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Family Socioeconomic Status, Immigration, and Children's Transitions Into School

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Abstract

Family scholars have contributed a great deal to the growing literature documenting how children's transitions into elementary school serve as a critical period in their educational careers and, more broadly, in socioeconomic and demographic disparities in long-term educational attainment. The purpose of this review is to describe how this school transition works, why it has short- and long-term ramifications for educational inequality, and how it may be amenable to policy intervention and, then, to elucidate how research that looks inside children—including neuroscience—may deepen and build on what is already known in meaningful ways. Throughout, the discussion focuses on children from low-income families and children from Latin American immigrant families, two groups of children who are central to child- and family-focused efforts to understand and remedy educational inequality.

The start of formal schooling, typically in kindergarten in the United States, is a major event in the lives of children as they learn many new things, take on new responsibilities, meet new people, and engage in new types of educational and social experiences (Pianta, Cox, & Snow, 2007). Yet, the significance of the start of formal schooling is far broader than what happens to any one child. Just as the transition into school is a critical period in the individual life course, it also plays a foundational role in socioeconomic and demographic disparities in educational attainment. What happens to a child during this transition sets the stage for her or his entire educational career, and systematic differences during this transition by socioeconomic status, race/ethnicity, and other dimensions of stratification play a role in the well-documented divergence of the educational careers of children (Alexander, Entwisle, & Olson, 2014). This potential for the transition into school to be a sensitive period on the individual and population levels has important ramifications for policy and

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Special Issue Guest Editor's Note: In this article the authors identify the personal, experiential, and social psychological factors that affect children's transition from early childhood settings into K-12 education. Their research identifies the effects of high levels of risk on children's transition and the impact of this risk on children's academic trajectory. They discuss policy and practice implications of educational inequities associated with educational stratification. This article builds from its paired article, "Child Care and Cortisol Across Infancy and Toddlerhood: Poverty, Peers, and Developmental Timing" (this issue, pp. xx-xx), in which Berry, Blair, Granger, and The Family Life Project Key Investigators examine the extent to which the link between children's child care experiences and their biophysiological functioning differs for children experiencing heightened levels of contextual risk outside of child care. This research supports the conclusion that the magnitude and even direction of the link between child care hours and children's cortisol level varied for children from high- vs. low-risk contexts.

intervention, as it suggests that acting to reduce transitional difficulties and disparities can have long-term ramifications (Lee & Burkham, 2003).

In these ways, the transition into school represents a meeting point for developmental research and stratification research and between basic research and applied research. What goes on with the child matters to what is going on in society, and vice versa, and studying this multilevel phenomenon can help translate research into action. As such, it is a potential source of integration for research on children and families across multiple micro- and macro-oriented disciplines of the social and behavioral sciences. For example, the influential work of Nobel prize-winning economist James Heckman (2013) on the value of early childhood education as a policy lever to reduce socioeconomic inequality has been largely based on seminal developmental intervention studies, such as the Abecedarian Project (Ramey & Campbell, 1991) and Perry Preschool (Schweinhart et al., 2005). That integration can be taken even further. Right now, the literature on the transition into school is situated very much within the realm of social contexts and social experiences. A necessary next step in the field, therefore, is to go “under the skin,” elucidating the ways in which both successes and challenges during the transition into school occur at the intersection of social systems outside the child and developmental systems within the child (Berry, Blair, Granger, & The Family Life Key Investigators, 2016; Crosnoe & Benner, 2015). Certainly, building partnerships among family scholars and neuroscientists—the whole purpose of this special issue—is in this spirit.

The purpose of this article, therefore, is to provide an overview of the literature on school readiness and the transition into formal schooling with the larger goal of elucidating future avenues of research that may bring together family scholars and neuroscientists. With a particular focus on socioeconomic and demographic disparities, we sketch out what is currently known and point out what we need to know and close with a discussion of how neuroscience can intersect with this vibrant field of research that sets the stage for the work of Berry and colleagues (2016).

CONCEPTUALIZING THE TRANSITION INTO SCHOOL

According to life course theory, a *transition* refers to a change in status, stage, or setting that involves heightened odds of a significant deflection in developmental or behavioral trajectories within and across diverse groups (George, 1993). School transitions—entering the formal educational system, moving from one level of the system to the next—have long been viewed as illustrative examples of the role of transitions in the life course. They represent both a physical change, in that children and youth move into new buildings, and social psychological change, in that children and youth are exposed to new sets of norms and values and are faced with new sets of expectations and challenges (Crosnoe & Benner, 2015). Like any transition, a school transition is a fluid and dynamic process, with a history of prior experiences and influences shaping how the transition unfolds and the nature of that transition and its immediate aftermath shaping experiences and influences well into the future.

The School Transition Model

Increasingly, the interdisciplinary literature on educational inequality connecting psychologists, sociologists, economists, and educational scientists has highlighted a particular school transition—moving from early childhood settings, including preschool, into the formal K–12 system—as a critical window into the process of educational stratification across the life course and the many other types of inequalities that are associated with educational stratification (Duncan et al., 2007; Heckman, 2013). Basically, children’s cognitive development, learning, and achievement occur well before they enter the K–12 system, so that the start of formal schooling is not the start of the educational career. What happens prior to kindergarten creates differences among children in their readiness to engage in academic curricula in kindergarten, and these differences in school readiness then powerfully shape experiences in the ensuing years so that children who start off behind their classmates tend to fall further behind over time. Importantly, because of socioeconomic and demographic disparities in the developmental ecologies and learning opportunities of early childhood, differences among individual children in school readiness often represent systematic differences among child groups (Halle et al., 2009; Reardon, 2011). How these differences emerge prior to school entry and how they are acted on by schools are processes that unfold amidst the ongoing transactions of children with their ecological contexts (e.g., families, preschools, schools, communities, etc.) and the ongoing transactions among these ecological contexts (Rimm-Kaufman & Pianta, 2000).

An influential theoretical perspective on the role of the school transition in the educational career is the *school transition model*. This model was first formulated by developmentally oriented sociologists Karl Alexander and Doris Entwisle in a 1988 monograph from the Society for Research in Child Development and then refined over the years through their work on a diverse sample of public school students in Baltimore, Maryland, who were followed over two decades. Rooted in life course theory, it has three basic points (see also Figure 1):

1. Children from diverse racial/ethnic and socioeconomic backgrounds enter school with sharp differences in personal, experiential, and social psychological factors that translate into small differences in early academic and cognitive skills at the start of school.
2. These small differences in early academic and cognitive skills then affect teacher and peer expectations, influence class assignments and curricular positions, and affect self-evaluations from year to year in a cumulative way.
3. In this way, small early racial/ethnic and socioeconomic disparities in learning compound into larger disparities in end-of-school outcomes.

In this framework, the term *personal factors* refers to aspects of children themselves that may affect their orientation to learning and ability to learn (e.g., personality characteristics, cognitive traits), *experiential factors* refers to settings of early learning prior to the start of school (e.g., child care, preschool, community activities), and *social psychological factors* refers primarily to interpersonal connections (e.g., parenting, peer groups). These factors converge to inject diversity into school readiness, with some children more advanced than

others upon school entry. Because of large-scale stratification of American society by race/ethnicity and socioeconomic status, the children from more socioeconomically advantaged White backgrounds tend to have more opportunities to inhabit and enjoy the kinds of personal, experiential, and social psychological factors in early childhood that then lead to more advanced school readiness than children from more socioeconomically disadvantaged and racial/ethnic minority backgrounds. Because these stratifying processes take place prior to the start of formal schooling, the educational system cannot be implicated in socioeconomic and demographic disparities in school readiness. The educational system can, however, be implicated in how these academic disparities at the start of formal schooling are then magnified over time. Indeed, the cumulative nature of the system—in which early skills lead to new opportunities to learn, which facilitate the further development of skills, which lead to new opportunities to learn, and so on—serves to turn small disparities into large disparities, which is why the transition into school is so important (Alexander & Entwisle, 1988; Alexander et al., 2014; Entwisle & Alexander, Olson, 1993).

The School Transition More Broadly

The school transition model has inspired a great deal of research over the past two and half decades, including our own, and its direct and indirect influences are found in studies across disciplines that highlight the cumulative nature of learning and achievement that is anchored in the transition into school. For example, children's early numeracy skills lay the foundation for math achievement in subsequent years, so that children with the best developed early math skills at the start of elementary school have higher achievement on standardized tests in more advanced math skills years later. Thus, if children from some segments of the population enter school with less developed early math skills simply because of less opportunity for preparation they will be disadvantaged relative to their peers in the math curriculum over time regardless of their overall level of aptitude (Duncan et al., 2007). More specifically, children from low-income families are less likely to understand the basic properties of the number line (which gauges awareness of numerical magnitudes) early in school than their peers from more affluent backgrounds because they tend to have fewer opportunities to learn and practice with math during early childhood (e.g., less frequent learning activities with their parents at home, lower exposure to preschool enrichment). This early difference then hampers their progress in math across elementary school, eventually resulting in lower math achievement in secondary school (Siegler & Lortie-Forgues, 2014; Siegler et al., 2012).

The direct and indirect influence of the school transition model can also be found in studies in multiple disciplines that elucidate the short- and long-term implications of transactions among young children, families, and schools during early childhood and across the transition into school. For example, children's formal and informal learning experiences during early childhood, a direct factor in school readiness, may elicit more parental support for and investment in their future educational experiences; in other words, children who have an advantage in the school readiness process may then increase that advantage once they are in school because of the ways in which the home and school contexts work together. Consider the well-documented pattern by which children who are exposed to high-quality early childhood education (e.g., preschool) have more developed cognitive and academic

skills when they start school (e.g., National Institute of Child Health and Human Development Early Child Care Research Network, 2005). Research has also shown that parents are more involved in managing children's schooling when their children have spent more time in high-quality early childhood education programs. Thus, children in high-quality early childhood education programs have a double advantage—exposure to quality early education plus more parental investment—that then carries them through the critical transition into school. Furthermore, this double advantage may be more pronounced for children from socioeconomically disadvantaged backgrounds (Crosnoe, Augustine, & Huston, 2012). One explanation is that children bring their parents into the fold; that is, the early skills that children in quality early education demonstrate elicit more sensitive and stimulating parenting (Gershoff, Aber, & Clements, 2009; Lugo-Gil & Tamis-LeMonda, 2008).

Both the cumulative role of the school transition in the educational career and the transactional nature of children's experiences during this transition can inform policy and intervention. If early skill gaps are the precursor to long-term educational inequality (i.e., the skill-begets-skill argument), then this transitional period serves as a critical point for intervention (Cunha, Heckman, Lochner, & Masterov, 2006; Duncan & Magnuson, 2013). Indeed, evaluations of developmental studies of well-known high-quality early childhood programs have shown that investing money in interventions targeting school readiness among children from disadvantaged backgrounds bring greater long-term returns (i.e., they save or generate more money over the initial investment) than those targeting later stages of schooling (Heckman, 2013). Such programs, like the Perry Preschool Program, typically emphasize creating stronger and more supportive transactions among families, preschools, and schools (Schweinhart et al., 2005). Similarly, one of the strongest pushes in child-focused family interventions in recent years has come under the umbrella of the two-generation strategy, which invests time and money in the human capital of parents from disadvantaged circumstances coupled with early childhood education for their children. Theoretically, such investments work because they not only provide early education for children, but they also empower parents to more effectively structure their children's transitions into school and through school (Aspen Institute, 2014).

SCHOOL TRANSITIONS IN VULNERABLE POPULATIONS

If the transition into school is a critical period in the educational careers and developmental trajectories of children in general, it is particularly critical for children from segments of the population that have historically been marginalized, disenfranchised, or disadvantaged in American society. Such children are often viewed by researchers and policymakers as *educationally vulnerable*—many children in these populations do quite well, but their statistically lower odds of success on the group level necessitate special attention (Crosnoe, Bonazzo, & Wu, 2015). For them, the transition into school is a concrete channel in the intergenerational transmission of inequality, whereby early disadvantages are translated into long-term risks. For these very same reasons, then, this transition point is also where taking action to reduce their vulnerabilities and improve their long-term prospects is likely to have an outsized effect. Many populations can be considered vulnerable, in the sense that the odds may be stacked against them, but we want to focus on two potentially vulnerable populations

here for whom the transition into school appears to be especially significant and at whom early interventions are often targeted. They are children from low-income families and children from Latin American immigrant families.

Poverty and the Transition to School

Today, about one quarter of children live in homes below the federal poverty line, and just under half come from low-income homes, meaning at 200% of the federal poverty line or below (Addy, Engelhardt, & Skinne, 2013). Poverty is one of the best-documented predictors of truncated educational attainment. Across the educational career, children from low-income families make lower grades, score lower on standardized tests, are less likely to take advanced coursework, participate in fewer school activities, complete fewer years of schooling, and are less likely to earn degrees than children from middle-class and affluent backgrounds (Brooks-Gunn & Duncan, 1997; Mayer, 1997; McLoyd, 1998; Murnane, 2007). Importantly, these educational disparities between children from the low and high ends of the socioeconomic spectrum seem to have increased in recent decades (Saez, 2009).

In line with the school transition model, timing is key to understanding the link between poverty and educational attainment. Ample evidence suggests that poverty has the direst effects on children when experienced at young ages. A child who experiences poverty during early childhood and then has an improvement in family economic circumstances in adolescence is probabilistically likely to do worse academically in the long run than a child who lives in a family of adequate means in childhood but then experiences poverty in adolescence (Duncan, Yeung, Brooks-Gunn, & Smith, 1998; Votruba-Drzal, 2006). This sensitivity of young children to poverty is one reason why antipoverty and welfare policy evaluations have revealed that program effects are detected only for children whose parents entered the program before they (the children) were of school age (Morris, Duncan, & Clark-Kauffman, 2005).

Overall, children from low-income families enter formal schooling months, and even years, behind children from more socioeconomically advantaged backgrounds in terms of the cognitive and academic skills needed to succeed in school. For example, they are, on average, 22 months behind in early literacy skills upon school entry (Bradbury, Corak, Waldfogel, & Washbrook, 2011). Patterns like this one position poverty as one of the key markers of stratification in the school transition model. In short, poverty disrupts the personal, experiential, and social psychological foundations of school readiness, which are then acted on by schools (often low-quality schools) to derail academic trajectories in the long run. At the same time, poverty is one of the biggest mechanisms by which other forms of stratification (e.g., race/ethnicity) seem to matter in the school transition model. In other words, African American, Latino/a, and Native American children tend to have lower levels of school readiness—with all of the factors that go into these disparities and all of the implications they have for the future—than White and Asian American children, but these tendencies are primarily explained by the systematically higher rates of poverty in the former racial/ethnic groups compared to the latter (Alexander et al., 2014; Lee & Burkham, 2003).

The question, then, is why poverty would disrupt the transition into formal schooling in ways that have long-run consequences. Of course, many of the reasons for this disruption are structural in nature, having to do with the disorganized and dangerous communities in which many children from low-income families live, the low-quality schools that many of these children attend, their lower access to health care, their fewer and often inferior academic opportunities in school and the community (e.g., preschools, activities), and the overt and covert economic discrimination that is institutionalized in so many of our schools and communities (Arum, 2000). Given the focus of this journal and this special issue on families, however, we decided to devote more attention to the family-based mechanisms by which poverty is negatively implicated in the transition into school. Of note is that many of these family-based mechanisms are related to the structural and systemic dimensions of socioeconomic stratification that have a large impact on families and the children within them (Waldfogel, 2006).

The crux of these family-based mechanisms of interest is that the effects of poverty on children's educational trajectories are filtered through intrafamilial dynamics. Poverty shapes how families are organized and how they function, and family organization and functioning then shape how children learn and achieve (McLoyd, 1998). One of the most influential conceptual perspectives in this tradition is the *family socialization model* (also called the *family process model* and the *family stress model*). In this model, the material hardships and associated stressors and challenges that come with family poverty undermine the social and emotional functioning of parents, which then interferes with the quality of their relationship with each other, which then disrupts their interactions with their children and leads to problematic parenting behaviors, which, in turn, shape children's developmental trajectories (Conger, Conger, & Martin, 2010).

This perspective has been used to explain the links between family poverty and child development across a broad array of developmental domains, including children's school readiness and early achievement. On the general level, poverty affects the socioemotional quality of the home environment and parenting in ways that are not immediately academic in nature but that have academic implications. For example, the strains of keeping up with bills and putting food on the table may mean that low-income parents are less sensitive and nurturing toward their children, which could interfere with the confidence and concentration that children need to face academic challenges (Conger et al., 2002; Linver, Brooks-Gunn, & Kohen, 2002; Mistry, Biesanz, Taylor, Burchinal, & Cox, 2004). On the more specific level, poverty affects the concrete and direct ways that parents can play a role in managing and supporting their children's academic opportunities, including the monetary and nonmonetary investments they make in their children's educational progress (to borrow terminology from economics). For example, parents who are working multiple shifts to earn money for their families may have less time or energy to engage in home learning activities with children, seek out opportunities for children in the community or school, or form working partnerships with teachers and early child care educators. With money spread thin, they also may not have the ability to purchase academically relevant goods and services for children, such as activities, tutors, tuition, or learning materials (Foster, 2002; Kornrich & Furstenberg, 2013).

Thus, poverty can alter the general environment of child rearing (and the specific contexts of early learning), so that children from low-income families enter school with less developed academic and cognitive skills, even if they do not have lower aptitude (Crosnoe & Cooper, 2010). Significantly, such children will likely enter lower quality schools (and preschools before that) than their more affluent peers (Arum, 2000). In this way, what happens to them after the transition into school builds on and magnifies the disadvantages that they bring into school from their family and community contexts. Consequently, the transition into school is best thought of as the intersection of multiple contexts, not something that unfolds within schools. Poverty matters not just because it affects the kinds of schools that children attend but also because it affects the entire contextual system in which they live their daily lives (Rimm-Kaufman & Pianta, 2000).

In terms of policy intervention, shoring up the opportunities that young children from low-income families have to learn and cultivate new schools prior to the start of formal schooling is a key step. The massive effort at the federal, state, and local levels to fund and expand preschool for low-income children exemplifies this potential mechanism of reducing socioeconomic disparities in educational attainment by promoting the school readiness of children from low-income families. These efforts have had success in preparing children for kindergarten, but their initial advantages tend to fade as children transition into and progress through elementary school (Duncan & Magnuson, 2013). One reason is that investments in children from low-income families prior to school entry are undermined because they are not paired with investments in children after school entry and, more broadly, because high-quality early childhood programs are not matched with high-quality schools. As Brooks-Gunn (2003) argued, “To expect [pre-K] effects to be sustained throughout childhood in the absence of continued high quality schooling is to believe in magic” (p. 3). Furthermore, the evidence for family-based mechanisms detailed above suggests that programmatic educational interventions can go only so far without changes in family systems. More contentious efforts to ease the economic burdens of low-income parents and provide more financial stability also have effects on children, in part by helping parents construct more educationally supportive environments for young children. Other programs aim for such home environments without actually raising the socioeconomic circumstances of low-income parents through, for example, parenting classes (Gennetian, Magnuson, & Morris, 2008; Magnuson, 2007; Waldfogel, 2006).

In sum, poverty places many barriers in and constraints on children’s transitions into elementary school so that children from low-income families start school at an academic disadvantage relative to their peers that has cumulative effects on their long-term educational prospects. Some of what is going on during this period concerns the basic dynamics of family life, which can be counteracted by efforts to reduce poverty directly or through other means, such as supporting more positive family dynamics in the face of poverty or providing opportunities to learn outside of families.

Immigration and the Transition to School

Today, more than 1 in 4 American children are being raised in immigrant homes, meaning that they have at least one parent who was born outside the United States, regardless of

whether they themselves were born in the United States or elsewhere. The largest portion of these children trace their family origins back to Latin American countries, especially Mexico (Fortuny, Hernandez, & Chaudry, 2010). In a series of articles and books (see Crosnoe, 2006), Crosnoe has argued that the children of Latin American immigrants are a particularly important population in which to study the transition into formal schooling, including through the prism of the school transition model. Indeed, the transition into school does seem to be challenging for many (although not all) children from Latin American families. They tend to have lower levels of school readiness, as measured by a variety of cognitive assessments and achievement tests (Glick & Hohmann-Marriott, 2007; Han, 2008; Reardon & Galindo, 2009).

These immigration-related disparities require some context for discussion. One issue is that they stand in contrast to immigration-related patterns of achievement in secondary school, which typically follow a pattern called the *immigrant paradox*. In this paradox, immigrant youth outperform nonimmigrant youth from the same racial/ethnic groups on academic measures. Thus, on average, high school students from Latin American immigrant families make better grades than other Latino/a youth (although not necessarily White youth), in part because they have more social resources to draw on in their adult networks (e.g., supportive parents, tight-knit communities) that protect them from negative peer influences. The school transition period is when the evidence for such a paradox is weakest or nonexistent. As a result, it seems to be the period of maximum vulnerability in this large and growing population, so that improving the early educational outcomes of children of Latin American immigrant families might allow them to build on the paradox later on in their educational careers. Another issue is that immigration-related disparities in the academic dimensions of school readiness do not carry over into the socioemotional and behavioral dimensions of school readiness. In other words, although children from Latin American immigrant families score lower on standardized tests during the transition into school than U.S.-born Latino/as and students of other races/ethnicities, they tend to look better than these peers in domains such as mental health, work habits, and prosocial behavior (Crosnoe & Turley, 2011). Overall, then, children from Latin American immigrant families underperform academically during the transition into formal schooling, although they have many strengths that can be capitalized on at the same time.

In studying this phenomenon in the nationally representative Early Childhood Longitudinal Study, Kindergarten Cohort Crosnoe (2006) demonstrated that the link between Latin American immigration and lower levels of school readiness and early achievement was primarily channeled through two sets of developmental factors that mapped onto the experiential, personal, and social psychological mechanisms in the school transition model (see Figure 2). Developmental domains directly tapped into trajectories of physical, psychosocial, and cognitive development of children themselves, such as health, social competence, and early language skills. Developmental contexts captured the ecological and organizational settings that undermined or supported such developmental trajectories, such as family processes, educationally focused early childhood programs, and the structural characteristics of the receiving schools. Among the most important factors within these two categories were low rates of enrollment in preschool, poorer physical health, and a relative lack of family–school contact. Yet the primary reasons why children from Latin American

immigrant families were disadvantaged in these focal developmental domains and contexts before and after the transition into school were not specific to immigration (Latin American or otherwise). Instead, family socioeconomic circumstances did the most to explain away these patterns of vulnerability. Family poverty, low parent education, and lower level occupational statuses predicted lower levels of school readiness and early achievement through various contexts of development, and Latin American immigrant parents had among the lowest incomes, rates of educational attainment, and occupational statuses in the sample. The discrimination and segregation that Latino/as have long faced in the United States, regardless of socioeconomic status, also played a role. These socioeconomic and social circumstances are acutely felt by Latin American immigrants, but they do not strictly reflect Latin American immigration per se.

The large and growing population of children from Latin American immigrant families, therefore, seems to be a highly relevant case of the basic parameters of the school transition model but, at first glance, at least not a new twist on the school transition model. We should be clear, however, that the disadvantages related to being of low socioeconomic status and a member of a racial/ethnic minority group do not fully explain academic disparities during the transition into school among children from Latin American immigrant families. Some factors more specific to the immigrant experience come into play. We highlight two here. First, language barriers may impede the ability of even highly motivated Latin American immigrant parents to support the learning and achievement of their young children in the run-up to school entry and once formal schooling has begun. For example, a lack of proficiency in English (real or perceived) could constrain parents from helping children with English-based learning activities, identifying early educational opportunities (e.g., preschools) and selecting their children into them, or communicating what they want for their children to teachers. Although low socioeconomic status raises the likelihood of being uncomfortable speaking English, many immigrants from diverse socioeconomic backgrounds (and races/ethnicities) struggle with English upon arrival. Second, almost by definition, Latin American immigrant parents have less familiarity with the U.S. educational system—and all of the norms and rituals that go along with it—than many U.S.-born parents, including U.S.-born parents who are socioeconomically disadvantaged. The written and unwritten rules of U.S. schools, such as the importance of organized educational enrichment prior to school entry, how classes and curricula are organized, the expected role of parents in children's learning, and how demanding children and parents can be of educators, need to be learned, and many immigrant parents start out behind on that learning curve relative to other parents. Again, low socioeconomic status makes that disadvantage somewhat worse, but it is not completely to blame for it (Crosnoe et al., 2015; Glick, Bates, & Yabiku, 2009; Han, 2008; Reardon & Galindo, 2009; Suarez-Orozco & Suarez-Orozco, 2001).

In other words, children from Latin American immigrant families may lag behind other children (including other Latino/as) during the transition into school for reasons that reflect their higher levels of socioeconomic disadvantage and their racial/ethnic minority status. Unlike other children of similar socioeconomic and racial/ethnic backgrounds, however, they face additional obstacles during this period that are rooted in immigration itself (Crosnoe, 2006). Yet, within these vulnerabilities lie some important strengths that can be

systematically leveraged to promote more successful transitions in this population (Souto-Manning, 2010). Yes, children from Latin American immigrant families and their parents may be at a disadvantage if they have less developed English language skills than their peers, but bilingualism (equal mastery of two languages at once) can promote academic progress and comes with many other benefits. Children from Spanish-speaking Latin American immigrant families are already halfway to bilingualism, and the investments in English that they receive in school may foster that potential advantage with a long-run payoff (Padilla & Gonzalez, 2001; Winsler et al., 2014). Yes, Latin American immigrant parents may have less awareness of how U.S. schools expect them to actively scaffold learning opportunities outside of school and visibly manage their educational experiences in school through coordination with teachers, but they have such high levels of motivation and valuing of education that they are quite receptive to learning these expectations and working with schools to shape what is expected of them. This receptivity is precisely why so many dual-generation initiatives targeting low-income parents (as described above) focus specifically on Latin American immigrant parents (Crosnoe, 2010; Crosnoe & Kalil, 2010).

THE NEED FOR NEW INSIGHTS

The transition into elementary school has been studied intensively—and in many ways with many different methods—for some time, and so we definitely know a few things about how it works and what it means. First, it is clearly a sensitive period in the educational career and in the creation and maintenance of disparities in the educational career across diverse groups. Second, it is a critical point of intervention, where we have the ability to intervene to make a difference with lasting consequences for overall educational attainment and for greater equality in educational attainment. Third, specific structural, social, and developmental mechanisms underlie this role of the school transition in the educational career, and many of these mechanisms are directly actionable.

Thus, we have a good base of evidence to understand the transition into elementary school and translate this understanding into action. The depth of this scientific literature, however, should not lead one to conclude that there are no holes in the knowledge base. One of the most glaring holes is that, until recently, most of the research on the mechanisms of short- and long-term educational consequences of the school transition have glossed over or outright ignored what is happening inside the child. Many questions need to be asked to have a true multilevel view of the school transition, such as the following:

- How might early childhood experiences shape cognitive processes in ways that support or undermine successful transitions into school?
- Could the strains of school entry manifest themselves in the biological stress-response system and, through those effects, disrupt learning (and health) during this period and in the ensuing years?
- What are the aspects of the school transition that trigger different kinds of brain functioning for diverse groups of children as they are introduced to the formal curricula of elementary school?

These questions are just a few examples of the multiple lines of inquiry that need to be pursued to more fully develop the school transition model and other theoretical perspectives on the transition into school. They are posed in the spirit of doing better job of elucidating the ongoing transactional interplay between children and their environments and putting children more squarely in the center of attention rather than as “recipients” of social influences that have visible behavioral effects. Fortunately, we have a good start on answering such questions given recent work on early childhood that connects what is going on inside children to what is going on outside them. For example, research on the National Institute of Child Health and Human Development Early Child Care Network has revealed that children who spend more time in center-based care—an early childhood support for academic school readiness—tend to have lower awakening cortisol levels years later (Roisman et al., 2009). Daniel Berry has contributed to this literature in his work with The Family Life Project showing the benefits of high-quality early child care for executive functioning—a key ingredient in academic and behavioral school readiness—were not associated with children’s early cortisol levels (Berry, Blair, Ursache, Willoughby, & Granger, 2014). This line of research has also been extended from early childhood education settings into elementary school, with some evidence of fluctuations in children’s cortisol levels across the transition into school (Turner-Cobb, Rixon, & Jessop, 2008).

Such research connects social, psychological, and biological perspectives and methods to ask new questions relevant to the transition into school, but it is only start. Moving beyond the focus on hypothalamic–pituitary–adrenal axis activity to explore other aspects of biological functioning, including brain development, is one promising avenue of future research. We would also argue that such “under the skin” approaches to the transition into school should not be limited to the children doing the transitioning. What is going on with the adults shepherding children’s school transitions—parents, teachers, caregivers? They are developing too, and how they are developing matters to children. Clearly, we have a lot to learn on many fronts, but the field is moving in this direction. This special issue is part of that forward momentum.

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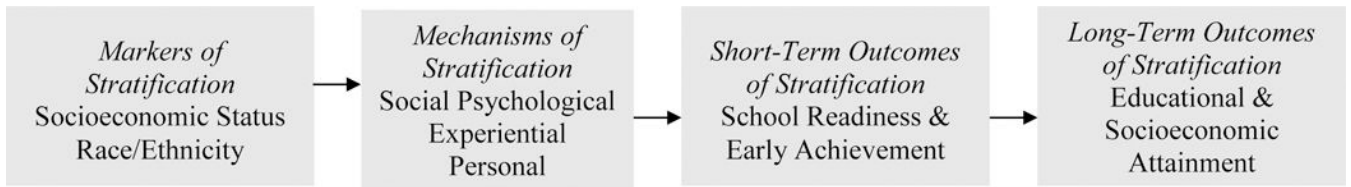


Figure 1.
THE SCHOOL TRANSITION MODEL.

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Figure 2.
SCHOOL TRANSITION MODEL FOR CHILDREN FROM IMMIGRANT FAMILIES.