinal & Nelson, 2000). Understanding more about how child and family characteristics relate to preschool placement and future development can provide information about potential interventions or areas of risk. Most importantly this study is among the first to place this decision making process within an overarching conceptual framework from developmental theory. This

comprehensive and theory driven approach provides structure and guidance regarding variables of interest and hypothesized relationships.

### **Transactional Ecological Approach**

The transactional ecological view of development provides a useful framework for examining complex, multilevel processes like parents' choice of preschool. This model moves beyond defining development as a simple interaction between the individual and the environment and instead views development as a series of bidirectional, interdependent relationships between individuals and the environment over time (Sameroff, 2009a, 2009c). In this view it is impossible to isolate the singular or main effects of either the individual or contextual factors since they are constantly interacting in dynamic and unique ways (MacKenzie & McDonough, 2009).

The transactional ecological model focuses attention on the child as an active participant in development, actively structuring and making sense of the world. In this framework, development is viewed as a result of a series of changes in the way that the child interacts with the environment. It is this series of transactions, the model asserts, that determine child outcomes (Sameroff, 2009a, 2009c). It is important to note that these changes can be beneficial or harmful, adaptive or maladaptive depending on the match between the child and the environmental demands (Sameroff, 2009b, 2009c). Child maturation, shifts in environmental influences or a combination of both may all initiate these changes. For example, the child's own maturation may alter the way he or she approaches the world. In turn the more mature child is able to grasp previously inaccessible environmental opportunities that spur further development and maturation. Beyond the interactions between the child and his or her immediate environment it is

also important to recognize that these transactions are occurring within a broader context. This context is best characterized by an ecological framework which organizes the broader environment by proximity to the individual.

Bronfenbrenner's bioecological approach provides a model of the environment that is well-suited for assessing multiple levels of influence that accompany transactions such as the transition to pre-kindergarten (Bronfenbrenner, Morris, Damon, & Lerner, 1998). This study will primarily focus on transactions occurring within families, with recognition that these transactions are located within a broader ecological context. First are factors that directly interact with the child. This immediate environment is known as the microsystem and includes families, schools and peers. Maternal warmth, for example, may influence children's responsiveness and subsequent development. Next, microsystemic factors interact at the mesosystem level, forming other relationships that directly and indirectly influence the child. A toddler's experiences or relationship with his or her older sibling may affect relationships with peers at day care and vice versa. A child's home language environment may have direct effects on his or her language and literacy development and indirectly influence the language development of other children in the same childcare center who are directly influenced by that child's language abilities. Next are more distal exosystem factors such as parental employment status that do not include the child but exert influence indirectly through more proximal processes. For example parents' work responsibilities and stress levels may affect their parenting behavior or alter their perception of how much time and energy they have for their child both of which may affect their child's development. Lastly broader community, social, and cultural factors form the most distal level of influence. These overarching sets of beliefs and practices socialize individuals and subsystems. For example, the high stakes testing culture that accompanied No Child Left Behind has had

profound indirect effects on children's early educational experiences and development through its influence on state policies with explicit emphasis on school readiness and increased availability of subsidized pre-kindergarten programs.

The current study characterizes parents' choice of pre-kindergarten as a series of transactions occurring within an ecological framework. Broader contextual factors, more proximal parental factors and characteristics associated with individual children all likely influence choice of preschool and subsequent child developmental outcomes. According to a transactional ecological approach, these relationships are not unidirectional but reciprocal. Just as cultural, family and child factors may influence choice of pre-kindergarten; the pre-kindergarten program a child attends may influence family beliefs and practices in addition to well-documented effects on children's development.

The transactional ecological approach allows for detection of these dynamic relationships between child, family and contextual characteristics. It also helps explain variability in choice considerations among low-income parents (Hirshberg, Huang, & Fuller, 2005). Though these groups share some important characteristics, variability is expected based on the distinct patterns and combinations of influences identified within a transactional approach. Lastly, the transactional ecological approach suggests concrete directions for intervention (Sameroff & Fiese, 2000a) in three main areas. First, children's behavior can be the target of remediation if it is the source of problematic family functioning. Next, parents' perceptions can be redefined to include more beneficial assessments of children's behavior. Lastly, broader elements of family beliefs and behavior can be affected through re-education (Sameroff & Fiese, 2000a). The same points of intervention are applicable for parent's choice of preschool. Children's behavior,

parental perceptions of child behavior or broader family routines and beliefs may all need to be addressed to help parents choose high quality centers and promote children's school readiness.

### **Variables of Interest**

The current study focuses attention on variables that are influential within a transactional approach and have been associated with parental choice in past research. Past work suggests that social class, ethnicity, childrearing beliefs, parent involvement and child abilities influence parents' decision making process and may help predict what kinds of programs they consider and choose. These factors and related research are discussed in order by proximity to children's development. The most distal factors (socioeconomic status, ethnicity) are discussed first due to their probable influence on more proximal factors. Next, family factors that influence children's development and decisions about preschool and pre-kindergarten are discussed. Lastly, child factors that influence how parents choose care are discussed.

The transactional approach views distal factors like socioeconomic status and ethnicity as exerting influence through a "cultural code". These influences broadly regulate behavior and beliefs for groups of individuals through laws, customs and mores (Fiese & Sameroff, 1992; Sameroff & Fiese, 2000a, 2000b). Ethnic or socioeconomic groups have varying levels and objects of shared meaning, traditions, and scripts for behavior. These "cultural codes" help to define and organize experiences and indirectly influence children's development through more proximal processes such as parent beliefs and family interactions. They transmit collective beliefs about children, families and childrearing that influence individual parents, children and decisions regarding preschool and pre-kindergarten.

Past research suggests that parents from different socioeconomic status groups may vary in terms of their considerations for early care and education. Though day to day practical considerations are valued by the majority of parents regardless of income or education, they are often particularly important for low-income parents. Parents who are under more economic stress prioritize convenience factors such as location, hours and cost and may be less likely or able to consider a broad range of centers and programs (Johansen et al., 1996; Li-Grining & Coley, 2006; Peyton et al., 2001). In contrast, higher income parents are more likely to cite developmental aspects of care (Barbarin et al., 2008), although there is evidence that low-income parents may also value certain developmental aspects of care such as comprehensive service provision (Barbarin et al., 2006).

These differences extend to beliefs regarding education and desired childcare setting. A national study found that more highly educated parents had higher expectations regarding their children's educational attainment and placed more importance on educational and structural aspects of childcare and preschool (Johansen et al., 1996). Research has retrospectively linked parents' choice of care with desired characteristics of care. Parents who valued convenience factors were more likely to have chosen care at home, relative or family day care which they viewed as more flexible and convenient than formal care (Johansen et al., 1996). Parents who valued comfort, supportive environments and knowing the caregiver were also more likely to have chosen relative or home care (Johansen et al., 1996; Li-Grining & Coley, 2006; McAllister et al., 2005). These findings coincide with evidence that low-income families are more likely to be in low quality centers and less likely to be in center-based care than their higher income counterparts (Reynolds, Wang et al., 2003). Despite this general trend in program quality, subsequent research has found considerable variation among low-income families (Hirshberg et

al., 2005). Family structure, language proficiency and marital status were all associated with child care selection patterns after controlling for socioeconomic status.

Ethnicity is another aspect of cultural code that may indirectly influence preschool choice. Past research has identified differential trends in and varying values based on ethnic group. Immigrants and Hispanic children are much less likely to be enrolled in preschool (Hernandez, Denton, & Macartney, 2007; Hirshberg et al., 2005) and Hispanic mothers in one study reported greater satisfaction with relative care (Buriel & Hurtado-Ortiz, 2000). There is also evidence that Puerto Rican and European American parents may have differing expectations regarding early education. Puerto Rican parents were more likely to cite academic and family oriented goals when discussing the purpose of preschool. European American parents were more likely to cite social-emotional goals and autonomy (Achhpal, Goldman, & Rohner, 2007). Another more recent study found ethnic differences for parents' definitions of program quality. Latinos were more likely than other ethnic groups to cite comprehensive service provision and concern about dual language development. White families were more likely to cite the emotional climate of the classroom. African American parents were more likely to cite home-school partnerships and close relationships with staff (Barbarin et al., 2006). More recent work, however, suggests that disparities in resources (income, education and job prestige) that are shared among ethnic groups may be more important than ethnic group membership per se (Fram & Kim, 2008).

The transactional concept of "family" code is also associated with the preschool or pre-kindergarten parents choose for their child. Family code is comprised of routines, stories, rituals and other interactions that help to communicate family beliefs, provide meaning, and help regulate behavior (Sameroff, 2009c; Sameroff & Fiese, 2000b). Family code reflects parental

characteristics, past experiences, and broader cultural influences. In this way family code helps to organize children's experiences (Sameroff & Fiese, 2000a). These codes create scripts of behavior and sets of beliefs that are reinforced by family routines and messages. It is at this level that behavior is organized and given meaning. Family codes can be separated into two categories: family beliefs and family practices. Parents and family members endorse messages about education and learning that affect children's development, influence parenting practices and shape their vision of appropriate early learning environments (Sameroff, 2009c; Sameroff & Fiese, 2000a). Previous research has demonstrated the importance of parental beliefs and representations. For example, a study of Michigan families found that maternal cognitions predicted later child behavior (MacKenzie & McDonough, 2009). Low-crying infants whose mothers perceived their behavior as negative went on to have worse outcomes than high crying infants whose mothers did not have a negative perception of that behavior (MacKenzie & McDonough, 2009).

Parents enter the preschool decision making process with certain values, beliefs and behaviors that inform their eventual choice (Hyson, Hirsh-Pasek, & Rescorla, 1990). Parents may differ in their expectations regarding child development, how children should be treated and beliefs about what constitutes an optimal learning environment. Past research has characterized these expectation and beliefs along a continuum of parental modernity (E.S. Schaefer & Edgerton, 1985). Parent with traditional beliefs endorse rigid and authoritarian treatment of children and prefer adult-directed learning. In contrast, parents with progressive beliefs endorse individualized treatment of children and child-directed learning. These beliefs have been linked to a number of child and choice outcomes that are important for the current study. In general, research suggests that progressive parenting is associated with increased child achievement and

traditional childrearing beliefs are associated with decreased child achievement (Campbell, Goldstein, Schaefer, & Ramey, 1991; E.S. Schaefer & Edgerton, 1985).

Childrearing beliefs have also been linked to the type of program children attend. Retrospective reports suggest that children with less traditional parents attend higher quality centers (Burchinal & Nelson, 2000) and that mothers with nontraditional beliefs about childrearing and gender roles utilize more hours of non-maternal care (Huston, Chang, & Gennetin, 2002). Mothers who view child rearing as an explicit process that improves school readiness were more likely to choose center based care (Liang, Fuller, & Singer, 2000). Collectively, these findings suggest that parental choice may mediate the relationship between parental beliefs and later child outcomes.

Parenting practices such as involvement at home and school are another important consideration when evaluating potential choice of preschool. A large scale longitudinal study found that parent involvement helped to mediate the effects of preschool experiences on later achievement (Reynolds, 1992). Parents whose children attended preschool tended to be more involved and this increased parent involvement sustained initial gains in achievement. This finding has been widely replicated with ample evidence that increased parent involvement is associated with positive child development and a greater mastery of early school skills (Farver, Xu, Eppe, & Lonigan, 2006; Henrich & Gadaire, 2007; Marcon, 1999; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004). Parent involvement at home and school may also be related to preschool placement. Parents who are heavily involved may be more likely to choose programs such as Head Start that encourage involvement and may place greater value on home-school collaboration and educational activities. This relationship is likely bidirectional with

children's participation in certain programs likely to affect subsequent levels of parent involvement.

Lastly children's individual and developmental differences must be included when assessing parents' considerations for pre-kindergarten within a transactional framework. As children mature, parents' perceptions and expectations change as well. Parents' choice of preschool program may reflect this shift in thinking as children near the transition to formal schooling. Whereas parents may perceive that babysitting is sufficient for infants and young toddlers, as children reach preschool age parents are more likely to endorse more educational programming (Fuller, Holloway, Rambaud et al., 1996; Rose & Elicker, 2010). Trends in early care and changes in parental values reflect this shift. Older children are much more likely to be in center-based child care and preschool than younger children (Early & Burchinal, 2001; Reynolds, Temple, & Ou, 2003), and parents of older toddlers are much more likely to report the benefit of center-based or educationally focused programs than parents of infants (Fuller, Holloway, Rambaud et al., 1996).

Children's skills and challenges may also affect their preschool placement. Parents whose children are especially proficient or deficient in certain areas may choose preschool programs that provide additional services or prioritize certain criteria (Early & Burchinal, 2001). Parents' perception of their children's school readiness and social emotional skills likely impact their choice of preschool and early care and influence their beliefs regarding important characteristics of preschool programs. In one recent study, parents who described their children as difficult or less proficient rated school readiness and curriculum as less important characteristics of care (Gamble et al., 2009). While no follow-up data were provided, these results suggest that parents unlikely to include considerations of care that are not relevant for their particular child. Lastly,

research indicates that children's affect and interests are associated with parents' choice of preschool and parenting practices. Low-income mothers in an ethnographic study discussed the importance of their child's satisfaction with the center and teachers as a primary consideration (Fuller, Holloway, Rambaud et al., 1996). Additional research has found that the effects of parent involvement on literacy skills are mediated by children's interest (Farver et al., 2006). Collectively, these findings demonstrate that decisions about early care and education represent a complex set of ongoing interactions among children, their families and contextual factors.

### **Research Goals and Hypotheses**

The current study reflects the present childcare atmosphere facing increasing numbers of parents. Currently parents in Georgia (and many other states throughout the country) may choose state or federally funded programs variable settings, providers and program characteristics. Past research has often relied on secondary analysis analyzed of large scale longitudinal studies (National Longitudinal Study 1972, NICHD Study of Early Care 1991, ECLS-B 2001) that may not reflect parent's concerns and beliefs in the current context. Georgia was among the first to offer state-funded preschool for all 4 year olds regardless of income or eligibility. The state funds preschool programs in a variety of settings including public schools, private for-profit centers and blended Head Start programs (Henry & Gordon, 2006). This project is among the first to examine parents' choices in this new early education landscape that offers multiple subsidized and non-subsidized choices.

The current study improves upon past research in several ways. First, the current study is among the first to examine parents' decision making process within a relevant theoretical framework. The transactional ecological approach provides an opportunity to examine the

complex series of interactions accompanying this process. In contrast to past research, the current study views parents' choices as a result of child characteristics, family code and cultural code. This approach also provides important direction regarding intervention for policymakers and practitioners. Though previous work that utilized the transactional ecological model has concentrated on child psychopathology and clinical implications the same applications are relevant within the context of parents' choice of preschool (Sameroff & Fiese, 2000a).

Secondly, all of the previously cited research concerning parents' considerations for early care is retrospective making it extremely difficult to imply causality or determine directionality. Parent reports may have been biased by their eventual decision and may have cited considerations that further justified their choice rather than their actual considerations prior to making this decision. In contrast the current study is the first prospective analysis of parents' decision making process regarding preschool. The sample is limited to parents whose children had not yet qualified for preschool at the time of the study and who were actively considering which preschool program to choose. Lastly, much of the past research is focused on parents' choice of childcare not preschool or pre-kindergarten. Parents' expectations and considerations as their child nears formal school entry may differ from expectations and considerations about childcare for their infant or toddler.

The current study conducted focus groups and survey research with parents to address the aims of: (1) identifying parents' considerations when choosing preschool programs for their children (2) developing a questionnaire to assess these choice considerations and (3) identifying cultural, family and child predictors of parent considerations for pre-kindergarten.

Specifically this study hypothesizes that:

1) Parents' considerations regarding pre-kindergarten cluster around four main categories reflected in past research: practical indicators, structural indicators, process indicators and educational considerations. Practical considerations include variables such as program location, hours, cost and program policies that influence daily life and family economics but are not indicative of program quality (Gamble et al., 2009; Lowe & Weisner, 2004; Rose & Elicker, 2008). Structural indicators of program quality include static features of programs such child-adult ratios, caregiver education, staff training, safety and accreditation (Barbarin et al., 2006; LoCasale-Crouch et al., 2007). Process indicators of program quality include a range of interactions among children and their childcare environment; examples include caregiver warmth and trustworthiness, teacher-child interactions, peer interactions, and teacher-parent communication (Barbarin et al., 2006; Gamble et al., 2009; Johansen et al., 1996; Rose & Elicker, 2008). Lastly instructional characteristics describe the classroom atmosphere and guiding philosophy, examples include academic or didactic instruction, play-based curriculum and child-centered curriculum (Fuller, Holloway, & Liang, 1996; Gamble et al., 2009; Kim & Fram, 2009; Rose & Elicker, 2008).

2a) Family codes, communicated through parent beliefs and behavior, are associated with parents' considerations for pre-kindergarten. Specifically, parents with traditional beliefs about childrearing are more likely to choose care based on instructional considerations. Previous research suggests that traditional parents are more likely to emphasize academics and didactic instruction (E.S. Schaefer & Edgerton, 1985). In contrast, parents with progressive beliefs about childrearing are more likely to utilize both practical and process indicators when choosing care. Previous research suggests that progressive parents are more likely to endorse practical considerations (Rose & Elicker, 2008) of care such as cost and location. Based on their belief

about the importance of individuality and child-directed learning, progressive parents are also more likely to endorse process indicators such as classroom climate, peer interactions and individual teacher-child relationships (E.S. Schaefer & Edgerton, 1985).

2b) In addition to beliefs, parent involvement is positively related to educational aspects of care (structural, process and instructional indicators). Parents who exhibit home practices such as reading to their child or who participate in classroom activities are more likely to endorse educational aspects of care. Past research suggests that parents who exhibit these behaviors are more likely to enroll their children in formal, center-based care (Fuller, Holloway, & Liang, 1996; Liang et al., 2000).

3a) Child characteristics are associated with what their parents consider is important for pre-kindergarten. The transactional model asserts that children's maturity, strengths and challenges predict the indicators that parents value when choosing a preschool program. Specifically children's age is predictive of educational indicators (structural, process and instructional indicators) of care. Children's increasing maturity and age positively influence parental perceptions about their ability to benefit from educationally focused programming. Past research suggests that parents are more likely to consider and value educational aspects of care as their children near preschool age (Early & Burchinal, 2001; Fuller, Holloway, & Liang, 1996; Reynolds, Temple et al., 2003).

3b) In addition, parent-rated child school readiness and social skills are hypothesized to be associated with instructional characteristics. Past research suggests that parents who rate their child as difficult or less proficient rate instructional characteristics as less important (Gamble et al., 2009). Transactional theory asserts that parents who perceive their child as less ready or social skilled may be less likely to emphasize instructional characteristics of care that may not be

relevant or especially beneficial for their child. In contrast, parents who give their children higher ratings on school readiness and social skills may be more likely to capitalize on those skills and emphasize instructional aspects of classroom.

4) Cultural code is associated with parental preschool considerations through family code such that socioeconomic status and ethnicity indirectly predict parental considerations through their more proximal effect on parent childrearing beliefs and parent involvement. Transactional theory emphasizes this hierarchical set of influences and suggests that broader cultural codes assert their influence through more proximal family code such as parent beliefs and behavior. Past research suggests that low socioeconomic parents are less likely to cite educational aspects of care than their higher income counterparts (Peyton et al., 2001; Rose & Elicker, 2008).

5) In addition to the mediational hypothesis, socioeconomic status and ethnicity are hypothesized as moderators of the association between child characteristics and parental considerations for preschool. The ecological approach suggests that relationships may differ based on broader cultural factors. Low-income and minority parents may respond differently to their children's school readiness and social skills. Past research has demonstrated that low-income parents are more likely to cite academic indicators of care than their higher-income counterparts (McAllister et al., 2005). A transactional approach suggests this relationship may be influenced by child characteristics and may be accentuated for highly skilled children.

## **METHODOLOGY**

The current study consisted of two main phases of activities. The first phase included a series of focus groups and interviews. Information obtained during the focus groups and interviews was then used to inform creation of a survey measure (Preschool Placement

Questionnaire) designed to capture parents' considerations and values when choosing pre-kindergarten for their child. This measure was included in a survey given to parents in the second phase of the study. During the second phase of the study, parent participants completed a questionnaire that included a variety of measures assessing family, child and parent characteristics.

### **Phase I: Focus Groups and Interviews**

**Participants and procedure.** The total focus group sample included 12 parents (10 mothers, 2 fathers) of preschool-aged children in the Atlanta metropolitan area. Recruitment targeted parents whose children would qualify for state-funded pre-kindergarten the following year (Fall 2010; turned 4 years of age between September 1, 2009 and September 1, 2010). This sampling method was used to identify and include parents who were actively considering pre-kindergarten programs for the next year so that parent responses reflected prospective attitudes and beliefs regarding this decision. In addition to this criterion there was also an effort to recruit parents who varied in terms of socioeconomic status.

The focus group method was chosen for several reasons. First this method allows for culturally sensitive research and inclusion of a broad range of ideas and beliefs from parents of varying backgrounds. Subsequent analysis of group responses can help to identify knowledge that is shared among certain groups, pertinent to specific individuals or fairly universal (Creswell, 2007). Secondly the questions are purposely open-ended and allow parents to express their own ideas and beliefs instead of a researcher's pre-conceived ideas. Previous research suggests that parents' ideas and language may differ from the language used by researchers and

professionals (Gamble et al., 2009; Shlay et al., 2005). Lastly focus group data can be used to inform the content and forma of quantitative methods such as survey items or response scales.

Parents from two different settings were included in the focus groups. The first setting included parents whose children attended a church-affiliated child development center that serves mainly middle and upper-income parents who are highly educated. Four parents from this setting participated in the study. A Head Start Center, where parents must qualify for services for their child based on family income, was the second setting. Eight parents from this setting participated in the study.

After agreeing to help recruit parents, center directors at each of the two settings helped identify parents who met the inclusionary criteria for the study. All of these parents received a description of the study and an invitation to participate. Of the approximately 50 parents who received these letters, 12 agreed to participate in focus groups between July 2009 and February 2010. Though focus groups were the intended method, parental time constraints necessitated the inclusion of interviews with smaller groups of parents or single participants. This resulted in seven overall sessions with parents, two of which were focus groups and four which included one to two parents.

Both focus groups and interviews were led by the researcher and followed a similar procedure. All sessions were audio-taped for future transcription of parent responses. The researcher began the session by introducing herself and providing a short explanation of the study. Participants were advised to exclude their names or any identifying information. Participants were then asked to provide a short introduction that includes how many children they have and their ages. The researcher then began the series focus group questions (Appendix A). The researcher or a research assistant took notes during the entirety of the focus groups,

making note of nonverbal exchanges and additional contextual information. At the end of the session there was another opportunity for participants to share additional information or views that were not addressed in the focus group session. Sessions lasted between 20 minutes (Interview with one parent) and 1.5 hours (focus group with four parents). The audio recordings were then transcribed and resulted in approximately 30 pages of written material and 15 pages of notes and memos.

**Instruments.** Parents were asked a series of questions about their child's child care experiences, beliefs about early education and potential decision making process regarding pre-kindergarten (see Appendix A for a complete set of focus group questions). These questions served as a guide for the researcher with flexibility in terms of the order of topics, insertion of relevant follow-up questions and feedback from participants.

## **Phase 2: Parent Survey**

Phase 2 of the study utilized information from focus groups and interviews to further categorize parent considerations and identify cultural, family and child predictors of those considerations. Over 200 parents from 20 child care centers completed a survey that asked about their beliefs, involvement in their child's education, perceptions of their child's development and the considerations they included when choosing a pre-kindergarten for their child.

**Participants and procedure.** Centers were identified through a search of childcare programs on the Georgia Department of Early Care and Education website that provides a list of all metro Atlanta centers registered with the state department. The search was restricted to centers that served preschool-aged children (i.e., three-year olds) and did not offer state-funded pre-kindergarten programming for four-year-olds (though many did offer pre-kindergarten at a

cost to parents). Trained research assistants contacted center directors by mail, email and telephone and provided information about the study that included details regarding parent recruitment and study participation. Of the list of approximately 75 centers contacted, 17 agreed to be part of the study. Thirteen centers, all private for-profit, refused to participate. Several of these programs were housed within larger school settings and required several levels of administrative permission. Other centers ( $n = 3$ ) indicated that they were quite busy but were interested in participating in the study at a later date. Administrator turnover, sick leave and pregnancy leave hampered our efforts at another group of centers ( $n = 6$ ). The remaining centers never returned phone or email messages ( $n = 36$ ).

In addition to the centers identified through the website, three Head Start Centers were also referred by a local agency that supervises a number of childcare and Head Start Centers in the Atlanta area. In contrast to the other centers, state-funded pre-kindergarten programs were available at the three Head Start centers. All other centers offered services for 4 year olds but none of these programs were subsidized by state funds. The final sample included 20 centers in various settings (religious, Head Start, private for-profit, YMCA) that served parents and children from a variety of backgrounds (See Table 2.1). Children in Head Start qualified for services based on family income. As a result, parents from these centers were considered low-income. Within the remaining centers, income and education was mostly homogenous but differed greatly between centers. Parents at one church affiliated center in a high income area of Atlanta were all college graduates and made over \$60,000 a year. At another center no parents had above a high school degree and most earned \$20,000 or less annually. In terms of for-profit sites, the weekly rates ranged from \$115 per week for a full time program (6:30 AM to 6:00 PM) to \$530 per week for a half day program (9:00 AM to 2:00 PM). Comprehensive services for

families were available at all Head Start sites. Transportation was offered for a fee at eight of the centers.

Table 2.1			
<i>Summary of Participating Centers</i>			
Type of Center	Centers <i>N</i> = 20	Parents <i>N</i> = 203	Percentage Total Sample
Religious	8	61	30.0%
Head Start*	3	96	47.3%
Private for-profit	8	42	20.7%
YMCA	1	4	2.0%
Center	Cost	Hours	Transportation
Religious			
Second Ponce	\$200.00	6:30 AM to 6:30 PM	
Seeds of Faith	\$140.00	6:30 AM to 6:30 PM	Yes
Wieuca Baptist Church	\$530.00	9:00 AM to 2:00 PM	
Haygood	\$395.00	9:00 AM to 12:00 PM	
Praise Mountain	\$120.00	7:30 AM to 6:30 PM	
Peachtree Lutheran	\$200.00	8:00 AM to 2:00 PM	
The Temple	\$152.00	9:30 AM to 1:30 PM	
Open Arms Lutheran	\$226.00	7:00 AM to 6:30 PM	
Head Start			
East Point Sheltering Arms	Free (\$85)**	6:30 AM to 6:30 PM	Yes
Oakley Sheltering Arms	Free (\$85)**	6:30 AM to 6:30 PM	Yes
Academies South Dekalb	Free (\$85)**	6:30 AM to 6:30 PM	Yes
Private for-profit			
Suzuki Buckhead	\$358.00	7:00 AM to 6:00PM	
Suzuki Northside	\$358.00	7:00 AM to 6:00PM	
Agape Unlimited	\$120.00	7:00 AM to 7:00 PM	Yes
Watch Me Grow	\$125.00	6:00 AM to 12:00 AM	Yes
Children First	\$115.00	6:30 AM to 7:00 PM	Yes
Auntie Sheree	\$130.00	6:30 AM to 6:30 PM	Yes
LoveJoy Academy	\$115.00	6:30 AM to 6:30 PM	
Taylor's Personal Care	\$130.00	6:30 AM to 6:00 PM	
YMCA			
Arthur Blank YMCA	\$150.00	6:30 AM to 6:30 PM	Yes
<i>Note.</i> Numbers of participants at each center are excluded to maintain confidentiality			
Cost = cost per week, Hours = M-F			
*One Head Start program was located within a YMCA center			
** \$85 for care before and after school			

Selection criteria were designed to target parents who were actively considering pre-kindergarten programs for the next year so that parent responses reflected prospective attitudes and beliefs regarding this decision. In most cases center directors and staff helped to identify classrooms and parents who met this criterion. Since recruitment began in the late spring two waves of recruitment were utilized. Wave 1 recruitment occurred in late Spring and early Summer 2010 and targeted parents who had children who would qualify for state-funded pre-kindergarten in Fall 2010 (turned 4 years of age between September 1, 2009 and September 1, 2010). Wave 2 recruitment commenced in Fall 2010 and targeted parents who had children who would qualify for state-funded pre-kindergarten in Fall 2011 (turn 4 years of age between September 1, 2010 and September 1, 2010).

203 participants were recruited during the two waves of recruitment (Wave 1 = 94, Wave 2 = 109) (see Table 2.2).

Table 2.2

*Individual Parent Characteristics*

Characteristic	Parents	Percentage
Gender	(N =203)	
Female	188	92.6%
Male	15	7.4%
Ethnicity	(N = 203)	
American Indian	2	1.0%
Asian or Pacific Islander	6	3.0%
Black	123	60.6%
Hispanic	3	1.5%
Multiracial	8	3.9%
White	60	29.6%
Other	1	0.5%
Nativity	(N = 200)	
United States	175	86.2%
Outside U.S.	26	12.8%
Education	(N = 203)	
Less than high school	3	1.5%
High school graduate	28	13.8%
Some college, associates degree	62	30.5%
College graduate, bachelor's degree	49	24.1%
Some graduate school	6	3.0%
Professional or graduate degree	55	27.1%
Annual Household Income	(N =198)	
Less than 20,000	52	25.6%
20,000-29,999	27	13.3%
30,000-39,999	18	8.9%
40,000-49,999	9	4.4%
50,000-59,999	6	3.0%
Over 60,000	86	42.4%

*Note.* Total respondents (N) listed for each characteristic.

The vast majority of respondents ( $n = 188$ ) were mothers. The remaining fifteen participants were fathers. On average participants were 36 years old with wide variability in parent age (21 to 58 years of age). The ethnically diverse sample included 123 Black participants, 60 Caucasian participants, eight participants who identified as multiracial, six Asian Pacific Island participants, three Hispanic participants, two American Indian participants and one African participant. 15% of parents indicated they had a high school education or less, 55% of the same had an Associates or Bachelors degree and some college experience. The remaining 30% had some form of postgraduate education. The same variation was evident in annual household income. 40 % of the sample reported less than \$30,000 annually, 18 % made between \$30,000 and \$60,000 and 42 % reported more than \$60,000 annually.

Parents also reported information about their preschool-aged child (see Table 2.3). Mean child age was between four and five years of age ( $M = 45.4$  months,  $SD = 7.54$ ). The sample was evenly divided among girls ( $n = 100$ ) and boys ( $n = 96$ ). Seven participants did not provide information about their child's gender. 55 children were only children at the time of the study, 27 had younger siblings and 117 had older siblings or both older and younger siblings.

Table 2.3

*Individual Child Characteristics and Child Care History*

Characteristic	Children	Percentage
Gender	(N =196)	
Female	100	49.0%
Male	96	51.0%
Ethnicity	(N = 203)	
American Indian	5	2.5%
Asian or Pacific Islander	5	2.5%
Black	122	60.1%
Hispanic	4	2.0%
Multiracial	12	5.9%
White	54	26.6%
Other	1	0.5%
Nativity	(N = 199)	
United States	195	98.0%
Outside U.S.	4	2.0%
Siblings	(N = 199)	
Only child	55	27.6%
Older siblings	81	40.7%
Younger siblings	27	13.6%
Older and younger siblings	36	18.1%
Enrollment current center	(N = 198)	
Less than 1 year	46	22.7%
1-2 years	83	40.9%
3 + years	69	34.0%
Previous childcare setting	(N = 197)	
Home with parent	73	36.0%
Home with relative	14	6.9%
Home with non-relative	20	9.9%
Out of home with relative	8	3.9%
Out of home with non-relative	4	2.0%
Family day care	12	5.9%
Child care center	42	20.7%
Combination settings	24	12.2%

*Note.* Percentages reflect reported child characteristic divided by total parent respondents

Once identified, parents received information about the study through a flyer sent home with their child. This flyer contained details about the study, opportunities to participate and incentives. Parents were advised that they could participate in the study in two ways: 1) Complete the survey on site at their child's center on a designated date or 2) Bring a copy of the survey home to complete and return it to their child's center at a later date. In the middle of the study additional funding became available for participant incentives. This funding was used to purchase books for preschool-aged children, and beginning June 2010 parents were advised that they would receive book upon completion of the study.

Active signed consent was obtained from all participating parents. Survey collections at the center were scheduled during times of convenience and most often occurred during morning drop-off or afternoon pick-up. Parents who completed the survey at home were advised to seal and sign the envelope containing the survey to ensure confidentiality and return the envelope to designated boxes at their child's center. There was no indication that any of these surveys had been opened or tampered with by center staff.

**Instruments.** The 152 item survey (See Appendix B for full survey instrument) included eight measures that asked about parents a variety of questions about their background, their child's background, child care history and school readiness skills, their involvement in educational activities, beliefs about childrearing, and considerations for pre-kindergarten programs. Each of these measures and corresponding variables are each discussed in greater detail.

***Participant and child background and cultural characteristics.*** Background characteristics were evaluated by a short demographic survey. Parents provided information

cultural characteristics (ethnicity, education, and annual household income), the age and birth order of the child that would be attending pre-k in the next year and birth. Based on these responses codes were created in order to represent variables of interest. The following section includes each code and a brief definition of the construct it represents.

*White.* Parent ethnicity was coded as a contrast between parents in the majority group (white parents = 1) and those in a minority group (American Indian, Asian/Pacific Islander, Black, Hispanic, Multiracial and African = 0).

*SES.* Based on the high correlation between parent education and income (Spearman's  $\rho = .80, p < .001$ ) these two scores were combined to create a composite socioeconomic variable (SES). Education level (1 = less than high school to 6 = graduate degree) and income (1 = 20,000 or less to 6 = Over 60,000) were summed to create this score for each parent. Scores were treated as continuous and ranged between 2 and 12. Higher scores indicated higher levels of education and greater annual income and lower scores indicated lower levels of education and income.

*Child Age.* Child's age reflects each child's age in months on the date parents completed the survey.

*Only Child.* Only child was coded as a contrast between children who were the only child (1) in their family when parents completed the survey and those who had siblings (0).

*Preschool Choice.* Preschool Choice was evaluated by the Preschool Placement Questionnaire, a survey created for this study. For each of the 28 items, parents indicated how much it would affect their decision when choosing pre-kindergarten for their child (will not affect = 1, will probably not affect = 2, may or may not affect = 3, will probably affect = 4, will

definitely affect = 5). Though missing values constituted less than 10% of responses, the EM algorithm was used to maximize information from the data and impute missing values (Floyd & Widaman, 1995; Widaman, 2006). Exploratory factor analysis identified two latent constructs of care: Quality Consideration, Practical Considerations. See the Results section for a description of the subscales.

***Parental ideas about raising children.*** Parental ideas about raising children were evaluated by the Parental Modernity Scale of Child Rearing and Educational Beliefs (PM). The Parental Modernity Scale was originally created for use as part of the NICHD Study of Early Care and has been used in numerous longitudinal datasets including the Early Head Start Research and Evaluation Project and the Head Start Family and Child Experiences Survey (FACES) and related publications (Burchinal & Nelson, 2000; Zill, Collins, & West, 1995). The PM is a 30 item survey that measures traditional authoritarian and progressive democratic beliefs of parents (E.S. Schaefer & Edgerton, 1985). These attitudes are reflected in two subscales: Progressive Beliefs (favor self-directed child behavior) and Traditional Beliefs (adult directives should guide child behavior) which can be summed for a total scale score. Each item is rated on a 5 point scale from 1 = strongly disagree to 5 = strongly agree. The scale was validated for use among a diverse subset of parents in the NICHD Study of early care with adequate internal consistency (Cronbach's  $\alpha = .69$  for Progressive Beliefs,  $.85$  for Traditional Beliefs and  $.87$  for Total Beliefs, *(Phase I Instrument Document, 2008)*

***Traditional beliefs.*** Traditional belief scores reflect each parent's mean response to each of the twenty items that describe traditional childrearing beliefs. Parents mean agreement with

each of the twenty items that describe traditional childrearing beliefs. Higher scores indicate more traditional childrearing beliefs. Cronbach's  $\alpha = .91$  for the current sample.

*Progressive beliefs.* Progressive belief scores reflect each parent's mean response to each of the six items that describe progressive beliefs. Higher scores indicate more progressive childrearing beliefs. Cronbach's  $\alpha = .68$  for the current sample.

*Parent involvement.* Parent involvement was evaluated by the *Parents Involvement in School Experiences Scaled (PICES)*. The PICES (Fantuzzo, Tighe, McWayne, Davis, & Childs, 2003) is a 33 item measure with three internally consistent parent dimensions: Supportive Home Learning Environment, Direct School Contact and Inhibited Involvement (Cronbach's  $\alpha = .87, .75, .73$  for the three subscales; (Fantuzzo et al., 2003). This instrument asks parents about their child's home learning environment (Example item: I buy educational materials for my child), contact with their child's school (Example item: I create opportunities to get to know my child's teacher) and possible barriers to involvement (Example item: I have a tight schedule and do not have time to talk with other parents).

*Home support.* Home support reflects how often parents engage in educational activities at home with their child (never =1, sometimes = 2, often = 3, always = 4). Mean response on 16 items was calculated for each parent. Higher scores indicate more involvement in home activities. Cronbach's  $\alpha = .86$  for the current sample.

*School support.* School support reflects how often parents participate in activities at their child's center or school (never =1, sometimes = 2, often = 3, always = 4). Mean response on 6 items was calculated for each parent. Higher scores indicate more involvement in school activities. Cronbach's  $\alpha = .69$  for the current sample.

***Children's social emotional skills and behavior problems.*** Children's social emotional skills and behavior problems were evaluated by the Your Child's Behavior rating scale originally adapted for the Head Start Family and Child Experiences (FACES) Survey (Zill et al., 1995). This scale asks parents to rate how often their child engages in prosocial and/or problem behavior. Seven items assessed children's prosocial and positive approaches to learning were adapted from the *Social Skills Rating Scales* (Eliot, Gresham, Freeman, & McCloskey, 1988) (Example item: Accepts friends' ideas in sharing and playing? ) were combined with twelve items adapted from the *Child Behavior Checklist* (Achenbach, 1992) that asked about children's aggressive hyperactive, anxious or depressed behavior. (Example item: Doesn't get along well with other kids?) Parents rated how well seven statements described their child's usual behavior over the past month on a three point scale (not true = 0, sometimes or somewhat true = 1, very true or often true = 2) Both these measures have been validated among nationally representative populations and have demonstrated adequate internal consistency (Achenbach, 1992; Eliot et al., 1988).

***Social emotional skills.*** Social emotional skills reflect mean parental ratings of how often children exhibit developmentally appropriate behavior. Higher scores reflect more social emotional skill. Cronbach's  $\alpha = .71$  for the current sample.

***Problem behavior.*** Problem behavior scores were created by calculating parent's average rating on items that describe problematic behavior. Higher scores reflect more exhibit problem behaviors. Cronbach's  $\alpha = .70$  for the current sample.

*Children's school readiness.* Children's school readiness was evaluated by the Developmental Accomplishments Scale originally created for the Head Start Faces Survey (Zill et al., 1995). This 17 item scale asks parents to rate children's developmental accomplishments and difficulties including fine motor skills, speech, emerging literacy and emerging mathematics skills. (Example item: How high can your child count?). This measure was adapted from a school readiness measure used in the 2007 National Household Education Survey with four additional items added (number recognition, name recognition, counting and liking to write) for the Head Start FACES study. The scales were validated among a nationally representative sample with adequate internal consistency demonstrated (median Cronbach's  $\alpha$  for all items = .65 (Zill et al., 1995).

*Literacy and numeracy skills.* Children were given a score of correct (1) or incorrect (0) on each of the following skills (identification of all primary colors, tells connected stories when pretending to read, counts to 20 or more, writes name, recognizes most or all of the letters in the alphabet). Mean parental response to these five items was calculated for each child. Higher scores indicate greater literacy and numeracy skills. Cronbach's  $\alpha$  = .54 for current sample.

## **RESULTS**

### **Identifying Parental Considerations**

The project's first main aim (identifying parents' considerations when choosing preschool programs for their children) was accomplished with analysis of focus group and interview responses. All focus groups and interviews were audio-recorded and transcribed by trained research assistants. Qualitative content analysis was utilized to examine parent responses (Kolhbacher, 2006; Mayring, 2000; Richards, 2005). This approach provided a guideline for

thematic analysis of the transcripts and allowed for examination of both manifest and latent content, which seemed particularly appropriate for identification of parents' considerations, barriers and the underlying belief systems that accompany those concerns. Past research related to parents' considerations was used to help formulate a criterion definition that dictated which segments of the transcripts were initially coded. Based on these past findings and the specific research questions, the present study analyzed parent responses to the following five questions:

- 1) How did you choose day care?
- 2) Were you able to send your child to your first choice?
- 3) What are key considerations when looking at preschools?
- 4) Are there any features of a preschool program that are important for your child in particular?
- 5) How would you describe the perfect preschool for your child? Do you think that will happen?

First a complete list of considerations cited in response to the above questions was created by reading through the transcripts several times (Table 3.1). This list included 39 considerations and 12 barriers (negative aspects of a center).

Table 3.1

*List of Factors and Barriers*

Factors	Barriers
1. Recommendation (professional, personal)	1. Waitlist
2. Continuity-same childcare	2. Cost
3. Continuity-elementary school	3. Transportation
4. Child-teacher interaction	4. Child's age (too little)
5. Teacher turnover	5. Not accredited
6. Teacher dedication	6. Poor staff attitude
7. Administration/Administrators	7. Poor administrators, leadership
8. Facilities	8. Poor organization, no structure
9. Curriculum	9. Safety issues
10. Review process	10. Irresponsible staff
11. Teacher availability	11. Dirty
12. Parent-teacher communication	12. Bad, unsafe location
13. Teacher demeanor (happy, positive, kind, patient)	
14. Teacher responsibility (care, attentiveness)	
15. Confidence in teachers	
16. Quality of program	
17. Safety, security	
18. Socialization	
19. Field Trips	
20. School readiness	
21. Learning	
22. Approach	
23. Transportation	
24. Cost	
25. Ease transition to kindergarten	
26. Bilingual (respect ELL kids)	
27. Schedule	
28. Food	
29. Cleanliness	
30. Location	
31. Hours	
32. Accreditation (NAEYC)	
33. Siblings already attend center or school	
34. God	
35. Diversity	
36. Personal relation to staff	
37. Speech therapy	
38. Teacher attention to home/family problems	
39. Lose fear of school	

Next, following the guidelines set by Mayring (2000), this list of categories and the context in which parents discussed their importance shaped the transformation of the initially broad category (parent considerations) into more specific themes. This feedback loop was repeated several times resulting in a detailed coding guide with five main categories that accounted for parents' considerations. Parents' responses were then coded in Atlas-ti 6 using both manifest and latent content into the following categories: practical factors, educational factors, safety and health factors, teacher and personnel factors, and child-directed factors (Mayring, 2000; Richards, 2005). Particularly exemplary parent descriptions were also coded as parent language in order to provide additional support for these categories (Table 3.2).

Table 3.2

*Coding Guide for Focus Groups*

<b>Category</b>	<b>Definition</b>	<b>Example</b>	<b>Coding rules</b>
Practical	Include parent's discussion of factors such as location, cost and hours that make a center a convenient or inconvenient option for their family and child.	"God led me here otherwise I wouldn't have been able to afford it for my child"	Includes cost or subsidized care.
Educational	Include parent's discussion of educational aspects of the center such as the curriculum, a NAEYC accreditation or center quality.	"Well prior to having a nanny we went to another daycare and we were somewhat nuts about um credentialing"	
Safety and health	Considerations related to safety, security, nutrition, cleanliness	"It needs to be light and clean, not dark or scary"	
Teacher and personnel	Desirable or undesirable teacher traits or interactions	"we know the woman who is with xxx now is going to change to pre-k. We feel really confident about her"	
Child-directed	Considerations about centers that are specific to a particular child's needs	"So my child has a speech problem and they pay more individual attention to check his progress."	These may overlap with other categories.
Parent language	Exemplary parent quotes	"It was almost a no-brainer for us. We didn't to put a whole lot of thought into it."	Include quotes, parent descriptions of considerations in past research in their own language

Parents' considerations were very similar to those identified in past research. Comparison of the categories and concerns found in past research (Table 1.1) and those identified in this study (Table 3.1) revealed considerable overlap. Four of the five main categories (convenience, educational, safety and health, personnel) of parent considerations replicated findings from numerous studies with various groups of parents. The last category, child-directed factors, had not been identified as a separate category in past research, but seems related to educational and quality aspects of care (structural, process). This category included responses to the question "Are there any features of a preschool that are important for your child in particular?" so parents were explicitly prompted to consider child-directed factors. Many of these considerations focused on specific contexts or characteristics of programs that would improve a perceived issue with their child. Parents, especially parents of only children, described the importance of socialization and peer interaction to improve their child's social skills.

**Development of the measure (Preschool Placement Questionnaire).** These findings were used to develop a questionnaire for the second phase of the study. A review of past research identified a variety of approaches when examining parents' considerations when choosing early childcare and education (Fram & Kim, 2008; Fuller, Holloway, & Liang, 1996; Fuller, Holloway, Rambaud et al., 1996; Gamble et al., 2009; Hirshberg et al., 2005; Johansen et al., 1996; Kim & Fram, 2009; Li-Grining & Coley, 2006; Liang et al., 2000; Lowe & Weisner, 2004). The majority of studies asked parents to rate or rank a list of considerations. Parents have also been asked to rate the likelihood of choosing care in a series of vignettes. Lastly interviews with parents have also been used to identify concerns with childcare and considerations when

choosing care. After consideration of all these approaches a rating system was chosen for the present study. The present study was interested in quantifying parents' current decisions and actual considerations not their reactions to vignettes which describe fictional settings. In contrast to rankings, this approach allowed parents to rate multiple considerations as equally important while still allowing for comparison between items.

The questionnaire that was developed in this phase, the Preschool Placement Questionnaire (PPQ), assesses parent ratings on a number of characteristics of pre-kindergarten programs (see Appendix B for complete measure). For each item parents were asked to indicate how much each of the 28 characteristics will affect their choice of pre-kindergarten (1 = will not affect, 2 = will probably not affect, 3 = may or may not affect, 4 = will probably affect, 5 = will definitely affect). Items were chosen based on past research and focus group findings. An effort was made to include considerations that had been cited in three or more studies among diverse groups of parents (program hours, location, cost, child-teacher ratios, school readiness math, reading, transition to kindergarten, staff warmth, education, welcoming environment, safety, socialization, sick policies). In addition, seven items were added based on focus group responses (accreditation, food, communication with parents, cleanliness, low turnover, leadership, reputation). These items were mentioned multiple times during focus groups and interviews and all had been cited in past research. Because this study was interested in cultural beliefs and ethnic differences, three additional items asked parents about diversity. Lastly two items were added based on differences among the specific group of centers included in this study (transportation, religious education). The questionnaire concluded with an additional open-ended question that asked parents to write-in any additional considerations that were not addressed in the preceding items. The comprehensiveness of items was confirmed by the very small

percentage of parents (6%) that had concerns beyond those identified in the questionnaire. These additional concerns included language immersion, B.A. requirements for teachers, special needs programming, field trips, attention to hygiene and religious concerns.

**Identification of latent factors.** Exploratory factor analysis (EFA) was used to identify latent constructs within the Pre-Kindergarten Placement Questionnaire. These constructs could were then compared with the four hypothesized categories (practical considerations, structural indicators of quality, process indicators of quality and educational concerns). Common factor analysis was performed on the 28 PPQ items. In contrast to other exploratory methods, common factor analysis is particularly useful for identifying underlying constructs that explain variance in survey responses (Floyd & Widaman, 1995). It is especially useful for identifying factor structures within newly created surveys such as PPQ (Floyd & Widaman, 1995). A promax rotation, which allows for a relationship between factors, was utilized due to the possibility of overlap between the four hypothesized factors.

Next, parallel analysis, a more rigorous alternative to analysis of scree plots or comparison of eigenvalues, was employed to help to determine non-trivial factors (Hayton, Allen, & Scarpello, 2004). In contrast to other methods of factor retention, parallel analysis helps to limit overestimation of factors due to sampling error by comparing eigenvalues from the actual data with average and 95<sup>th</sup> percentile eigenvalues from 100 randomly created samples with identical numbers of participants and variables. Raw data eigenvalues that are larger than those from the random data sets are considered nontrivial. In contrast to the hypothesized 4 categories of care only three factors had raw data eigenvalues that fulfilled this requirement (Table 3.3).

Table 3.3

*Parallel Analysis Eigenvalues*

Factor	Raw data	Mean	95th percentile
1	18.54	0.91	1.03
2	1.16	0.79	0.87
3	0.91	0.7	0.78
4	0.57	0.63	0.7

*Note*. Factors with real data eigenvalues > average or 95% are considered non-trivial. First 3 factors meet this criteria, Factor 4 does not. All additional raw data eigenvalues are less than the random mean and percentile eigenvalues factors (Factors 5 - 28).

As suggested by Hayton and colleagues (2004), theory and other methods of factor retention were consulted following parallel analysis to further trim the solution. Examination of the scree plot demonstrated considerable drop-off from the first factor but little differentiation among remaining factors. Subsequent inspection of the factor solution and additional retention methods suggested that the third factor should be eliminated. Only three items had factor loadings of above .40 on this factor and two of those items co-loaded onto other factors. The Kaiser method, which includes factors with eigenvalues greater than one, would not include the third factor. Based on this evidence the third factor was eliminated and a two factors solution was specified.

Two factors were specified based on the previously discussed retention criteria and accounted for over 72% of the variance in PPQ ratings (Factor 1 = 66.9%, Factor 2 = 5.5%). Items with factor loadings above .40 were deemed significant (See table 3.4). The two scales were highly correlated ( $r = .70, p < .05$ ).

Table 3.4

*Pattern Matrix Factor Loadings*

Item	Factor 1	Factor 2	Communalities
Close to home or work	<b>0.41</b>	0.24	0.37
Accredited	<b>0.72</b>	0.09	0.62
Teaches early reading	<b>0.73</b>	0.16	0.72
Good child-to-staff ratio	<b>0.85</b>	0.08	0.82
Prepares for kindergarten	<b>0.93</b>	-0.01	0.85
Good parent communication	<b>0.88</b>	0.05	0.84
Warm staff	<b>1.03</b>	-0.12	0.89
Feels welcoming, structured	<b>1.06</b>	-0.17	0.89
Helps socialize	<b>0.87</b>	-0.02	0.74
Safe	<b>1.05</b>	-0.12	0.94
Staff with similar values	<b>0.76</b>	0.14	0.76
Staff educated child dev	<b>0.92</b>	0.01	0.85
Teaches early math	<b>0.75</b>	0.14	0.73
Clean	<b>1.00</b>	-0.05	0.93
Learn how to learn	<b>1.01</b>	-0.08	0.92
Good leadership	<b>0.96</b>	-0.01	0.90
Low turnover	<b>0.69</b>	0.19	0.70
Encourage diversity	<b>0.70</b>	0.16	0.67
Reputation	<b>0.74</b>	0.18	0.76
Social skills	<b>0.74</b>	0.17	0.75
Good food	0.08	<b>0.68</b>	0.54
Preferred school or district	0.33	<b>0.44</b>	0.50
Affordable	0.36	<b>0.48</b>	0.61
Hours fit schedule	0.39	<b>0.43</b>	0.57
Flexible sick policies	0.05	<b>0.72</b>	0.58
Transportation	-0.27	<b>0.74</b>	0.34
Diverse staff students	0.36	0.35	0.44
Includes religious education	0.23	0.38	0.33

*Note* . Factor loadings >.40 are in boldface.

Twenty items significantly loaded on the first factor, labeled Quality Considerations. These items included structural (e.g. child-to-staff ratio), process (e.g. warm staff), and instructional (prepares child for transition to kindergarten) considerations that are associated with program quality and included items describing three of the four hypothesized categories (structural, process and instructional). The mean of these twenty items was calculated for each parent to represent the extent to which quality characteristics affected their decision about pre-kindergarten. Due to significant negative skew the resulting variable was reflected and log transformed. The resulting log transformed quality variable was normally distributed. Lastly this score was re-reflected for all subsequent analyses to increase interpretability. Higher scores on this variable indicate higher average responses to quality characteristics (i.e. more likely to affect decision about pre-kindergarten. This subscale high internal consistency in the current sample (Cronbach's  $\alpha = .98$  for Quality Considerations).

As hypothesized, six items significantly loaded onto the second factor, labeled Practical Considerations. These items described practical characteristics of pre-kindergarten programs (food, cost, hours, school/district preference, sick policy, and transportation). The mean of these five items was calculated for each parent to represent the extent to which practical characteristics affected their decision about pre-kindergarten. Higher scores on this variable indicate higher average responses to quality characteristics (i.e. more likely to affect decision about pre-kindergarten). This subscale high internal consistency within the current sample (Cronbach's  $\alpha = .85$ ).

Table 3.5

*Means, Standard Deviations and Correlation Matrix for all Predictors and Dependent Variables*

<i>M</i>	<i>SD</i>	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.50	0.21	1. Quality	<b>1.00</b>	0.75 **	0.04	-0.24 **	0.21 **	0.37 **	-0.26 **	0.28 **	0.00	0.06	-0.08	0.08	0.10	-0.09	-0.06
3.41	1.09	2. Practical		<b>1.00</b>	0.01	0.02	-0.03	0.01	0.06	0.26 **	-0.05	-0.03	-0.02	0.11	-0.03	-0.17 *	0.06
0.54	0.50	3. Wave 1			<b>1.00</b>	(-).05 <sup>p</sup>	0.06 <sup>p</sup>	-0.01	-0.08	-0.04	0.03	0.07	-0.42 **	-0.07	-0.24 **	-0.01	-0.10
0.39	0.49	4. On site				<b>1.00</b>	0.48 <sup>p</sup> **	-0.49 **	0.38 **	-0.12	0.19 **	-0.04	0.15 *	0.05 <sup>p</sup>	-0.13	0.06	0.03
0.30	0.46	5. White					<b>1.00</b>	0.57 **	-0.52 **	0.13	-0.24 **	-0.05	-0.14	-0.03	0.07	0.01	-0.14
7.75	3.41	6. SES						<b>1.00</b>	-0.60 **	0.13	-0.18 *	0.07	-0.21 **	-0.01	0.09	-0.04	-0.20 **
3.08	0.80	7. Traditional							<b>1.00</b>	-0.02	0.16 *	-0.07	0.20 **	-0.02	-0.02	-0.07	0.20 **
3.87	0.61	8. Progressive								<b>1.00</b>	0.01	0.08	-0.06	-0.01	0.03	-0.07	0.05
3.60	0.38	9. Home									<b>1.00</b>	0.56 **	0.17 *	0.11	0.20 **	0.35 **	-0.08
3.19	0.56	10. School										<b>1.00</b>	-0.08	0.14	0.14	0.22 **	-0.11
45.45	7.62	11. Child age											<b>1.00</b>	0.00	0.44 **	0.17 *	0.11
0.28	0.45	12. Only Child												<b>1.00</b>	0.13	0.17 *	-0.01
0.72	0.25	13. LitNum													<b>1.00</b>	0.16 *	-0.14
1.71	0.30	14. Prosocial														<b>1.00</b>	-0.25 **
0.47	0.28	15. Problem															<b>1.00</b>

*Note.* n = 191, p = Phi, all others are Pearson correlations coefficient

Quality = re-reflected log quality. Practical = average response

White = 1 Other =0, SES = Education + Income

Traditional = mean response traditional child rearing items, Progressive = mean response progressive childrearing items,

Home support = mean involvement at home, School support = mean involvement at school

Child age = age in months, Only child =1, LitNum= mean literacy & numeracy rating, Prosocial = average prosocial rating, Problem = average problem behavior rating

\*  $p < .05$ , \*\*  $p < .01$

### **Identifying Cultural, Family and Child Predictors of Parental Considerations**

Next, a series of hierarchical regression analyses was performed to accomplish the third aim of the study, which was to identify cultural, family and child predictors of parental considerations. The first two regressions assessed family and child predictors of each of the two factors identified in the preceding EFA analysis (Table 3.6). The same order of variable entry was used for both of these regressions. Step 1 included cultural factors (SES, ethnicity) and covariates regarding variations in survey administration that may have affected parent response. These included a contrast indicating including time survey was collected (Wave 1: April-July, Wave 2: September-October) and another dichotomous variable that indicated where parents chose to complete their survey (on-site, off-site). After controlling for the effects of these variables, family factors (traditional beliefs, progressive beliefs, home support, and school support) were entered into Step 2. This step tested Hypothesis 2, family code as communicated through parent beliefs and practices would predict parents' preschool considerations. Lastly, after controlling for cultural and administrative factors and family factors, child factors (child age, single child status, literacy and numeracy skills, prosocial behavior and problem behavior) were entered into the last step of the regression. This step tested Hypothesis 3, children's characteristics would help to define what their parents consider is important for preschool (Table 3.6).

Table 3.6

*Final Step of Hierarchical Regression Analyses Predicting Quality, Practical Considerations From Cultural, Family, and Child Factors*

Predictor	DV = Quality Considerations				DV = Practical Considerations			
	B	SE	$\beta$	p	B	SE	$\beta$	p
Final Step								
Covariates								
Wave	0.03	0.03	0.07	0.36	0.12	0.17	0.06	0.50
On-Site	-0.03	0.03	-0.07	0.37	0.06	0.19	0.03	0.75
SES	0.02	0.01	0.29	0.00	0.02	0.03	0.05	0.64
White	-0.02	0.04	-0.05	0.59	-0.10	0.22	-0.04	0.66
Family factors								
Traditional	-0.02	0.02	-0.09	0.29	0.07	0.13	0.05	0.59
Progressive	0.08	0.02	0.24	0.00	0.47	0.13	0.26	0.00
Home	0.06	0.05	0.11	0.21	-0.05	0.28	-0.02	0.85
School	-0.02	0.03	-0.06	0.50	-0.05	0.18	-0.02	0.80
Child factors								
Child Age	0.00	0.00	0.02	0.80	0.01	0.01	0.06	0.53
Only Child	0.05	0.03	0.10	0.15	0.38	0.18	0.16	0.03
LitNum	0.05	0.07	0.06	0.47	-0.16	0.37	-0.04	0.67
Prosocial	-0.08	0.05	-0.12	0.12	-0.61	0.29	-0.17	0.04
Problem	-0.01	0.05	-0.02	0.84	-0.05	0.30	-0.01	0.86

Note.  $n = 191$ , Final step  $R^2$  Quality = .23,  $\Delta R^2 = .02$ ,  $p = .42$ , Final step  $R^2$  Practical = .12,  $\Delta R^2 = .04$ ,  $p = .16$

Quality considerations = Re-reflected and Log transformed mean response quality items

Practical considerations = mean response practical items

Wave = wave 1 recruitment (1), On-Site = survey at center (1)

SES = Education + Income, White =1, All other ethnicities = 0

Traditional, Progressive = mean response belief statements, Home, school = mean response involvement items

Child age = months, Only Child =1, Siblings =0, LitNum = mean rating literacy numeracy skills

Prosocial, Problem = mean rating child skills, problem behavior

\*  $p < .05$ , \*\*  $p < .01$

**Step 1.** The first step of each regression included covariates and cultural factors as covariates. The wave (Wave 1 = April –July, Wave 2 = September- October) that parents completed the study was not significantly related to quality considerations ( $\beta = .04, p = .58$ ) or practical considerations ( $\beta = .01, p = .85$ ). Similarly, where parents completed the survey (on-site at center, off-site) was not significantly related to quality considerations ( $\beta = -.09, p = .30$ ) or practical considerations ( $\beta = .02, p = .82$ ). There was a significant positive relationship between socioeconomic status and quality considerations ( $\beta = .35, p < .001$ ). Higher SES parents rated quality considerations as more important. There was not a significant relationship between socioeconomic status and practical considerations ( $\beta = .04, p = .65$ ). Lastly, there was not a significant relationship for the contrast between majority white parents and all other minority parents for either quality considerations ( $\beta = -.01, p = .74$ ) or practical considerations ( $\beta = -.04, p = .65$ ). Overall, the first step explained 15% of the variance in quality considerations ( $R^2 = .15, p < .001$ ) and less than 1% of the variance in practical considerations ( $R^2 = .002, p = .98$ ).

**Step 2.** The second step of each regression included parental beliefs and involvement and tested whether family factors predicted parental ratings of quality or practical considerations. None of the relationships between covariates and either quality or practical considerations changed from Step 1 to Step 2. There was still a significant positive relationship between socioeconomic status and quality considerations in Step 2 ( $\beta = .30, p = .001$ ). The hypothesis that traditional beliefs would be negatively related to instructional considerations (part of the quality factor identified in the study) was not supported. Traditional beliefs about childrearing were not significantly related to parental ratings of quality considerations ( $\beta = -.08, p = .35$ ) or practical considerations ( $\beta = .07, p = .49$ ) There was support for the hypothesis that progressive child-

rearing beliefs would be significantly positively related to parents ratings of structural and process indicators (part of quality considerations). Even after controlling for survey administration and cultural factors, progressive child-rearing beliefs were significantly positively related to both quality ( $\beta = .24, p < .001$ ) and practical considerations ( $\beta = .27, p < .001$ ). Regardless of socioeconomic status and ethnicity, parents with more progressive beliefs in childrearing rated both quality and practical considerations more highly. There was not support for the hypothesized positive relationship between parental involvement and educational (part of quality) considerations of care. There was not a significant relationship between parental involvement at home and either quality ( $\beta = .10, p = .26$ ) or practical considerations ( $\beta = -.07, p = .48$ ) or between parental involvement at school and either quality ( $\beta = -.05, p = .54$ ) or practical considerations ( $\beta = -.02, p = .84$ ). Overall the second step explained an additional 6% of variance in quality considerations ( $\Delta R^2 = .06, p = .01$ ) and 8% of variance in practical considerations ( $\Delta R^2 = .08, p = .01$ ).

**Step 3.** The third and final step of each regression included child factors and tested whether child age, only child status, child literacy and numeracy skills, child prosocial behavior and child problem behavior would predict parental considerations. Findings from this step are presented in Table 3.6. Even after the inclusion of these child factors relationships identified in previous steps remained the same. Socioeconomic status was still significantly positively related to quality considerations, and progressive beliefs were still significantly positively related to both quality and practical considerations. There was not support for the hypothesized positive relationship between child age and educational (part of quality) considerations of care. Child age was not significantly related to either of the factors. There was a significant relationship between only child status and practical considerations. Parents with an only child had higher ratings of

practical considerations than parents whose preschool-aged child had younger or older siblings. Contrary to the hypothesized positive relationship between child skills and instructional (part of quality) considerations, parent-rated literacy and numeracy skills were not significantly related to either quality or practical considerations. The hypothesized positive relationship between child social skills and instructional (part of quality) considerations was not supported. There was, however, a significant positive relationship between parent-rated social skills and practical considerations. Parents who rated their children highly were more likely to include practical considerations in their pre-kindergarten decision. Lastly there was not a significant relationship between parent-rated problem behavior and either quality or practical considerations.

**Cultural mediation.** The fourth hypothesis, that socioeconomic status and ethnicity would indirectly predict parental considerations through their more proximal effect on parent beliefs and involvement, was tested by assessing the two essential requirements for mediation (Kenny, Kashy, & Bolger, 1998). First, there must be a significant relationship between the independent variable (socioeconomic status, ethnicity) and the proposed mediator (childrearing beliefs, involvement). This requirement was met for the relationship between socioeconomic status and traditional beliefs ( $r = -.60, p < .001$ ), socioeconomic status and home involvement ( $r = -.18, p < .001$ ), ethnicity and traditional beliefs ( $r = -.50, p < .001$ ) and between ethnicity and home involvement ( $r = -.24, p < .001$ ). There were not significant relationships between socioeconomic status and progressive beliefs ( $r = .13, p > .05$ ), socioeconomic status and school involvement ( $r = .07, p > .05$ ), ethnicity and progressive beliefs ( $r = .13, p > .05$ ) or ethnicity and school involvement ( $r = -.05, p > .05$ ). As a result the second requirement was only assessed for traditional beliefs and home involvement. The step requires that the mediator (traditional beliefs,

home involvement) has a unique relationship with the dependent variable (quality considerations, practical considerations) after controlling for the independent variable (socioeconomic status, ethnicity). This requirement was not met for either potential mediator. Traditional childrearing beliefs did not explain unique variance in quality considerations ( $\beta = -.09, p = .29$ ) or practical considerations ( $\beta = .05, p = .59$ ) after controlling for the effects of socioeconomic status and ethnicity (Table 3.6). Home involvement did not explain unique variance in quality considerations ( $\beta = .11, p = .21$ ) or practical considerations ( $\beta = -.072, p = .85$ ) after controlling for the effects of socioeconomic status and ethnicity. Thus, there was not evidence to support the hypothesized mediational relationships.

**Cultural moderation.** The fifth hypothesis, that the relationship between child characteristics and parental considerations would be moderated by socioeconomic status and ethnicity, was tested by two additional hierarchical regressions. These regressions added another step with culture by child interactions. The two regressions followed the same order of variable entry as the previous regressions and all continuous variables were mean centered. Covariates (cultural and survey factors) were entered into step 1, Child factors (age, only child, literacy numeracy skills, prosocial skills, problem behavior) were entered into step 2 and six interactions between the cultural factors (SES, white) and child skills (literacy numeracy skills, prosocial skills, problem behavior) were entered into the last step. (Table 3.7)

Table 3.7

*Final Step of Hierarchical Regression Analyses Predicting Quality, Practical Considerations From Cultural x Child Factors*

Predictor	DV = Quality Considerations				DV = Practical Considerations			
	B	SE	$\beta$	p	B	SE	$\beta$	p
Final Step								
Covariates								
Wave	0.03	0.03	0.06	0.41	0.06	0.18	0.03	0.73
On-Site	-0.02	0.04	-0.06	0.49	0.06	0.20	0.03	0.77
SES	0.02	0.01	0.35	0.00	0.01	0.03	0.04	0.65
White	-0.01	0.04	-0.02	0.84	-0.03	0.22	-0.01	0.90
Child factors								
Child Age	0.00	0.00	0.02	0.79	0.01	0.01	0.06	0.57
Only Child	0.05	0.03	0.11	0.13	0.37	0.37	0.15	0.05
LitNum	0.03	0.08	0.04	0.73	-0.13	0.46	-0.03	0.78
Prosocial	-0.07	0.06	-0.10	0.27	-0.77	0.34	-0.21	0.03
Problem	0.00	0.07	0.00	0.98	-0.03	0.40	-0.01	0.93
Child x Culture Interactions								
LitNum x White	0.13	0.17	0.08	0.44	-0.05	0.98	-0.01	0.96
LitNum x SES	-0.01	0.02	-0.06	0.53	-0.03	0.13	-0.02	0.82
Prosocial x White	0.05	0.15	0.03	0.73	0.40	0.86	0.05	0.65
Prosocial x SES	0.03	0.02	0.17	0.05	0.03	0.10	0.02	0.79
Problem x White	0.05	0.19	0.02	0.81	0.57	1.09	0.05	0.94
Problem x SES	0.01	0.02	0.05	0.62	0.01	0.12	0.01	0.94

Note.  $n = 193$ , Final step  $R^2$  Quality = .20,  $\Delta R^2 = .03$ ,  $p = .39$ , Final step  $R^2$  Practical = .056,  $\Delta R^2 = .02$ ,  $p = .988$

Quality considerations = Re-reflected and Log transformed mean response quality items

Practical = mean response practical items

All variables mean centered

\*  $p < .05$ , \*\*  $p < .01$

There was not evidence of the hypothesized interaction between child academic skills and cultural factors. Neither ethnicity nor socioeconomic status significantly moderated the relationship between children's literacy and numeracy skills and either quality or practical considerations. Similarly there was not evidence that either ethnicity or socioeconomic status moderated the relationship between problem behavior and quality or practical considerations. Lastly ethnicity and socioeconomic status did not moderate the relationship between prosocial skills and practical considerations.

However, there was a significant interaction between children's social skills and quality considerations. Socioeconomic status significantly moderated the relationship between children's prosocial skills and quality considerations. The interaction was probed and simple slope analysis was performed (Aiken & West, 1991; Preacher, Curran, & Bauer, 2006; Preacher & Hayes, 2004) to further qualify this relationship. The simple slope of prosocial skills at 1 standard deviation below the mean of SES was significant ( $B = -.18$ ,  $SE = .07$ ,  $p < .01$ ). The simple slope of prosocial skills at 1 standard deviation above the mean of SES was not significant ( $B = .05$ ,  $SE = .09$ ,  $p = .59$ ). This indicated that parent ratings of prosocial skills were significantly related to quality considerations for low SES parents only. Parents in this group who reported higher prosocial skills for their children were less likely to endorse quality considerations of care. (Figure 1). There was not a significant relationship between parent rated prosocial skills and quality considerations for higher income parents.

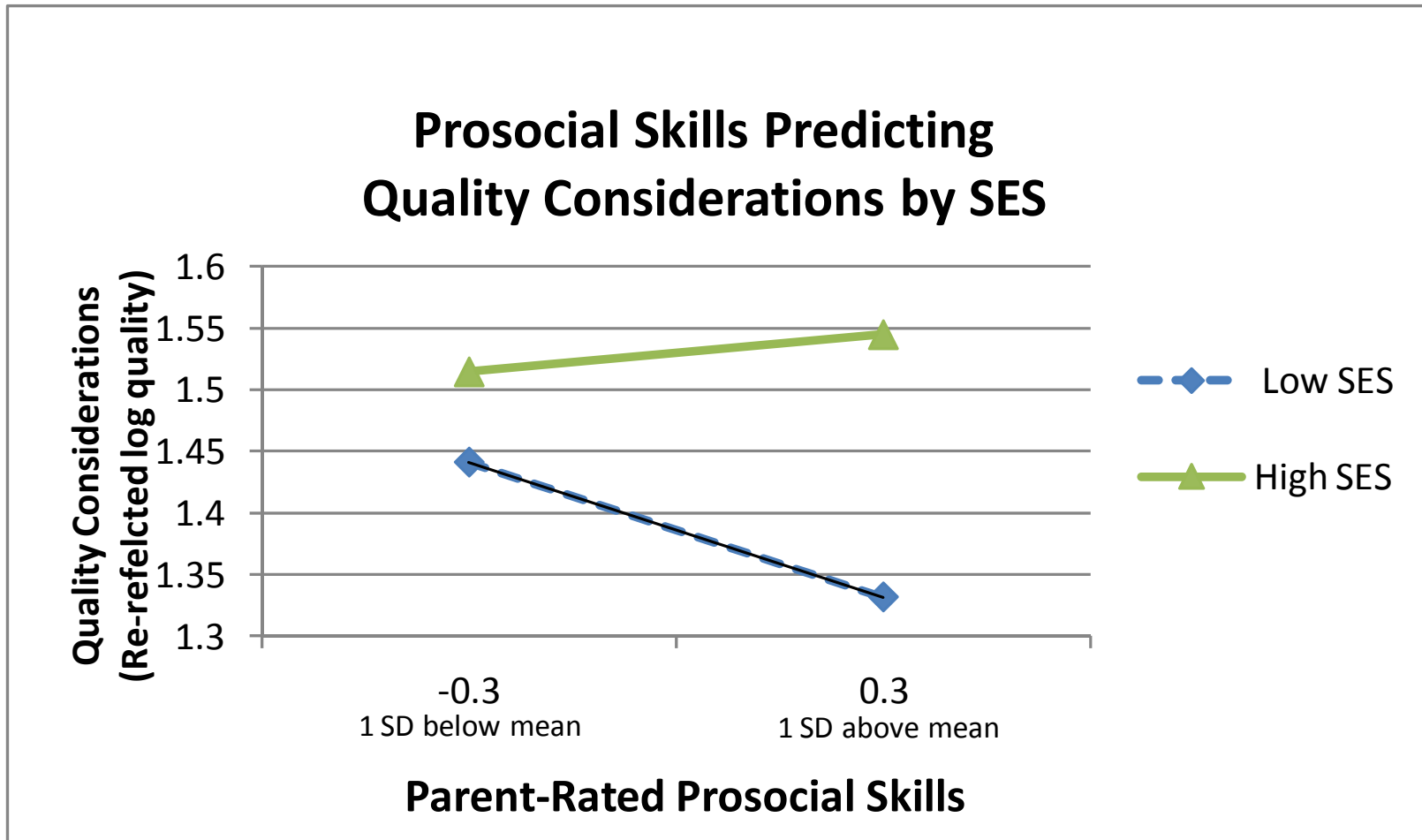


Figure 1.

**Exploratory Analyses.** Since none of the mediational hypotheses regarding indirect effects of cultural code through family code was significant, additional analyses were conducted to explore interactions between cultural and family factors. These analyses were warranted from an ecological perspective. In particular, Bronfenbrenner's assertion "the principal main effects are likely to be interactions" suggests the importance of moderational analysis to better distinguish relationships among predictors from different ecological levels (Bronfenbrenner, 1979, p. 38). Within this context, relationships between families and parental considerations may vary as a function of cultural influences. Two additional regressions tested whether culture by family interactions explained additional variance in parental considerations. These two regressions followed the same order of variable entry and all variables were mean centered. Covariates (cultural and survey factors) were entered into step 1, parent factors (traditional beliefs, progressive beliefs, home involvement, school involvement) were entered into step 2 and eight interactions between the cultural factors (SES, white) parent factors (traditional beliefs, progressive beliefs, home involvement, school involvement) and were entered into the last step. This step examined whether relationships between family factors and parental considerations were moderated by cultural factors (Table 3.8).

Table 3.8

*Final Step of Hierarchical Regression Analyses Predicting Quality, Practical Considerations From Cultural x Family Factors*

Predictor	DV = Quality Considerations				DV = Practical Considerations			
	B	SE	$\beta$	p	B	SE	$\beta$	p
Final Step								
Covariates								
Wave	0.02	0.03	0.04	0.56	0.05	0.16	0.02	0.75
On-Site	-0.04	0.03	-0.08	0.29	0.08	0.19	0.03	0.70
SES	0.01	0.01	0.21	0.02	-0.01	0.03	-0.03	0.76
White	0.02	0.04	0.05	0.57	0.08	0.25	0.03	0.74
Family factors								
Traditional	-0.08	0.03	-0.32	0.00	-0.18	0.15	-0.13	0.25
Progressive	0.05	0.03	0.14	0.13	0.39	0.19	0.21	0.04
Home	0.00	0.06	0.01	0.96	-0.55	0.37	-0.18	0.14
School	-0.03	0.04	-0.08	0.42				
Family x culture interactions								
Traditional x White	0.08	0.05	0.18	0.11	0.24	0.31	0.10	0.44
Traditional x SES	0.01	0.01	0.06	0.44	0.05	0.04	0.11	0.23
Progressive x White	0.04	0.07	0.05	0.55	0.02	0.44	0.01	0.96
Progressive x SES	-0.03	0.01	-0.31	0.00	-0.12	0.05	-0.23	0.02
Home x White	0.05	0.11	0.05	0.69	0.59	0.68	0.12	0.38
Home x SES	0.03	0.02	0.22	0.03	0.12	0.09	0.14	0.21
School x White	0.02	0.08	0.02	0.84	-0.03	0.45	-0.01	0.94
School x SES	-0.01	0.01	-0.05	0.58	-0.04	0.06	-0.06	0.55

Note.  $n = 196$ , Final step  $R^2 = .35$ ,  $\Delta R^2 = .14$ ,  $p = .00$ , Final step  $R^2 = .16$ ,  $\Delta R^2 = .10$ ,  $p = .009$

Quality considerations = Re-reflected and Log transformed

Practical = mean response practical items

All variables mean centered

As indicated in Table 3.8, there was not evidence that the relationship between parent factors (traditional beliefs, progressive beliefs, home involvement, school involvement) and either quality or practical considerations varied by ethnic group. There was evidence, however, that relationships between progressive childrearing beliefs and home involvement and parental considerations were conditional on parent's socioeconomic status. As a result all three of these significant interactions were probed using simple slope analysis (Aiken & West, 1991; Preacher et al., 2006; Preacher & Hayes, 2004).

Socioeconomic status moderated the relationship between progressive beliefs and both types of considerations (quality, practical). For quality concerns there was a significant positive relationship between progressive beliefs and quality considerations but only at lower levels of parent socioeconomic status. The simple slope at 1 standard deviation below the mean was significant ( $B = .15$ ,  $SE = .03$ ,  $p < .001$ ). The simple slope at 1 standard deviation above the mean was not significant ( $B = -.06$ ,  $SE = .05$ ,  $p > .05$ ). For low SES parents, higher levels of progressive beliefs were associated with increased ratings of quality considerations. Among higher-income parents there was not a significant relationship among progressive beliefs and quality considerations (Figure 2). The same trend was evident when predicting practical trends. There was a significant positive relationship between progressive beliefs and practical considerations but only at lower levels of parent socioeconomic status. The simple slope at 1 standard deviation below the mean was significant ( $B = .8$ ,  $SE = .16$ ,  $p < .001$ ). The simple slope at 1 standard deviation above the mean was not significant ( $B = -.02$ ,  $SE = .33$ ,  $p > .05$ ) (Figure 3). For low SES parents with higher levels of progressive beliefs were associated with increased ratings of both quality and practical considerations. Progressive beliefs were not related to quality considerations among higher-income parents.

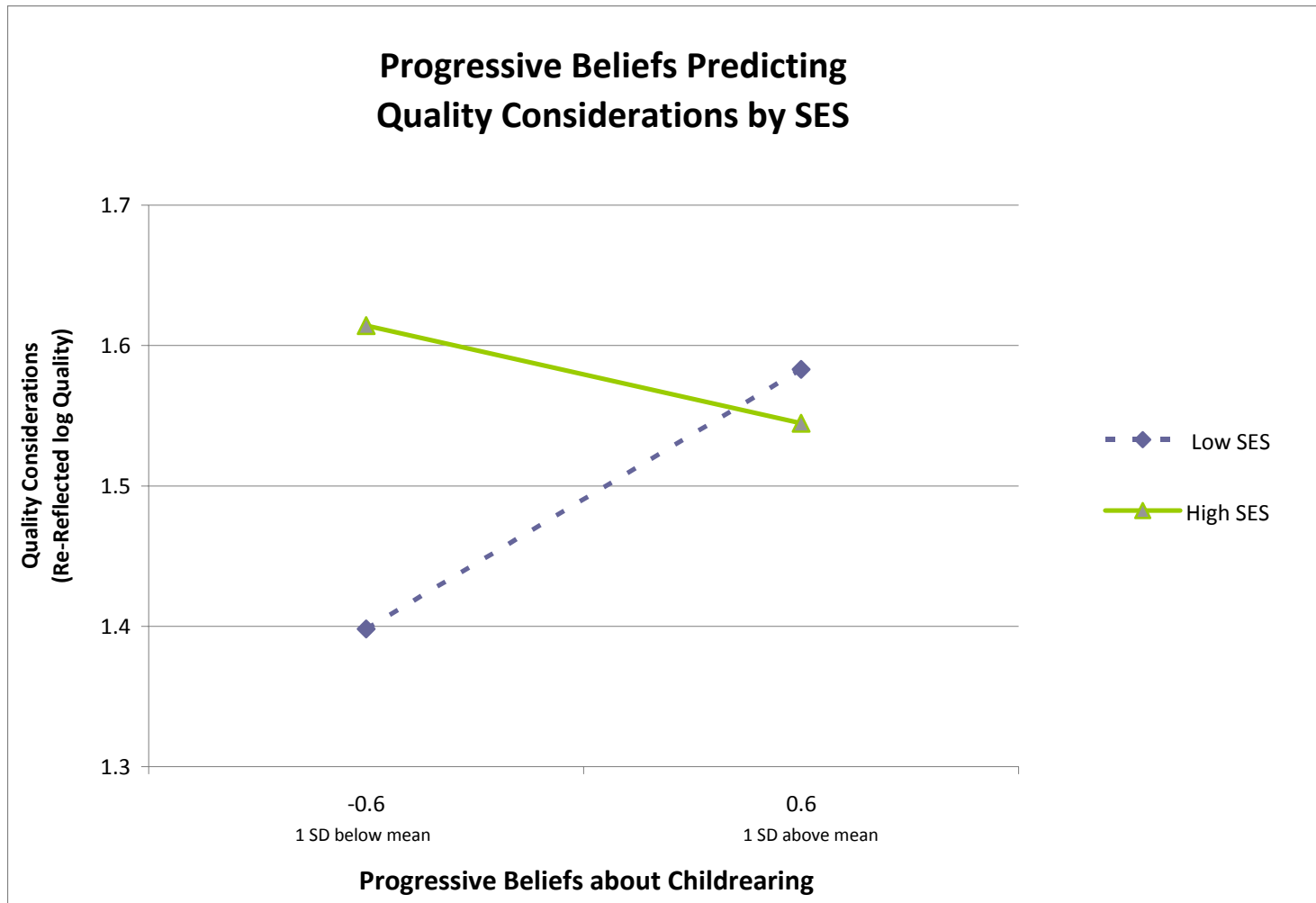
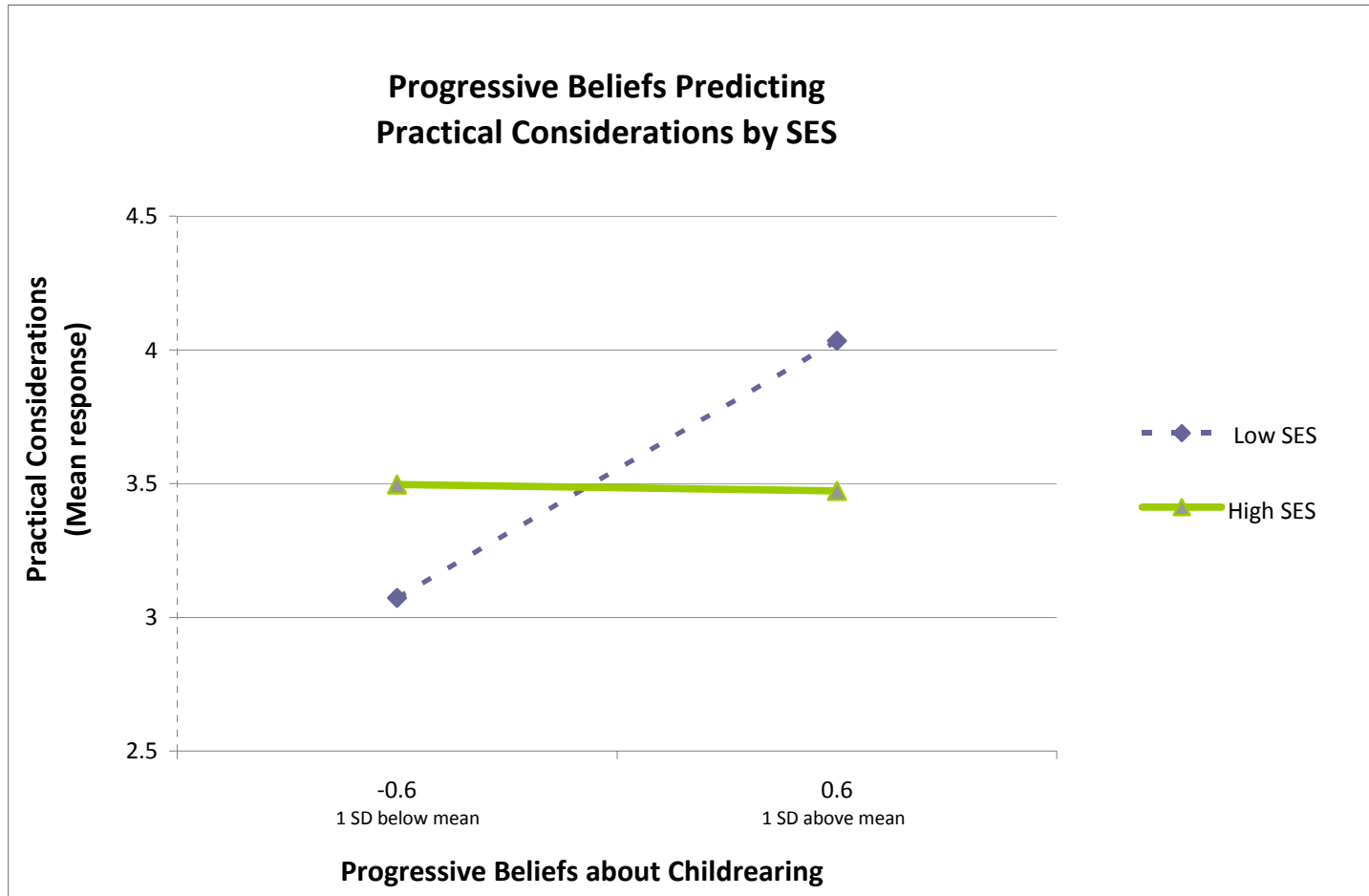
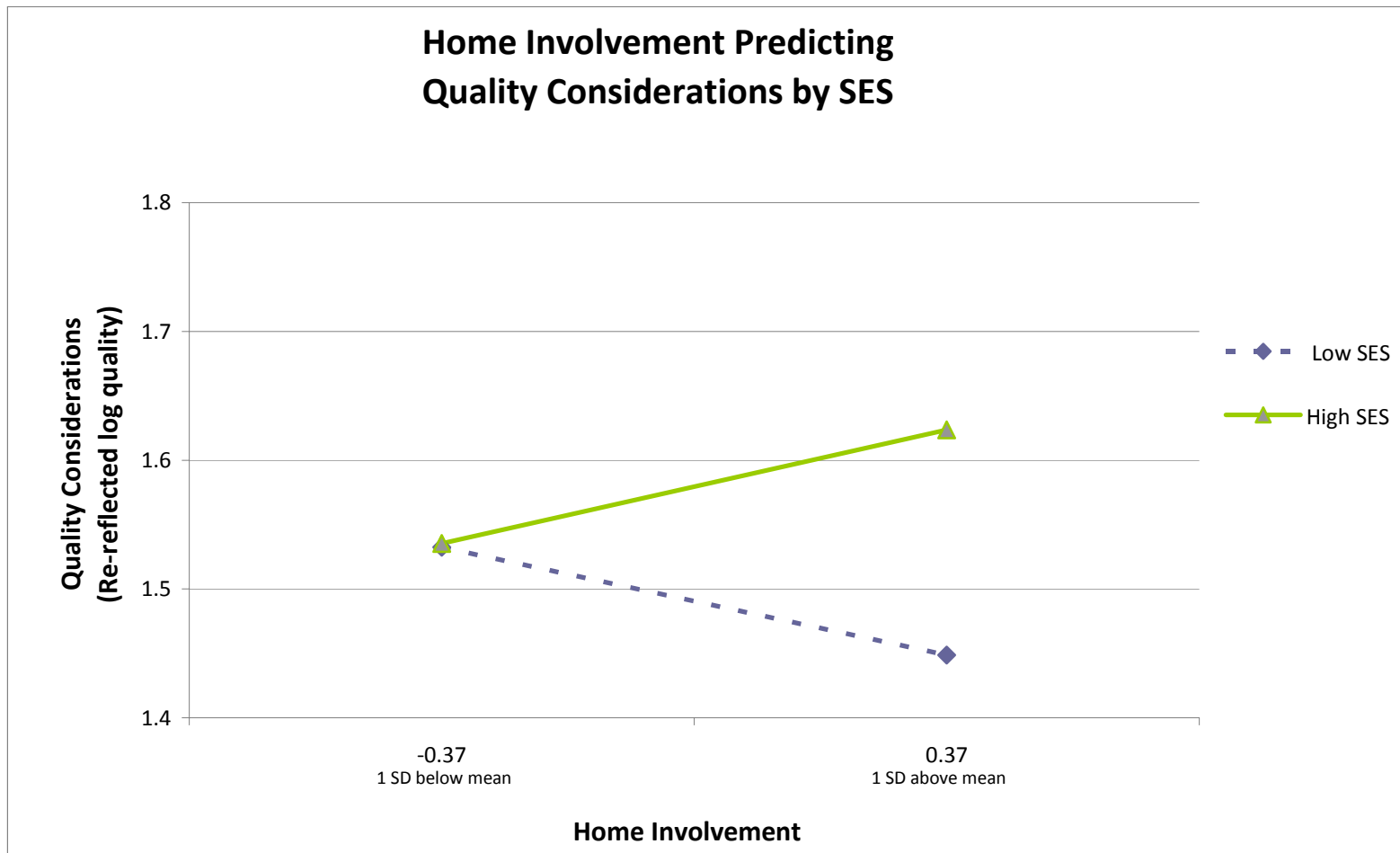


Figure 2.

*Figure 3.*

Alternately these findings could be viewed as progressive beliefs moderating the relationship between SES and parent considerations. When probed this way, there was a significant positive relationship between socioeconomic status and quality considerations but only for parents with less progressive beliefs. The simple slope at 1 standard deviation below the mean was significant ( $B = .03, SE = .01, p < .001$ ). The simple slope at 1 standard deviation above the mean was not significant ( $B = .01, SE = .01, p > .05$ ). A significant negative relationship was found between socioeconomic status and practical concerns but only for parents with very high progressive beliefs. The simple slope at 1 standard deviation below the mean was not significant ( $B = .06, SE = .04, p = .13$ ). The simple slope was also not significant at 1 standard deviation above the mean ( $B = -.09, SE = .05, p = .08$ ). Regions of significance analysis indicated that the relationship between SES and practical considerations was significant for parents whose beliefs were above .85 ( $M = 0, SD = .60$ ) ( $B = -.11, SE = .06, p = .05$ ). For parents with less progressive beliefs, higher SES was related to increased ratings of quality considerations. For parents with more progressive beliefs, higher SES was related to decreased ratings of practical considerations.

Lastly, socioeconomic status moderated the relationship between parent involvement at home and ratings of quality considerations. There was a significant negative relationship between parent involvement at home and quality considerations but only for very low-income parents. The simple slope at 1 standard deviation below the mean was not significant ( $B = -.11$ ,  $SE = .06$ ,  $p = .08$ ). The simple slope at 1 standard deviation above the mean was also not significant ( $B = .12$ ,  $SE = .06$ ,  $p > .05$ ). Regions of significance analysis indicated that the relationship only significant was significant for parents whose SES was below  $-4.14$  ( $M = 0$ ,  $SD = 3.42$ ) ( $B = -.14$ ,  $SE = .06$ ,  $p = .05$ ). For very low-income parents higher ratings of children's social skills were associated with lower ratings of quality considerations (Figure 4).

*Figure 4.*

Alternately, home involvement could be viewed as moderating the relationship between SES and quality considerations. When probed this way, there was a significant positive relationship between SES and quality considerations but only at high levels of parent involvement at home. The simple slope at 1 standard deviation above the mean was significant ( $B = .03$ ,  $SE = .01$ ,  $p < .001$ ). There was not a significant relationship between SES and quality considerations at lower levels of involvement. The simple slope at 1 standard deviation below the mean was not significant ( $B = .0004$ ,  $SE = .01$ ,  $p = .95$ ). Increased education and income was associated with higher ratings of quality consideration among parents who were highly involved at home.

## DISCUSSION

The current study is among the first to assess parents' considerations for pre-kindergarten within a developmental science framework. In contrast to the four factors hypothesized, parents' considerations did not cluster around practical, process, structural, and educational considerations of care. Instead the current study suggests parents' considerations are best reflected by two highly correlated categories of considerations: 1) characteristics that designate several types of quality indicators and 2) characteristics that designate a program's practical features. These findings may differ from the larger set of distinct underlying factors of care that were originally hypothesized for several reasons. First, many of the studies used to support these categories relied on single item indicators of category or researcher categorization not latent analysis of parents responses (Early & Burchinal, 2001; Johansen et al., 1996; Rose & Elicker, 2008). Only one other study used factor analysis to identify parents' considerations. They identified six factors (practical, instructional, curriculum, scheduling, child-centered, school readiness) but also included twice as many items and did not follow the usual specifications for significant factor loadings (Gamble et al., 2009). The results of the current study suggest that parents may not group considerations into multiple discrete categories characterized by researchers. Another difference is that all past research has relied on retrospective reports of choice considerations. Parents' ideas and considerations in the midst of the decision may be different than the considerations they cite at a later time after their child has entered the chosen program or center.

The current study also supports the utility of a transactional framework when assessing processes related to parents choice of pre-kindergarten. Findings indicate that a combination of cultural, family and child factors are important when assessing parents' considerations for pre-

kindergarten. In particular, socioeconomic status, parents' beliefs about childrearing and involvement and children's prosocial skills and family structure were uniquely related to parental endorsement of quality and practical considerations.

### *Family code*

The findings provide evidence of the importance of parent beliefs about childrearing even after controlling for differences in socioeconomic status. As hypothesized, progressive beliefs about childrearing were positively related to both quality and practical considerations. As in past research, parents who endorsed children's individuality and child-directed learning were more likely to indicate that practical and quality considerations influenced their decision about pre-kindergarten (Early & Burchinal, 2001; Johansen et al., 1996; Rose & Elicker, 2008). It seems that parents with more progressive beliefs about childrearing tend to include a greater range of considerations, which is especially important in light of additional findings linking progressive beliefs to increases in child achievement.

In contrast to hypotheses and past research, there was not evidence that traditional beliefs about childrearing are related to either quality or practical considerations. In the past, traditional beliefs have been negatively related to program quality (Burchinal & Nelson, 2000), but this relationship was not evident in the present study. This disparity may have occurred for several reasons. First, past research has measured an association between parents' traditional beliefs and observed quality at the centers their child attended (Burchinal & Nelson, 2000). In contrast the current study examined parents' prospective quality considerations. In addition, past associations between traditional beliefs and program quality may have been confounded by other factors such as socioeconomic status that are related to both traditional beliefs and program quality (Burchinal & Nelson, 2000). The current study and past research have established a positive

relationship between socioeconomic status and progressive parenting beliefs and a negative relationship between socioeconomic status and traditional beliefs (Earl S. Schaefer, 1991; E.S. Schaefer & Edgerton, 1985).

Findings also failed to support hypothesized relationships among parents' involvement and quality considerations of care. There was not evidence that parents' involvement is related to either quality considerations or practical considerations. Past research has often linked parent involvement to increased child achievement but there is little information about the relationship between parent involvement and considerations for childcare and early education (Farver et al., 2006; Henrich & Gadaire, 2007; Marcon, 1999; McWayne, Campos, & Owsianik, 2008). In addition high proportion of Head Start parents included in this study may have obscured relationships between involvement and considerations since those programs encourage high levels of involvement (Henrich & Gadaire, 2007). In that case, the relationship between parent involvement and parents' considerations may have differed for parents in Head Start and parents in other programs. Future studies should explore how this relationship differs depending on variable programmatic requirements for parent involvement.

#### *Child characteristics*

As hypothesized, findings indicate children's prosocial skills and family structure were related to parental considerations. There was not evidence, however, that child age is positively related to quality or practical aspects of care. This finding is likely a result of restricted range. Only children of preschool age and above were included in the study and parents' considerations may not change based on within this time frame. Past research that included infants, toddlers and preschoolers were much likelier to find this effect (Early & Burchinal, 2001; Fuller, Holloway, & Liang, 1996). Though not hypothesized, there was evidence that parents of only children are

more likely to endorse practical considerations of care. Parents with one child may be less familiar with the childcare landscape and may be more likely to choose care based on explicit, practical considerations. This finding suggests that family structure and birth order are important characteristics that have not received enough attention. Parents who are making this decision for the first time may differ from those who have already chosen pre-k for their older children. Targeted parent education efforts for this group of first-time parents may be a more effective form of outreach.

There was not evidence that children's literacy numeracy skills or levels of problem behavior predict parental considerations. The lack of findings could be due to several reasons. First even though the literacy and numeracy skills measure has been used in large scale data sets in the past, there was not adequate reliability in the current sample which severely limits any conclusions based on this measure. Additionally, past research that linked child skills and parent considerations explicitly asked parents about their child's success (Gamble et al., 2009). In contrast the current study asked parents about specific literacy, numeracy and social skills. This method may not have accurately captured parents overall perception of their child leading to null results.

#### *Cultural code*

First, there was evidence that parents with more education and greater annual income are more likely to include quality considerations when choosing pre-kindergarten. Previous research has identified similar trends between SES and quality considerations (Barbarin et al., 2008; Johansen et al., 1996). In contrast, there was not evidence in the current study that SES is related to endorsement of practical considerations. Past research on this relationship has been less clear. Some studies have found a negative relationship between SES and practical considerations but

other studies have found no differences based on SES (Li-Grining & Coley, 2006). Findings in this study support the latter conclusion and suggest the importance of practical considerations regardless of SES.

### *Cultural code and family code*

Interestingly, additional findings regarding family factors emerged when parents' SES was taken into account. In contrast to hypotheses, these relationships were not meditational. Instead the relationships between family factors and parent considerations appear conditional upon socioeconomic status. In particular, observed relationships between progressive parenting and endorsement of quality and practical considerations were moderated by socioeconomic status. Levels of progressive childrearing beliefs were positively related to quality and practical considerations but this relationship is only significant for low-income parents. Progressive parenting beliefs did not help explain considerations for high-income parents. Past research that documented the relationship between childrearing beliefs and program characteristics (quality, type of program) did not aggregate data for different socioeconomic groups. The present finding suggests the importance of examining conditional effects. Progressive beliefs about childrearing may be an important link between low-income families and higher quality care. Low-income families with progressive beliefs were more likely to cite quality considerations and past evidence suggests that children of progressive parents are more likely to be in high quality centers and have better academic outcomes than children with less progressive parents (Burchinal & Nelson, 2000; Campbell et al., 1991; Earl S. Schaefer, 1991; E.S. Schaefer & Edgerton, 1985).

Similar moderating effects of culture were evident for the relationship between parent involvement at home and quality considerations. Interestingly, low-income parents who were

more involved seem to be less interested in quality considerations. Again this relationship may reflect the high proportion of Head Start parents in the sample instead of conditional effects based on socioeconomic status. The vast majority of low-income participants were recruited from Head Start programs which require parent involvement and offer subsidized pre-kindergarten programs. As a result, effects may be conditional on Head Start attendance instead of socioeconomic status. In contrast to the other centers included in the study, Head Start centers offered subsidized pre-kindergarten programs, giving parents the opportunity to remain at their center and take advantage of state-funded pre-kindergarten. In addition past research suggests higher levels of satisfaction among parents with children in Head Start (Fantuzzo, Perry, & Childs, 2006). Thus, parents in these centers may not have been as concerned with quality considerations because they planned to keep their children at Head Start programs that they assessed as high quality. This explanation is further supported by the very small percentage of Head Start parents (11.5%) who indicated they were considering programs other than Head Start for pre-kindergarten. Alternatively, research indicates that parent involvement is dependent on parental perceptions of self efficacy and their role as parents (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Thus, parents in this sample who are highly involved may also have higher levels of self-efficacy and confidence in their ability to promote their children's education. As a result they may have been less concerned with quality features of programs.

#### *Cultural code and child characteristics*

Lastly findings did support hypothesized moderation of child skills by socioeconomic status. In particular this study found that the relationship between children's prosocial skills and parental considerations varied as a function of socioeconomic status. In contrast to hypothesized positive relationship, there was evidence that low SES parents with highly skilled children were

less likely to endorse quality ratings. The same relationship was not evident for higher income parents. Again, this relationship was confounded by the large number of low-income parents recruited from Head Start programs that offer subsidized pre-kindergarten programs.

Alternatively, parents that view their child as competent and socially skilled may be less concerned about quality considerations. Future research is needed to examine the relationship between parent perceptions of children's social skills and their considerations for early childcare and education.

#### *Limitations and future directions*

Limitations of the present study should be noted. First this study only included parents whose children were already enrolled in some form of center care. Parents who cared for their children at home or who relied on less formal means of child care (relative care, family day care) were not included in the present study. Parents who did not select formal center care before pre-kindergarten may have a very different set of standards for pre-kindergarten programs. The study was also limited in the conclusions it could make based on ethnic group membership.

Unfortunately, there were not enough Latino, Multicultural or Asian participants to make group comparisons beyond the distinction between white parents and all other parents in the sample. This significantly limits conclusions about the role of ethnicity in the pre-kindergarten decision making process. Additional analyses with more parents from different ethnic groups and better designation of those groups is needed before any conclusions about ethnic differences can be made. Lastly, this study asked parents about a distinct set of pre-determined considerations. It did not necessarily reflect the full range of considerations that may accompany this decision. Nor did it assess the actual choice that parents made regarding pre-kindergarten. Parents were asked about their potential considerations but had not enrolled their child in a pre-kindergarten program

at the time of the study. There is a strong likelihood that parents will enroll their child at centers that exhibit these characteristics but there is also a chance that parents' considerations may not match their eventual choice. Follow-up with the current sample of parents after they have chosen a center is anticipated and would allow for comparison of considerations and eventual choice.

It is important to note that the current study is only a snapshot of processes occurring as parents choose pre-kindergarten. Longitudinal research is crucial for examining these transactions across time. Following families for an extended period of time could more appropriately test hypothesized relationships between parental considerations, preschool placement and subsequent child outcomes. There is evidence that parent beliefs predict placement and that early educational experiences influence children's readiness for school (Barnett, 1995; Burchinal & Nelson, 2000; Huston et al., 2002; Liang et al., 2000; Pianta et al., 2009), but there is not yet evidence linking these two lines of research. Thus the results of this study and parent considerations represent the penultimate outcome of interest. Their ultimate importance hinges on their relationship with children's school readiness and social development.

Future research is also needed to better understand how these parental considerations are related to ethnic and cultural differences. The current study attempted to examine ethnic differences but was hampered by sample size and a rather simplified measure of ethnicity. Additional analysis of parents should include larger groups and more sophisticated methods of characterizing cultural groups. Recent studies suggest that group membership may be less important than elements shared among individuals within these groups such as shared access to resources (Kim & Fram, 2009). Looking at these variables may provide more information than designating parents based on self-reported ethnic group.

### *Implications*

These findings have important implications for policymakers and early childhood professionals. This study suggests that a transactional approach that recognizes the influence of cultural, parent and child factors is a helpful framework for designing policies related to pre-kindergarten and promotion of high-quality programming. Knowledge of parental beliefs, family structure and child skills may help program administrators highlight desired programmatic features. For example, program administrators could highlight practical features of care when communicating with parents of only children.

Similarly, this study has several implications regarding parent education. Parent beliefs are one point of intervention suggested within a transactional framework. This study suggests that progressive childrearing beliefs among low-income parents were positively related to quality considerations of care. Education among low-income parents that emphasizes child-directed learning and highlights the importance of individualized instruction may be an effective way to alter childrearing beliefs and promote the importance of quality features of care.

In addition, this study suggests that education efforts could focus additional attention on communicating features that are most important indicators of quality and positive child outcomes. Parents in this study tended to rate a broad range of considerations related to quality similarly. It seems that they understand these things are good for children, but research has also identified varying effect sizes for these elements. Highlighting considerations with the greatest impact on children outcomes may be a more effective way to disseminate evidence about pre-kindergarten. Currently, the main child care and preschool agency in Georgia, All GA kids, offers parents a series of pamphlets that distinguish high quality care. One pamphlet includes descriptions of each of the 10 NAEYC standards required for quality care and the other provides

a checklist with each of the standards that parents can use when they are contacting or visiting centers ("Child Care Checklist: Infants, Toddlers, and Preschoolers," 2010; "NAEYC Accreditation: The Mark of Quality," 2010). While this information is helpful, the current study suggests the addition of rankings of each of the standards based on their relationship with child outcomes in past research may provide a clearer guide for parents. For example, greater emphasis could be placed on standards describing indicators of process quality which researchers have identified as a main source of the positive effects associated with high quality preschools (Pianta et al., 2009).

Beyond parent education, these findings are also important for government agencies and non-profit groups that provide guidance for parents searching for child care, pre-kindergarten and out-of school programs. For example, All for GA Kids, Georgia's statewide referral agency, currently helps parents search for centers in two ways: an online search option available on their website or a phone conversation with a referral agent. Parents are able to search for care and include a number of criteria to help narrow down potential programs. Currently parents are able to search by program location, type of program (family day care, center care etc.), funding source (subsidized), available hours, curriculum (High Scope, Montessori etc.), teacher education, available transportation, languages spoken by staff, and accreditation (NAEYC accredited programs only). Parents also provide information about the age of their child and any other siblings that may need care. The current study suggests additional information that parents could provide to referral agents during this process may provide additional information about what kinds of considerations they may value. In particular, additional information about parents' childrearing beliefs, home involvement and perceptions of their children's skills could also be ascertained by referral agents. This information could be used to individualize the referral

process and provide targeted parent education. For example, referral agents could ask a series of questions about parent beliefs and tailor information based on parent responses. Parents with less progressive beliefs would receive additional information about the importance of quality indicators of care and could even be referred for additional parent education.

The current study also suggests that a dual emphasis on quality and practical features of care may be the most effective approach for preschool policymakers and practitioners. Though a distinction was made between quality and practical considerations these two factors were very highly correlated. Parents who endorsed quality considerations were also very likely to include practical features of care. In addition, there was considerable overlap in predictors of quality and practical considerations of care. Progressive childrearing beliefs were positively related to both quality and practical considerations. In addition, socioeconomic status was an important moderator for predictors of both quality and practical considerations. Child characteristics primarily predicted practical considerations though children's prosocial skills did predict quality considerations for low-income parents. These findings suggest similar family, cultural and child factors affect parent ratings of considerations and further endorse the utility of focusing on both quality and practical features of care in public policy and programming efforts.

Considerable attention has rightly focused on improving quality standards but there has been less effort to address practical issues. This point was made in a recent special issue of *Psychological Science in the Public Interest* that summarized forty years of evidence linking quality programming and child outcomes but admitted that quality control is only important if parents choose high quality centers (Pianta et al., 2009). Current standards offer specific guidance regarding many quality features with much less emphasis on more practical elements of care that have become increasingly relevant for growing numbers of households with two

working parents or single working parents. In addition to child development, subsidized pre-kindergarten also serves an important function for working parents. Programs and policies must strive to meet both these needs in order to be most effective (Zigler, Marsland, & Lord, 2009).

This study is an important first step in assessing processes associated with parents' choice of early education. Parents in this study rated a number of considerations identified in past research that reflect quality and practical features of care. More importantly it identifies specific family, child and cultural factors that are related to those beliefs. The persistence of an achievement gap despite increases in preschool and pre-kindergarten programs warrants additional examination of processes such as parents' choice of pre-kindergarten and may help to illuminate the intersection between educational policy, families and child outcomes.

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**Appendix A: Focus Group Questions**

- How did you choose day care?
  - Were you able to send your child to your first choice?
- Are you planning on sending your child to preschool?
- What preschool programs are you considering?
- What are key considerations when looking at preschools?
  - What is the most important consideration?
  - What would eliminate a preschool from consideration?
- What is the purpose of preschool?
- What does your child need to know by the end of preschool?
- Who do you think should be responsible for providing preschool?
- Who do you think should be responsible for paying for preschool?
- If you could describe the perfect preschool program for your child what would it look like?
  - How different do you think that will be from the program they will likely attend?
- Are there any features of a preschool program that are important for your child in particular?

## Appendix B: Survey Instrument

Thank you for taking the time to complete this questionnaire. Please be reminded that all information provided about you and your child will be completely confidential.

Please provide the following information about **yourself** (Contact information will be used to follow-up about your eventual pre-kindergarten choice and will be shredded immediately after):

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

\_\_\_\_\_

Home Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Gender (Check one box):       Male **15**       Female **188**

Race/Ethnicity (Check one box):

- American Indian or Alaskan native **2**
- Asian or Pacific Islander **6**
- Black/African American (not Hispanic) **123**
- Hispanic (Latino) **3**
- Multiracial **8**
- White (Caucasian, not Hispanic) **60**
- Other race →Please specify: \_\_\_\_\_

In what year were you born? \_\_\_\_\_

Were you born in the United States?       Yes **26**       No **175**

What language is most frequently spoken in your home?

- English **193**
- Other language →Please specify: \_\_\_\_\_ **7**

What is the highest level of school that you have completed?

- Less than a high school graduate **3**
- High school graduate or GED **28**
- Some college, Associate's degree **62**
- College graduate, Bachelor's degree **49**
- Some graduate school **6**
- Professional or graduate degree **55**

For last year what was your approximate household income from all sources?

- Less than \$20,000 **52**
- \$20,000-\$29,999 **27**
- \$30,000-\$39,999 **18**
- \$40,000-\$49,999 **9**
- \$50,000-\$59,999 **6**
- Over \$60,000 **86**

Please answer the following questions about your **child**:

Age: \_\_\_\_\_ years \_\_\_\_\_ months **M = 45.4 months**

Was your child born in the United States?  Yes **195**  No **4**

Is your child (Check one box):  Male **96**  Female **100**

Child's Race/Ethnicity (Check one box):

- American Indian or Alaskan native **5**  
 Asian or Pacific Islander **5**  
 Black/African American (not Hispanic) **122**  
 Hispanic (Latino) **4**  
 Multiracial **12**  
 White (Caucasian, not Hispanic) **54**  
 Other race →Please specify: \_\_\_\_\_ **1**

Is this your only child?  Yes **55**  No **117**

If no, how many older siblings does this child have? \_\_\_\_\_ younger siblings? \_\_\_\_\_

How long has your child been enrolled at this center?

- 3 + years **46**  
 1-2 years **83**  
 Less than 1 year **69**

What type of child care did you use before enrolling at this center (**please mark all that apply**):

- I primarily took care of my child at home **73**  
 A relative took care of my child in my home **14**  
 A Non-relative took care of my child in my home **20**  
 A Relative took care of my child outside my home **8**  
 A Neighbor or friend took care of my child outside my home **4**  
 My child went to a family day care center with other children **12**  
 My child went to a child care center with other children **42**  
 Other (Please specify): \_\_\_\_\_ **24**

How stressful was choosing non-parental care for your child? **M = 2.09**

- Extremely stressful  Stressful  Somewhat Stressful  Not stressful  Don't know  
0 1 2 3 4

How many waitlists are you currently on for pre-kindergarten programs? \_\_\_\_\_

**M = .24**

Are you planning to send your child to state-funded pre-kindergarten?

- Yes **119**  No **75** Maybe **3**

How many pre-kindergarten programs are you currently considering for next year? \_\_\_\_\_ **M = 1.18**

Please List in the space below:

### Parent Involvement in Children's Education Scale

The following questions ask you how often you engage in certain activities with your child or your child's school. By school we are referring to your child's preschool or child care center. If your child is not in school feel free to skip these items.

Please read each question and tell us how often you engage in these activities. A rating of 1 means that you rarely engage in these activities whereas a rating of 4 means that you always engage in these activities.

	Almost Never	Occasionally	Often	Almost Always
1. I don't spend enough time talking with my child about what they do at school	1	2	3	4
2. I am not involved enough in school activities	1	2	3	4
3. At school functions I do not have time to talk with parents	1	2	3	4
4. Major responsibilities prevent me from going on school trips	1	2	3	4
5. House tasks prevent me from reading to my child	1	2	3	4
6. I am unaware of who my child plays with at school	1	2	3	4
7. I am reluctant to voice my opinions at school meetings	1	2	3	4
8. I am reluctant to talk with my child about race and culture	1	2	3	4
9. My parental responsibilities are stressful	1	2	3	4
10. I am unaware of my child's classroom rules and daily routines	1	2	3	4
11. I participate in parent programs at my child's school	1	2	3	4
12. I attend parent meetings	1	2	3	4
13. I talk with the teacher about my child	1	2	3	4
14. I create opportunities to get to know my child's teacher	1	2	3	4
15. I take my child to the public library	1	2	3	4
16. I involve my child in activities outside of school	1	2	3	4
17. I give my child rewards when he/she does well in school	1	2	3	4
18. I follow a specific set of rules to discipline my child	1	2	3	4
19. I buy educational materials for my child	1	2	3	4
20. I set a regular after-school routine for my child	1	2	3	4
21. School-to-home communications are respectful to me	1	2	3	4
22. My child's school is open to parent participation	1	2	3	4
23. I discipline my child when I receive reports of misbehavior	1	2	3	4
24. I can tell when my child has had a bad day at school	1	2	3	4

	Almost Never	Occasionally	Often	Almost Always
25. I talk to my child about how important school is	1	2	3	4
26. I tell my child how I expect him/her to behave in school	1	2	3	4
27. I make sure that my child has school supplies	1	2	3	4
28. I ask my child about days at school	1	2	3	4
29. I help my child to be successful in school	1	2	3	4
30. I help my child practice what he/she is learning at school	1	2	3	4
31. I talk to my child about what they want to be when they grow up	1	2	3	4
32. I say positive things to my child about school	1	2	3	4
33. I review my child's school work	1	2	3	4

### Your Child's Activities

These next questions are about things that different children do at different ages. These things may or may not be true for your child.

Can your child recognize...

- All the letters of the alphabet       Most of them       Some of them       None of them

How high can your child count? Would you say...

- Not at all  
 Up to five  
 Up to ten  
 Up to twenty  
 Up to fifty  
 Up to 100 or more

Can your child button (his/her clothes)?       Yes       No

Does your child hold a pencil properly?       Yes       No

How often does your child like to write or pretend to write? Would you say...

- Never       Has done it once or twice       Sometimes       Often       Don't Know

Does your child mostly write and draw rather than scribble?       Yes       No

Can your child write (his/her) first name even if some of the letters are backward?

- Yes       No       Don't know

When your child speaks, is (he/she) understandable to a stranger?       Yes       No

Did your child start speaking later than other children you know? Yes No

Does your child stutter or stammer? Yes No

Does your child ever look at a book with pictures and pretend to read? Yes No

When your child pretends to read a book, does it sounds like a connected story, or does (he/she) tell what's in each picture without much connection between them?

Sounds like a connected story  Tells what's in each picture  Does both

Does your child recognize (his/her) own first name in writing or in print?

Yes  
No  
 Don't know

Can your child identify the colors red, yellow, blue, and green by name? Would you say...

All of them  Some of them  None of them

### Your Child's Behavior

In general thinking about your child now or over the past month, tell me how well the following statements describe your child's *usual* behavior. Circle one response for each.

	Very true or often true	Sometimes or somewhat true	Not true
1. Makes friends easily?	1	2	3
2. Enjoys learning?	1	2	3
3. Has temper tantrums or hot temper?	1	2	3
4. Can't concentrate, can't pay attention for long?	1	2	3
5. Is very restless, and fidgets a lot?	1	2	3
6. Likes to try new things?	1	2	3
7. Shows imagination in work and play?	1	2	3
8. Is unhappy, sad, or depressed?	1	2	3
9. Comforts or helps others?	1	2	3
10. Hits and fights with others?	1	2	3
11. Worries about things for a long time?	1	2	3
12. Accepts friends' ideas in sharing and playing?	1	2	3
13. Doesn't get along with other kids?	1	2	3
14. Wants to hear that he or she is doing ok?	1	2	3
15. Feels worthless or inferior?	1	2	3
16. Makes changes from one activity to another with difficulty?	1	2	3
17. Is nervous, high strung or tense?	1	2	3
18. Acts too young for (his/her) age?	1	2	3
19. Is disobedient at home?	1	2	3

### Preschool Placement Questionnaire

We know that you are currently deciding where to send your child for pre-kindergarten. Parents have lots of different concerns when approaching this choice. For each item please indicate how much it will affect your decision when choosing pre-kindergarten for your child.

Please indicate how much each of the following will affect your decision	Will not affect	Will probably not affect	May or may not affect	Will probably affect	Will definitely affect
The pre-kindergarten program:					
1. is located close to my home and/or workplace	1	2	3	4	5
2. is accredited	1	2	3	4	5
3. has diverse staff and students	1	2	3	4	5
4. has good food	1	2	3	4	5
5. teaches early reading skills	1	2	3	4	5
6. is in the school or district I prefer	1	2	3	4	5
7. has a good child to staff ratio	1	2	3	4	5
8. prepares my child for the transition to kindergarten	1	2	3	4	5
9. has good communication with parents	1	2	3	4	5
10. is affordable	1	2	3	4	5
11. has hours that fit my schedule	1	2	3	4	5
12. has staff that is warm and trustworthy	1	2	3	4	5
13. feels welcoming and structured	1	2	3	4	5
14. helps my child make friends and socialize	1	2	3	4	5
15. is safe	1	2	3	4	5
16. has staff with values that are similar to my own values	1	2	3	4	5
17. has staff that is educated/trained in child development	1	2	3	4	5
18. has flexible sick day policies for kids	1	2	3	4	5
19. teaches early math skills	1	2	3	4	5
20. is clean	1	2	3	4	5
21. helps my child learn how to learn	1	2	3	4	5
22. has good leadership	1	2	3	4	5
23. has low staff turnover	1	2	3	4	5
24. encourages/celebrates diversity	1	2	3	4	5
25. has a good reputation	1	2	3	4	5
26. includes religious education	1	2	3	4	5
27. teaches social skills	1	2	3	4	5
28. has transportation	1	2	3	4	5

Are there any other characteristics not listed above that are influencing where you send your child to pre-kindergarten? If yes please list below:

### Parental Modernity Scale

Here are some statements other parents have made about rearing and educating children. For each one, please circle the number that best indicates how you feel in general, not just about your own child.

	Strongly disagree	Mildly disagree	Not sure	Mildly agree	Strongly agree
1. Since parents lack the special training in education they should not question the teacher's teaching methods	1	2	3	4	5
2. Children should be treated the same regardless of differences among them	1	2	3	4	5
3. Children should always obey the teacher	1	2	3	4	5
4. Preparing for the future is more important for a child than enjoying today	1	2	3	4	5
5. Children will not do the right thing unless they must	1	2	3	4	5
6. Children should be allowed to disagree with their parents if they feel their own ideas are better	1	2	3	4	5
7. Children should be kept busy with work and study at home and at school	1	2	3	4	5
8. The major goal of education is to put basic information into the minds of children	1	2	3	4	5
9. In order to be fair, a teacher must treat all children alike	1	2	3	4	5
10. The most important thing to teach children is absolute obedience to whoever is in authority	1	2	3	4	5
11. Children learn best by doing things themselves rather than listening to others	1	2	3	4	5
12. Children must be carefully trained early in life or their natural impulses will make them unmanageable	1	2	3	4	5
13. Children have a right to their own point of view and should be allowed to express it	1	2	3	4	5
14. Children's learning results mainly from being presented basic information again and again	1	2	3	4	5
15. Children like to teach other children	1	2	3	4	5
16. The most important thing to teach children is absolute obedience to parents	1	2	3	4	5
17. The school has the main responsibility for a child's education	1	2	3	4	5
18. Children generally do not do what they should unless someone sees it	1	2	3	4	5
19. Parents should teach their children that they should be doing something useful at all times	1	2	3	4	5

20. It's all right for a child to disagree with his/her parents	1	2	3	4	5
21. Children should always obey their parents	1	2	3	4	5
	Strongly disagree	Mildly disagree	Not sure	Mildly agree	Strongly agree
22. Teachers need not be concerned with what goes on in a child's home	1	2	3	4	5
23. Parents should go along with the game when their child is pretending something	1	2	3	4	5
24. Parents should teach their children to have unquestioning loyalty to them	1	2	3	4	5
25. Teachers should discipline all the children the same.	1	2	3	4	5
26. Children should not question the authority of their parents	1	2	3	4	5
27. What parents teach their child at home is very important to his/her school success	1	2	3	4	5
28. Children will be bad unless they are taught what is right	1	2	3	4	5
29. A child's ideas should be seriously considered in making family decisions	1	2	3	4	5
30. A teacher has no right to seek information about a child's home background	1	2	3	4	5

## EARLY CHILDHOOD SURVEY OF BELIEFS AND PRACTICES

Instructions: Each statement on this survey represents a continuum of two different thoughts or ideas regarding Early Childhood Education. For each statement mark an "X" anywhere on the line that best represents your thoughts about Early Childhood Education for 4-year-olds.

**\* I BELIEVE THE MOST IMPORTANT DEVELOPMENTAL GOAL OF PROGRAMS FOR 4-YEAR-OLDS IS:**

academic preparation \_\_\_\_\_ social and emotional growth

**\* I BELIEVE THAT 4-YEAR-OLDS LEARN BEST THROUGH:**

direct instruction \_\_\_\_\_ active experience

**\* I BELIEVE THAT ACTIVITIES IN A CLASSROOM FOR 4-YEAR-OLDS SHOULD BE:**

teacher initiated \_\_\_\_\_ child initiated

**\* I BELIEVE THAT THE ROLE OF A TEACHER OF 4-YEAR-OLDS IS TO:**

dispense knowledge \_\_\_\_\_ facilitate learning

**\* I BELIEVE THAT PROGRAMS FOR 4-YEAR-OLDS SHOULD USE A LEARNING FORMAT THAT IS:**

group oriented \_\_\_\_\_ individualized one-to-one

**\* I BELIEVE THAT 4-YEAR-OLDS IN A GROUP LEARN EFFECTIVELY THROUGH INTERACTION WITH:**

adults \_\_\_\_\_ peers

**\* I BELIEVE THAT CLASS MATERIALS AND RESOURCES FOR 4-YEAR-OLDS SHOULD BE:**

teacher distributed \_\_\_\_\_ child accessible