Chapter 9
Minority Families in the Rural United States: Family Processes, Child Care, and Early Schooling

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Over the last 10 years, large-scale national studies, policy briefs, and qualitative examinations of family life in the United States have described the alarming and growing "opportunity gap" between more-educated middle-class families who have thrived over the last 30 years and less-educated working-class families who have actually lost ground over the last 30 years (Duncan & Murnane, 2011; McClanahan, 2004). The opportunity gap has stemmed from increasing income, education, and work disparities that have impacted parental time with children, provision of resources for children, child participation in outside-of-school activities, and access to educational opportunities (Duncan & Murnane, 2011; Lareau, 2003). All of these factors contribute to an "achievement gap" for children from under-resourced versus well-resourced families. Most of the discussion of the opportunity and achievement gaps has focused on urban families, with much less attention focused on rural and/or rural minority families, even though rural children comprise almost one quarter of the school-aged population in the United States and minority populations in the rural United States are growing (O'Hare, 2009). This chapter will outline how disparities play out in the rural United States, with a focus on the unique experiences of minority families.

Early gaps in children's opportunities are concerning in part because later school difficulties have been linked to limited early resources. Children who struggle in school are generally from poorer and less-educated families. If poor children do not

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learn to read by early elementary school, they are set on a trajectory of failure for their entire school career (Duncan et al., 2007; Entwisle & Alexander, 1999). Longstanding evidence shows that African American and Latino children who are poor enter school with lower school readiness skills than more advantaged children (Brooks-Gunn & Markman, 2005). The gap between minority, low-income children and more advantaged nonminority, non-low-income children continually grows over the years, with low-income children and especially minority, low-income children becoming progressively further behind in school (Grace, Zaslow, Brown, Aufseeser, & Bell, 2011; Mulligan, Hastedt, McCarroll, & National Center for Education Statistics, 2012). This trend appears to lead to disaffection with school for low-income minority youth who are more likely to drop out of school if they do not receive early intervention to improve their academic skills (Duncan & Murnane, 2011). School trajectories for minority children are even more constrained in rural areas, especially low-wealth rural areas, where teachers have less training and where children and families have fewer opportunities to access high-quality resources such as libraries and after-school programs (O'Hare, 2009; Smith & Tickamyer, 2011; Vernon-Feagans, Gallagher, & Kainz, 2010).

Children in the rural United States have higher poverty rates than urban and suburban children. The gap between urban and rural child poverty rates has grown, especially since the 2008 recession (Vernon-Feagans, Burchinal, & Mokrova, 2015). Rural children also tend to live in deeper poverty and for longer periods of time compared to their more urban counterparts (O'Hare, 2009). Furthermore, minority families in the rural United States are twice as poor as nonminority families, another gap that is much greater in rural than urban areas (Lichter & Graefe, 2011). A 2009 report from the Carsey Institute found that one in five young rural white children, two in five young rural Hispanic children, and one in two young rural African American children were living in poverty (O'Hare, 2009).

Lower reading levels at kindergarten entry translate into lower literacy levels during adolescence and adulthood, contributing to lower lifetime earnings, higher unemployment levels, and a continued cycle of poverty (Craig & Washington, 2006). Thus, inequities related to poverty and opportunities in the home environments begin from the earliest years of life and continue into school. To explore the lives of rural minority families in this chapter, we will frequently describe findings from the Family Life Project (FLP), a representative sample of 1292 children living in low-wealth rural areas in the United States who were followed from birth (see Vernon-Feagans, Cox, and the FLP Key Investigators, 2013 for more details). FLP oversampled for families in poverty and African American families, with these populations comprising 70 % and 40 % of the full sample, respectively. This chapter will provide background on the early development of these children in preschool and the transition to school, using key findings from the FLP study. We will focus on ecological factors that have been linked to school readiness, including: (a) rural isolation, work, and poverty; (b) child care; and (c) parenting. At the end of the chapter, we will discuss future directions, including implementing effective interventions in rural schools and conducting sensitive and efficacious studies in rural minority communities.

Theoretical Foundations for Studying Ethnic Minority Families

Ecological, sociocultural, and integrative frameworks are valuable for investigating family processes and child development in minority families (García Coll et al., 1996). An ecological framework places the child at the center of a network of environmental systems, with the interrelatedness of the systems influencing the child's development (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998). Not only does the environment affect the child but the child also impacts the environment through reciprocal actions and relationships. Ecological theory posits that both distant (*distal*, such as economic contexts) and immediate (*proximal*, such as parenting) factors influence children's development. Sociocultural theory maintains that early childhood is an important time during which children learn to interact in culturally specified ways with family members, other children, nonfamilial adults, and community members (Bronfenbrenner, 1979; Rogoff, 2003). The strength of these relationships works in conjunction with children's individual attributes to set a foundation guiding how children develop positive self-concepts, use language, develop racial pride, approach learning, and engage in subsequent peer and teacher relationships (Rogoff, 2003; Suizzo, Robinson, & Pahlke, 2008).

Most studies have been conducted without recognizing historical and current inequities underlying ethnic minority children's early schooling outcomes (Cabrera, Beeghly, & Eisenberg, 2012; García Coll et al., 1996). To better understand how inequities impact minority children and families, García Coll et al. (1996) embedded the ecological framework within an integrative model of minority child development (see Fig. 9.1). The integrative model includes important ecological contexts for all children but pays special attention to unique factors related to the development of minority children, including experiences related to racism, prejudice, discrimination, and oppression as well as the resulting segregation of minority families through both residential and economic segregation. Inhibiting and promoting factors in families, neighborhoods, and schools are shown to be related to children's language, academic, and social skills. These constructs are particularly important when studying the lives of minority families. For instance, FLP used the integrative model to find evidence suggesting that higher levels of perceived discrimination by African American mothers was related to greater maternal depression. Yet, this study also showed how optimism and church-related social support helped mothers suffering from severe depression (Odom, Vernon-Feagans, & The Family Life Project Key Investigators, 2010). Thus, investigating some of the unique constructs of minority family life may be particularly important in understanding children's normative positive development. Throughout this chapter we attempt to address these unique factors in the lives of minority children as they traverse through early childhood and the transition to school. Below, we explore how rural economic restructuring, parental educational attainment, and constraints on parental investments and family stability may impact child care stability and quality, parenting characteristics, and children's early and later development. Although the findings

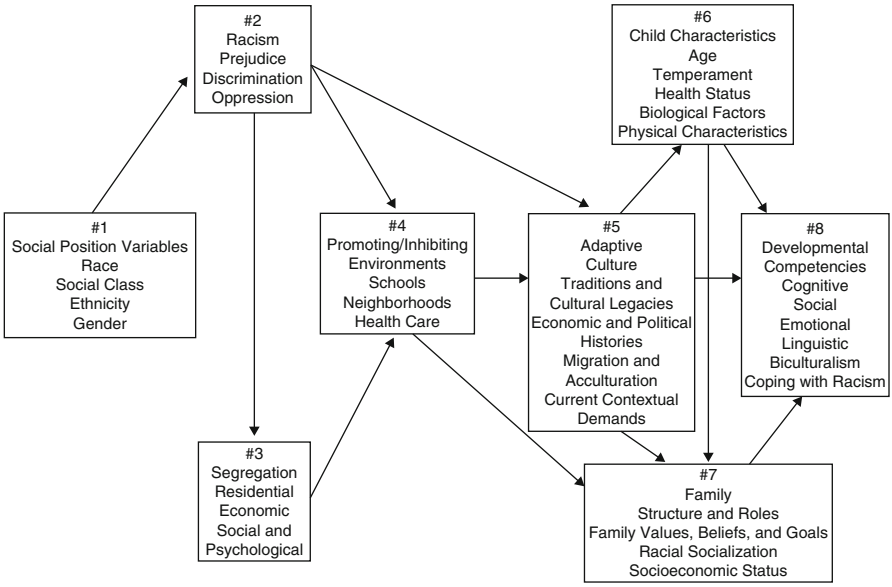

Fig. 9.1 Integrative model

discussed below will reference the experiences of minority children living in rural areas where possible, we will also draw on a larger body of work in order to fully explore the factors that influence children's transition to school.

Transitioning to School for Ethnic Minority Children

The transition to school is a time of greater responsibility for children, as they take on the role of "student" with a new collection of rules and obligations, a new set of adults, and a larger group of peers (Entwisle & Alexander, 1999; Mayer, Amendum, & Vernon-Feagans, 2010). Interactions with teachers are more academically focused and structured and typically less warm than children experience with family members or child care providers (Rimm-Kaufman & Pianta, 2000). Additional changes that children may experience for the first time include comparison with other children, evaluation of skills, and early tracking by teacher-perceived ability (Entwisle & Alexander, 1999). Further, schools are often spaces in which children first learn about race and its nuances (Noguera, 2003). Given these demands and children's need to synthesize new information, this transitional period can set the stage for children's later schooling (Vernon-Feagans, 1996). Across six large-scale studies, for example, academic achievement in children's late elementary years was most strongly predicted by school-entry reading, math, and attention skills (Duncan et al., 2007).

For low-income minority children, the transition to school has the potential to lead to academic success if they attend effective schools that provide high-quality instruction, set high expectations for children, and have a strong commitment to serve all students (Noguera, 2003). Unfortunately, not all children experience strong educational environments, which may be particularly true in rural areas, where rural schools have fewer resources and fewer well-trained teachers (Vernon-Feagans et al., 2010). Therefore, parents and other family members as well as prior educational exposure (e.g., high-quality child care) are important components of children's success. For example, African American and Latino parents often believe that education is associated with social mobility for their children (Holloway, Rambaud, Fuller, & Eggers-Pierola, 1995). Parents' views on school readiness are shaped both by their personal, experiential understanding of what happens in schools and by public discourse (Barbarin et al., 2008). As children's first teachers, parents choose activities, learning materials, and how they want to socialize their children, imparting values that they deem or have been told are most important (Lareau, 2003). Minority families have been shown to strongly value education (Fields-Smith, 2009; Hill & Torres, 2010), and in order to best aid their children, often equate successful adaptation to school with their children's academic preparedness (Barbarin et al., 2008). Despite efforts of rural ethnic minority families to prepare their children for school and promote school success, distal factors such as economic disparities and poverty often reduce their children's opportunities for a successful transition to school.

Economic Restructuring and Rural Families Massive restructuring of the United States economy and continued globalization have changed the quality of family life over the last 30–40 years. Rural economic changes have been fueled by the disappearance of family farms (Dimitri, Effland, & Conklin, 2005) and furniture, textile, steel, and railroad manufacturing jobs (Smith & Tickamyer, 2011; Vernon-Feagans et al., 2010; Vernon-Feagans et al., 2015), all of which provided steady and reliable work for rural adults 30 years ago. The disappearance of key industries has had a greater impact on minority than nonminority adults, as minority adults are even more likely to work in service industry jobs (e.g., retail, fast food, and home health), which are characterized by lower wages, poorer benefits, and nonstandard work hours (Smith & Tickamyer, 2011). Thus, rural families have been uniquely affected by changes in the United States economy compared to their more urban counterparts. The combination of the outmigration of young adults to urban areas and the disappearance of key industries in rural areas have created the context for greater poverty in rural than urban communities (Glasmeier & Salant, 2006; Petrin, Schafft, & Meece, 2014).

The economic restructuring in the rural United States has had a profound impact on the ability of rural families to provide optimal contexts for their children's development. Longer work hours, less vacation time, more low-paying jobs with nonstandard work hours, and the rise in the necessity for two wage earners to meet families' needs have disproportionately affected working-class and minority families (McClanahan, 2004; Vernon-Feagans et al., 2015). A shift in work has clearly

not happened only in the rural United States but the impact may be greater in rural areas, where poverty is more prevalent and fewer jobs are available to provide standard working hours, benefits, and high pay (Vernon-Feagans et al., 2010).

Educational Attainment The outmigration of educated and talented young adults in the rural United States seeking better opportunities in urban/suburban areas further decreased community social capital and resources (Hornberger & Cobb, 1998). Those left behind were often older adults and young adults with less education and skills. Outmigration, coupled with reduced access to higher education in the rural United States, has created a dramatic difference in the college graduation rates between urban and rural adults, with 17.5 % of rural adults having a college degree compared to 31 % of urban adults (USDA Economic Research Service, 2012). These differences are even more exaggerated for minority adults, with only 7 % of rural African American adults with a college degree in comparison to 18 % of their urban counterparts (Harris & Worthen, 2003). Differences in educational attainment between urban and rural areas have fairly negative implications for families and their children. For instance, in 1970, almost half of adults without a high school degree and 60 % of high school graduates were in the middle class, but by 2007, the proportion had fallen to 33 % and 45 %, respectively. Since 1970, people with college degrees or greater have remained in the middle class or "boarded the escalator upwards" to the highest income levels as compared to high school graduates who have lost ground economically (Carnevale, Smith, & Strohl, 2010).

Rural economic trends may also be driving a convergence in the lives of less-educated adults, such that adults with less than a high school education and those with a high school education only are more alike compared to the more advantaged college-educated adults. Jobs that may have been relegated previously to the least educated (i.e., women without a high school degree) are now also being filled by women with a high school degree or even some college. At the national level across the rural/urban continuum, the trend for high school graduates to be employed in lower-paying jobs that once were mostly filled by non-high school graduates may be one of the reasons for the rising income gap between the college-educated and the noncollege-educated groups, as well as, the gap between minority and nonminority families (Presser, 2003).

Constraints on Parental Investments Family poverty directly exerts its influence on child development through the resources that parents are able to provide, including books in the home, child participation in outside school activities, and child academic enrichment activities (Duncan & Murnane, 2011; Reardon, 2011). Some evidence has shown that poverty indirectly influences child development through parental educational levels and nonstandard work hours. For example, a recent study by Kalil, Ryan, and Corey (2012) examined the relationship between maternal education and the amount of time mothers spent in various activities with their children at different ages. They reported what they called a "developmental gradient," such that college-educated mothers shifted their time with children in response to child developmental needs. College-educated mothers spent much more time during

early childhood in basic care and play with their children in comparison to less time in these activities by the noncollege-educated mothers. College-educated mothers then continued to shift their time allocations across childhood in accordance with child needs, such that they spent more time teaching their children in early childhood and more time helping manage children's activities at school-age. This shift in time allocation was not apparent in the noncollege-educated mothers' time allocation, suggesting a divergence in beneficial parenting practices between the college- and noncollege-educated mothers. The gap in parenting by maternal education may be even greater in the rural United States because of the larger percentage of noncollege-educated adults.

Nonstandard Work Hours Although the time parents spend with children is clearly related to parents' educational levels, the time and activities that mothers and fathers engage in with children are also related to their work hours and how those work hours mesh with the developmental needs of their children. Even though 80 % of rural households have a full-time working adult, many of the available jobs pay low wages with few benefits and often involve nonstandard work hours that put families and children at risk (Lichter, Roscigno, & Condron, 2003). The rise in the "24-hour economy" (Presser, 1999, 2004), wherein an increasing number of adults are working evening, overnight, rotating and variable shifts, and weekends, has changed the structure of family life. This change in work schedules has disproportionately affected lower-educated adults (Presser, 2004). In FLP, over 40 % of the working mothers living in rural North Carolina and Pennsylvania had nonstandard work hours (Vernon-Feagans et al., 2015).

A number of sociologists have argued that nonstandard work hours have negatively impacted the lives of families (Enchautegui, 2013; Smith & Tickamyer, 2011). Nonstandard work hours have been implicated in the actual time and activities that parents are able to participate in with their children. Enchautegui (2013) examined diary entries recording the amount of time parents spent with their children as a function of whether they had a standard or nonstandard work schedule. Although she did not control for education level, Enchautegui reported that mothers and fathers who worked in nonstandard work schedules spent considerably less time with their children from infancy to age 18. Presser (2004) reported that parents who worked in nonstandard shifts spent fewer nights having dinner with their children, with 64 % of single working mothers missing about half the dinners with their children each week compared to only 23 % of single mothers who work during the day. This trend was similar for both mothers and fathers in dual-earner families.

In addition, nonstandard work hours have now been associated with poorer outcomes for children, including greater behavior problems for children in elementary school (Joshi & Bogen, 2007). For African American families in FLP, maternal employment in nonstandard work hours at 24 months was associated with lower expressive language skills at both 24 and 36 months. This finding was mediated by maternal engagement, suggesting that nonstandard work hours decreased mothers' ability to engage in sensitive parenting behaviors (Odom, Vernon-Feagans, & Crouter, 2013).

Family Stability The economic and social forces described above have increased the likelihood that some rural children will experience less supportive environmental conditions, including greater household chaos. Rurality and poverty place severe stress on families who may need to drive long distances to jobs, health services, and schools, while juggling work and family schedules. The strain on family life can create increased chaos and poorer parenting, leading to poorer child outcomes (Hofferth, 1998; Vernon-Feagans, Garrett-Peters, Willoughby, & Mills-Koonce, 2012; Vernon-Feagans et al., 2015). Household chaos has been defined by family instability and disorganization. Instability includes people moving in and out of the household, household moves to a different location, and changes in the mother or father figure in the home. Disorganization includes lack of schedules and routines, clutter, and noise in the home. Family chaos may be particularly salient in rural households (Evans, 2006; Vernon-Feagans, Garrett-Peters, De Marco, & Bratsch, 2012) as families cope with limited public transportation and geographic isolation, which make access to work, school, and essential services difficult. In a recent FLP papers (Vernon-Feagans, Garrett-Peters, Willoughby & Mills-Koonce, 2012), family disorganization negatively predicted children's earlier and later language outcomes. Thus, chaotic living conditions not only affect poor children but potentially place all rural children at risk (Dewees, 2000; Lee & Burkam, 2002). Rurality is significantly linked to poorer outcomes for children as they enter formal schooling, not simply in the presence of poverty but due to chaotic home lives that are often associated with rural families' work schedules, geographic isolation, and marginalization.

Child Care Providing high-quality child care may be an important way to help ethnic minority children successfully transition to school and to lessen the achievement gap (McCartney, Dearing, Taylor, & Bub, 2007). For example, higher-quality care has been shown to be an especially strong protective factor for African American children as they progress through elementary school (Votruba-Drzal, Coley, Maldonado-Carreno, Li-Grining, & Chase-Lansdale, 2010) as well as for Latino children (Bassok, 2010). Although research on child care has not sufficiently explored or disaggregated data on the accessibility, quality, and stability of child care and its influence on the transition to school for minority children living in rural communities (Bratsch, 2011; U.S. Department of Health and Human Services, 2005), we highlight a sampling of relevant literature below.

Accessibility High percentages of rural and ethnic minority children attend out-of-home child care during their earliest years. A National Household Education Survey estimate of rural families' participation in childcare was 62 % (Swenson, 2008), similar to urban areas and the United States as a whole. ECLS-B data showed that, nationally, child care attendance for African American and Latino children increased from 65 % and 47 % at 9 months to 85 % and 78 % at 4 years, respectively (Bassok, 2010). These figures highlight the fact that national data is often disaggregated by race or geographic location, but not both. Thus, data from longitudinal projects such as FLP help to fill in the gap of knowledge of the child care experiences for minority families living in rural areas. In FLP, 53 % of African American children were in child care at 6 months (56 % informal/44 % formal), which increased to 68 % at prekindergarten

(4 % informal/96 % formal). As expected, rural African American children in FLP increased in the likelihood of attending child care outside of the home and changed from primarily informal care as infants (e.g., friend or relative care, family child care homes) to formal care (e.g., center-based care) as preschoolers.

Although rural families may be able to find child care, whether that care is preferred or beneficial for their children remains questionable. Child care accessibility for rural families continues to be constrained by geographic isolation and cost (Forry & Walker, 2011). Rural families make child care decisions based on minimizing the distance to child care, thus reducing travel costs (Li-Grining & Coley, 2006). In a study exploring child care availability for families living in rural communities, respondents from a rural community in Maryland revealed that the only formal child care option was in a neighboring county 50 miles away (Walker & Reschke, 2004). Further, rural families tend to pay more for child care than families living in urban areas (Smith & Gozjolko, 2010), with rural single-parent families paying over one-third of their income on infant care (Walker & Reschke, 2004). Families may not be best situated to understand the characteristics of high-quality care or be able to make decisions about child care based on quality. Thus, rural families make child care choices based on location, cost, convenience, and/or subsidy receipt, restricting their access to a variety of care options, including options they might prefer (Bratsch, 2011). In FLP, families who had access to child care subsidies (approximately one-third of the full sample from 6 to 36 months), however, were able to select higher-quality child care, particularly center-based care (De Marco, Vernon-Feagans, & The Family Life Project Key Investigators, 2014).

Quality Given the high prevalence of children from ethnic minority families attending child care, understanding whether that care is high in quality becomes an important task. Despite the known benefits of high-quality care, the majority of children across the United States experience only average quality care (Vandell et al., 2010). For low-income families in particular, the combination of low availability of programs such as Head Start (Clements, Reynolds, & Hickey, 2004), child care costs that are a disproportionate share of their income (Smith & Gozjolko, 2010), and limited amounts of publicly funded child care subsidies (Weinraub, Shlay, Harmon, & Tran, 2005) make accessing high-quality child care a challenge. An additional barrier specific to ethnic minority families may be the challenge of accessing child care programs specifically designed to provide culturally sensitive care for their children (Howes, 2010). Using FLP data, rural African American children were shown to experience lower-quality child care than their non-African American peers at ages two and three (De Marco, Crouter, & Vernon-Feagans, 2009). In other findings, FLP children at 36 months who experienced low maternal language diversity or complexity in the home but positive caregiving interactions in child care had better language skills at 36 months and pre-K (Vernon-Feagans, Bratsch-Hines, & The Family Life Project Key Investigators, 2013), even after controlling for home environment and child care quality. Finally, for FLP children in prekindergarten, analyses showed support for a relationship between higher child care quality and lower problem behaviors (Burchinal, Vernon-Feagans, Vitiello, Greenberg, & The Family Life Project Key Investigators, 2014). Thus, stimulating,

high-quality child care (e.g., high amounts of verbal interaction, better classroom management) is a key ingredient in promoting children's behavioral, language, and emergent literacy skills for both African American and non-African American children in the rural context.

Intensive child care interventions such as the Abecedarian project and the Perry Preschool project, which predominantly served African American children in poverty, found that children who received child care services experienced short-term gains in academic achievement and long-term advantages such as exposure to higher education, employment opportunities, and better physical health in adulthood (Campbell et al., 2014; Pungello et al., 2010; Schweinhart, 2005; Schweinhart & Weikart, 1997). Longitudinal studies have also linked high-quality child care to children's academic and social development. Data from the NICHD Study of Early Child Care and Youth Development, which included rural and minority children but did not disaggregate findings, showed that higher-quality child care predicted higher academic achievement and lower rates of externalizing behaviors up to age 15 (Vandell et al., 2010).

Stability Researchers focusing on child care quality have not always considered that children often attend several different child care settings prior to age five, experiencing sequential changes from month to month or year to year (Bratsch-Hines, Mokrova, Vernon-Feagans, & The Family Life Project Key Investigators, 2014) and/or simultaneous changes within a given week (Morrissey, 2009). These changes, termed *child care instability*, are a common experience for most children in the United States (Adams & Rohacek, 2010). While previous research has focused on the links between child care instability and outcomes for children from low-wealth families, limited work has explored this phenomenon for rural ethnic minority families. For the 96 African American children in FLP who were consistently in non-parental child care arrangements from 6 to 36 months (only 17 % of the African American sample), higher child care instability was associated with lower social competence skills at 36 months. This finding was moderated by home environment quality, such that children who experienced lower home environment quality and higher child care instability had the highest likelihood of being rated as having low social competence skills by their child care providers at 36 months (Bratsch-Hines, Vernon-Feagans, & The Family Life Project Key Investigators, 2013). Despite contributions from longitudinal projects such as FLP, more work is needed to understand how child care quality and instability are associated with social and academic development for rural ethnic minority children as they transition into elementary school.

Parenting

Children's home environments and experiences with parenting have the most salient influences on their early development. Parenting in ethnic minority families is shaped by cultural values, beliefs, and skills. Sociocultural theorists posit that

didactic interactions with more knowledgeable members of society (e.g., parents) are necessary for children to acquire new skills (Vygotsky, 1978). In relation to school readiness, sociocultural theory suggests that child development is a socially determined process, in which children depend on assistance from parents to master new cognitive and behavioral challenges (Vygotsky, 1978). As a result, early interactions with parents lead to continuous changes in children's development that vary from culture to culture. The social transmission of knowledge from parent to child is especially salient prior to school entry because parents serve as the first teachers of their young children (Baker & Rimm-Kaufman, 2014). Parents who provide developmentally appropriate cognitive stimulation and model appropriate behaviors during joint learning activities (e.g., quiet listening during book reading) can enhance children's academic functioning and ensure their readiness for school. Sociocultural theorists argue that this kind of parenting not only helps children understand how to learn but also how to execute specific tasks. Recent empirical studies with ethnic minority families have provided some support for these suppositions and highlight the importance of several family processes in families with young children, including (a) sensitivity, (b) control/discipline, (c) interfamily conflict, (d) learning and language stimulation, and (e) cultural socialization. Although work has increasingly studied these processes in ethnic minority families, less work has focused specifically on rural ethnic minority children; we will highlight that work where possible below.

Sensitivity Evidence presented above described how distal factors place constraints on parental investments. Findings from FLP have suggested strong connections for rural families between proximal influences such as the ability to parent sensitively and distal characteristics such as economic and social circumstances. For example, Newland, Crnic, Cox, Mills-Koonce, and The Family Life Project Key Investigators (2013) found that for African American and non-African American families, maternal anxiety and depression mediated the relationship between maternal report of economic pressures and observed sensitive parenting behaviors (Newland et al.,2013). Specifically, mothers who had higher economic pressures reported increased anxiety, depression, somatization, and hostility, which affected their ability to parent sensitively.

Additional research has directly and indirectly linked maternal sensitivity to ethnic minority children's positive developmental outcomes. Findings from a longitudinal study of Black, White, and Hispanic children showed that maternal sensitivity, starting when children were 6 months old and continuing throughout elementary school, was associated with gains in children's cognitive skills and social-emotional functioning from 3 to 10 years of age (Landry, Smith, & Swank, 2006). FLP researchers recently compared two parenting models during early childhood: the family investment model (importance of availability of economic resources to provide advantages to children) and the family process model (importance of relationships and interactions between parents and children). They found that while a cumulative risk index (low maternal education, low-income, single-parent household, high number of children in the household, negative life events, parental unemployment, and unsafe neighborhoods) predicted children's later development, both

models of parenting were significant partial mediators, particularly the family process model (Vernon-Feagans, Cox, and The Family Life Project Key Investigators, 2013). Assessing a national sample of African American children from the Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K), which included rural children, Baker and Iruka (2013) found that after controlling for multiple demographic risk factors, maternal sensitivity mediated the relation between maternal depression and children's kindergarten reading achievement. Although more comprehensive research is needed, these studies suggest that parental sensitivity has the potential to enhance the developmental trajectories of ethnic minority children from diverse economic contexts.

Control and Discipline Mothers who combine warmth with an adequate amount of control and discipline tend to have children with better developmental outcomes (McLoyd & Smith, 2002). Maternal discipline, in particular, allows parents to demonstrate concern for their children's well-being by setting boundaries for children's daily behaviors and activities. Based in part on the definition of parenting constructs, however, studies have shown mixed support for the link between maternal control and child outcomes. In some samples of low-income minority children, studies have shown that mothers' provision of control and discipline are positively related to children's cognitive and social-emotional development (Mistry, Vandewater, Huston, & McLoyd, 2002; McLoyd & Smith, 2002). In a study of low-income rural African American children and their mothers, Brody and Flor (1998) linked aspects of maternal control (e.g., no-nonsense parenting) to enhanced cognitive and social-emotional competence in a sample of 9-year-old children. Similarly, Mistry et al. (2002) used a sample of low-income urban African American and Latino children to show that economic hardship was related to less maternal warmth as well as less control/discipline, which predicted lower teacher ratings of behavioral competence among children aged 5 through 12 years old.

While maternal control may have some positive benefits for some ethnic minority children, research on other aspects of parenting such as intrusive parenting suggest more complicated relationships. An FLP subsample of mothers of African American boys showed increasing intrusive parenting behaviors across their first 3 years. While initial levels of intrusive behaviors were not associated with expressive communication/language development, inhibitory control, and intellectual functioning at age three, the increase in intrusive behaviors lead to poorer adjustment in these domains (Clincy & Mills-Koonce, 2013).

Interfamily Conflict Several FLP studies have examined the influence of interfamily conflict on children's developmental outcomes. For both African American and non-African American FLP families whose biological mother resided with a romantic partner when their child was three, interparental aggression increased the risk for conduct problems and ADHD symptoms (Towe-Goodman, Stifter, Coccia, Cox, & The Family Life Project Key Investigators, 2011). Similarly, mother–grandmother conflict in three-generational FLP homes was predictive of children's problem behaviors at 3 years (Barnett, Mills-Koonce, Gustafsson, Cox, & The Family Life Project Key Investigators, 2012). Similar findings were shown for FLP children

at 58 months, such that exposure to higher levels of interparental conflict as well as higher household chaos and sustained poverty uniquely contributed to children's ability to recognize and control negative emotion (Raver, Blair, Garrett-Peters, & The Family Life Project Key Investigators, 2015). Together, these studies indicate that parenting is complicated by a number of distal and proximal factors that influence children's optimal development.

Learning and Language Stimulation Additional literature suggests that home learning stimulation can have lasting positive benefits for ethnic minority children (Britto & Brooks-Gunn, 2001; Farver, Xu, Eppe, & Lonigan, 2006). In a small sample of low-income, Latino children, Farver et al. (2006) found that mothers who participated in more frequent home learning stimulation had children with better emergent literacy and social skills at 6 years of age compared to mothers who engaged in less frequent home learning stimulation. Data from nationally representative studies have also shown that African American and Latino children whose mothers and fathers read to them frequently, told stories, sang songs, and played informal learning games had more advanced cognitive and social-emotional skills in preschool and kindergarten (Baker, 2013; Baker, 2014a). In FLP, paternal rather than maternal language inputs at 6 months (i.e., diverse vocabulary during a shared book task) significantly contributed to children's communication skills at 15 months and expressive language at 36 months (Pancsofar, Vernon-Feagans, & The Family Life Project Key Investigators, 2010). However, a recent FLP study found that maternal language vocabulary and complexity during a wordless picture book task in the home at 36 months of age were predictive of children's 36-month language outcomes and pre-K school readiness skills (Vernon-Feagans, Bratsch-Hines & The Family Life Project Key Investigators, 2013).

Cultural Socialization Cultural socialization is typically defined as practices that advance children's knowledge about their race, ethnicity, or heritage (Hughes, 2003). The ways that ethnic minority parents transmit messages of cultural socialization to their young children has been increasingly studied. Research that has focused primarily on adolescents has shown that discussions about ethnicity and race are salient components of parenting in ethnic minority families (García Coll et al., 1996; Hughes et al., 2006). In addition to engaging in home learning stimulation, African American and Latino parents have been shown to transmit information about unique aspects of their culture, including their racial, ethnic, and religious heritage (Coard & Sellers, 2005; Hughes, 2003; Hughes et al., 2006).

A paucity of research has investigated African American and Latino mothers' efforts to engage in early cultural socialization and its subsequent relation to early school readiness and academic success. In one exception, O'Brien-Caughy and colleagues (2002) found that home-based cultural socialization practices were related to greater factual knowledge (measured using the Kaufman Assessment Battery for children) and better problem-solving skills among African American preschoolers. In addition, African American mothers who socialized their preschool children to be proud of their heritage reported fewer problem behaviors. Data from national samples of African American children and their mothers have yielded

similar results. For example, Baker (2014b) linked parenting and cultural socialization to higher science and social studies scores in kindergarten among African American children from the ECLS-K. Evidence from ethnic minority families living in rural contexts suggests that some aspects of cultural socialization can promote racial pride, which has been linked to positive self-esteem during adolescence (McBride Murry et al., 2005; Murry, Berkel, Brody, Miller, & Chen, 2009). Yet, no studies have examined whether and how cultural socialization practices may promote the positive development of African American or Latino children from rural families during early childhood. Thus, culturally responsive research that can address this limitation is needed.

Improving Rural Students' Trajectories

In FLP, African American children entered school with standardized scores at or above the national average (kindergarten Woodcock Johnson Letter-Word Identification, $M = 107.39$, $SD = 12.06$) and similar to their non-African American peers ($M = 107.29$, $SD = 12.12$). Over time, however, these scores began to diverge, although the African American children were still at the national average (third grade Woodcock Johnson Letter-Word Identification, $M = 99.92$, $SD = 11.15$) compared to their non-African American peers ($M = 104.36$, $SD = 11.97$, $p < 0.05$). These data suggest that, at the earliest grades, developing programs that can change this disparity is needed. In addition to families, teachers have an enormous responsibility to improve the early academic trajectories for their students. Like families, teachers, particularly those living in rural areas, face barriers to supporting children's optimal developmental pathways. For example, teachers in rural areas often do not have access to high-quality professional development programs that supply them with the necessary tools to enhance children's reading readiness (Vernon-Feagans, 2009; Vernon-Feagans et al., 2010).

In an effort to address these realities and promote children's literacy skills, Vernon-Feagans, Kainz, Hedrick, Ginsberg, and Amendum (2013) developed a professional development intervention for rural early elementary teachers (The Targeted Reading Intervention; TRI). The TRI is part of a new generation of early interventions preparing classroom teachers to use specific strategies with individual learners to prevent reading failure, with an end goal of children reading independently, fluently, and with high levels of comprehension (Amendum, Vernon-Feagans, & Ginsberg, 2011; Vernon-Feagans, Kainz et al., 2013). The TRI is unique in that it uses coaches to deliver ongoing professional development via web-based technology to teachers in remote rural schools. Literacy coaches observe teachers instruct an individual struggling reader in one-on-one sessions and provide immediate feedback to help classroom teachers choose the best individualized, instructional strategies. Using webcam technology is more cost effective and feasible in rural areas where geographic isolation may prevent access to high-quality professional development (Vernon-Feagans et al., 2010). Effectiveness data from previous

randomized controlled trials have shown effect sizes between 0.36 and 0.63 on student reading gains (Vernon-Feagans, Kainz et al., 2013). Two independent groups who conducted further analyses with TRI data have endorsed the TRI as one of very few effective early reading programs: Annie E. Casey Foundation's *Blueprints for Healthy Youth Development* and Rand Corporation's *Promising Practices Network*. Programs such as the TRI are promising ways to help rural ethnic minority children attain and maintain academic achievement.

Methodological Challenges and Strategies

In this chapter, we discussed findings from a number of studies, including nationally representative, descriptive, and intervention studies that described how parenting and schooling processes impact the social and academic trajectories of rural minority children. We were particularly interested in sharing our work using Family Life Project data, because we believe this longitudinal, representative dataset uniquely captures the home, child care, and early schooling experiences of children living in low-wealth rural areas. A particular contribution of FLP was the over-sampling for African American families, which provides a window into their lives and helps us understand the normative developmental processes that guide their children's growth.

Our work with FLP data collection has taught us many lessons about how best to work with rural low-wealth study participants. We learned that building trust in communities and with families takes an enormous investment of time and resources. Researchers must allow for a number of months or even years to gain access to the level of trust that families in FLP have displayed. One key strategy used by FLP was an ethnographic study that researchers completed during the first year of the study, prior to quantitative data collection. Interviews were conducted with families from FLP locations to determine which family and community processes were important at the proximal level. These data allowed the quantitative design and questionnaires to be more relevant to the lives of rural and minority families. In addition, FLP researchers worked with local organizations to promote the study and get buy-in at the community level. Another key strategy was that FLP employed research assistants (all women) who were from the study counties. In North Carolina, the majority of the research assistants were African American. Thus, FLP families often shared or developed a bond with the women who represented FLP in the research field.

A challenge that FLP research assistants commonly encountered was the high levels of poverty and chaotic home lives of the study participants, which influenced their ability to participate in the study, both at a given time point and over time. One research assistant's work was entirely devoted to tracking participants' locations and making sure updated contact information was available. FLP children experienced not only child care instability but also residential and income instability, which were impediments to continuous study participation. Because the research assistants were locally hired, they could draw on a number of family and community networks to stay in touch with families.

Research work in rural communities tends to be expensive. Due to the costs associated with the time and mileage logged by research assistants, their local availability was an important advantage. In addition, FLP researchers piloted all questionnaires and measures with a smaller subsample of families. This allowed for an understanding of the feasibility of data collection with dozens of families prior to data collection with hundreds of families.

Conclusions

National goals demand that all children enter school ready to learn. Available evidence suggests that children's ability to succeed at the start of school is largely determined by economic characteristics and early parenting. Although early experiences with parents appear to play an important role in children's academic trajectories, our knowledge of these processes in ethnic minority families is limited, especially those exposed to rural poverty. This is especially important because too many low-income children enter school without the precursory skills needed for school success. Evidence from large and small-scale studies provides promising evidence that parent warmth, control/discipline, home learning stimulation, and cultural socialization can enhance kindergarten readiness in ethnic minority families. In addition, the provision of accessible, high-quality, and stable child care may be an important avenue for enriching early developmental trajectories and lifelong achievement. However, more work is needed that provides an even broader view of the ecology of schooling transitions in rural ethnic minority families. Importantly, research focusing on the *capacities* of rural families, rather than *deficits*, is needed. Studies that elucidate strengths in rural ethnic minority families have the potential to inform intervention programs that serve minority children living in these communities. Future efforts to create culturally sensitive measures of family processes in minority families will be vital. These measures should include family processes that have been largely ignored in the prior research with minorities, such as religion and racial pride. Understanding how rural ethnic minority families successfully navigate economic hardship and reduced employment opportunities and how children attending rural schools meet academic success are important avenues for future research.

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