

“The Challenges of Finding Causal Links Between Family Characteristics and Educational Outcomes”

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Long before social scientists began to explore how parents influence their children’s success in later life, theologians, philosophers, historians, and ordinary citizens offered aphorisms and observations instructing parents (cite Handbook article). It was not until the past century after the creation of the disciplines of anthropology, economics, psychology, sociology, and after the emergence of universal education, that researchers made concerted efforts to measure these practices and examine their impact on success in school. Over the course of the last century, and particularly during its last several decades, a voluminous and diverse literature began accumulating on the family’s role in preparing children for school and sustaining educational commitment.

This chapter reviews and examines that literature from the critical perspective of a sociologist of the family, and with an eye to distilling what we have learned about how families, and parents in particular, contribute (in a causal way) to success in school. My focus is on the U.S. educational system, although I refer to research in other nations when appropriate. My emphasis on examining the causal pathways is quite deliberate because my ultimate aim is to extract promising policies and programs that are likely to help families promote educational success.

For a host of reasons discussed later, this task is a not simple one. The field has developed increasingly sophisticated methods for discerning causal impacts, and there is a growing body of experimental evidence involving parents and families. However, the approaches to understanding and measuring *how* (not just how much) families influence children’s success in school remain fairly primitive. Social science’s methods for modeling how complex systems work have not yet faithfully simulated what happens inside families. Parenting behaviors have not always been well measured well or faithfully applied in research studies, especially experiments, but, even when they have, it is not always evident how they are perceived and responded to by children. Providing an accurate picture of how children acquire “school smarts” and how their competence in school is sustained and supported by practices and processes within the family remains a formidable challenge.

This effort calls for thinking about how systems such as the family work in practice. Much of the research has relied on quantitative study that treats family processes as “variables” or vectors of potential causal influence. These might include styles of parenting, family-school practices, or educational expectations. Although standard practice in quantitative social science, this approach leaves something to be desired in understanding how processes in family systems actually change children’s attitudes and behaviors. More seriously, it runs the risk of falsely specifying family influences that purportedly are amenable to policy change. Promoting family’s involvement in schools, for example, may or may not produce greater student commitment or skill development, even if that involvement has proved to be related to later school success. I will amplify this argument later in the chapter.

Viewing parents and their children as part of an interacting system requires that we think of causality in less mechanical terms. The family does not operate like a game of billiards, where parents hold the cue and children are the balls to place in the far pocket. This exercise of the principles of classical physics is in need of revision when it comes to study systems. In families, the “ball and the cue” are simultaneously responding to one another. A more useful analogy is to imagine the family more the way that physicists view a system of elementary particles, mutually reacting, often in paradoxical ways, to the presence of one another. Our approach to modeling causality in ongoing systems, I suggest, requires a different way of thinking about how and under what conditions influence occurs.

I promise no easy solutions to this measurement challenge, but I will show how failing to take account of the systemic properties of families impoverishes our attempts to understand the role of families in promoting children’s success in school.

A Life Course Perspective

In the past ten years or so, developmental researchers with a policy focus has targeted the early years of childhood, when the influence of parents and families is formative and pervasive (Heckman, Duncan). If not viewed as a “critical period” in the technical meaning of the term, the premise that early interventions aimed at influence children in infancy and toddlerhood are more effective than remedial efforts in later childhood has been backed up by both theory and research some of which will be cited later in the chapter(cite Romanian experiments). I do not take issue with this general principle that sooner may be a better investment of educational dollars. However, when it comes to affecting success in school and ultimate educational attainment, I will argue that the early investment approach is insufficient. Ignoring later points in children’s lives undermines that whether we the realities of how and why children fail to achieve in school or to realize their educational potential.

Getting off to a good start is essential to school success in the primary years, and doing well in the early years is essential, no doubt, to later performance. However, sustaining school success clearly involves support, interest, and involvement of parents and, of course, children beyond the primary years and into adolescence and early adulthood. Managing school choice, when possible, is likely a critical ingredient in educational attainment during middle and high school, and monitoring school activities (in ways that have not been fully elaborated) likely also influences staying on grade and curriculum choice. These conditions ultimately affect college attendance and completion. Moreover, family support, particularly resources, for higher education undoubtedly plays a role in college entrance and completion after high school.

Accordingly, I adopt a life-course perspective and consider the different family processes in play during childhood, adolescence, and early adulthood (cite Elder, and others). As mentioned above, there is a lively literature on family intervention during the early school years (see Duncan, Magnuson, and colleagues, XXXX). These studies have used experimental and quasi-experimental designs to identify casual influences. However, most educational researchers have not followed such a longitudinal approach to family influence. Rather, most researchers specialize in developmental periods and school levels. A life-course perspective sensitizes us to changing contexts, transitions,

and turning points, as well as relevant potential family intervention for students and their families during adolescent and post-adolescent years.

The Chapter's Roadmap

The first section of this chapter examines the literature illustratively. I say illustratively because it is impossible in a single chapter to provide a comprehensive review of the non-experimental literature. Instead, I focus on a select number of influential studies. The second section provides a similarly illustrative review of experimental evidence, with an attempt to reach some general conclusions about what we have learned to date. It remains an open question whether strong parallels exist between the non-experimental research (focused on discovery) and research designed to confirm "causality." Identifying what is being left out in policy-oriented experiments will lead to a fuller discussion of how parents and, more broadly, family systems may actually work to produce success in school.

The third second section represents the meat of my argument: children are affected by a multitude of overlapping and simultaneous processes that are, in turn, influenced and reinforced by the human ecology of their immediate environs: networks, community, and schools. These immediate environments in which the family is embedded are powerfully shaped by social class, ethnicity, and even geography. The family has its boundaries, but the outside world penetrates them in a variety of ways to affect the culture and practice of families regarding education. This perspective draws from a large literature in developmental psychology, stretching back to Kurt Lewin () and Urie Bronfenbrenner's () theoretical approach to the study of human development and in sociology by the contributions of symbolic interactionists and life-course theorists. I assert that we simply cannot expect to alter families' approaches to their children's school practices by isolating one particular element of family life without acknowledging how families operate as a social system.

Here again, it is useful to resort to another analogy. For a seed to thrive, it must grow in a setting that provides proper soil conditions but it also must be nourished and sustained with proper amounts of sunlight and water. Extreme deprivation of any of these conditions will result in a failure to thrive, regardless of the quality of the seed or soil. This is equally true for children, their families, and the proximate economic and social conditions in which they live. If we simply considered the seed and the soil, we probably could not predict success without other environmental conditions that are conducive to developing school skills and success. Accordingly, I will not only discuss processes within the family, but also how these processes are linked to conditions in schools and neighborhoods. I will also occasionally allude to conditions that are more distal from the family and child, such as the economy in the surrounding community, the organization of school districts, the cost and availability of higher education.

In the fourth and final section of the paper, I rely largely on theory and imagination to conjure studies and experiments that might engage the family more fully. This is not to say that what we currently know is not a sufficient basis to devise cost-effective programs that offer help to children at risk of failing in the educational system. Still, it is useful to think more boldly about more powerful interventions for helping

families realize their nearly universal aspirations of seeing their children reach their potential in school.

Early Research on the Influence of Families on Children's Success in School

It is fruitless to search for a single starting point in the tradition of studying family's influence on educational success because it was such a central theme in the middle decades of the past century. This focus was particularly prevalent among those interested in stratification in American society and its intergenerational persistence. Almost all of the pre-war and early postwar community studies exhibited some interest in the topic, particularly when their focus was on social class differences in family life. Explicit attention to the family and parents' role in children's school achievement figured prominently in the classic works of Middletown, Elmtown's Youth, Crestwood Heights, and the Urban Villagers, to mention but a few examples (references). Similarly, reaching back to the work of prominent studies of race, class, and family life by Dubois, Frazier, Davis and Havighurst, Clayton and Drake, Liebow, and Rainwater, researchers have been keen to understand the differences in family life and educational outcomes among blacks and whites within and across social strata (Furstenberg, 2007).

This early research laid a broad foundation for a more concentrated effort in the second half of the century to explore the processes or mechanisms within families that influence educational achievement and create mobility or stasis from one generation to the next. Various lines of research in developmental psychology and sociology typically concentrated on one mechanism or another that had emerged from comparative studies in the 1960s through the 1980s. These mechanisms include:

1. Cognitive training (language use and acquisition; family educational practices)
2. Cultural values (those that contribute to education, schooling, and social position acquired early in life)
3. Parental practices (in discipline, control, advocacy, and bonding)
4. Structural features (parental resources arising from how family is organized)
5. Social connections (the ability of parents to place the child in advantageous circumstances in school).

There are numerous reviews of this literature, and I single out only a few of the most prominent and influential studies that exemplify different mechanisms through which the family exerts influence. Hart and Risley (), for example, in a remarkable study of language acquisition, demonstrated how early speech habits and styles discourage development inside families. By age 2, children from the households of educated and affluent parents had far better command of language, speech practices, and vocabulary than their counterparts in families without money or education. Parents from affluent families continuously instructed, questioned, praised, explained, and responded to their children. In contrast, these practices were uncommon in disadvantaged families. Their research brings to mind the important distinction introduced by Basil Bernstein in his early research on class differences in language codes (). The children from privileged families in his studies were learning "elaborated" speech codes that provided

tools for learning while disadvantage children operated in a “restricted” speech patterns in response to their parents practices. .

I will reserve until later my discussion of whether these sharply different patterns are entirely due to parental practices or partially genetic in nature as some might claim. But the point remains that huge variations occur in capacity-building at frightfully early ages, creating an enormous catch-up process. Indeed, preschool programs are designed to redress the important learning advantages imparted by well-educated parents.

These different competencies that elite parents impart can be independent of their own educational values and expectations, a second prominent line of research. A number of researchers, among them Swanson and Miller () and Kohn (), sought to show how parents’ position in and understanding of the stratification system shape their goals for their children. These researchers emphasized how parents extrapolate from their educational and occupational experience to value certain and promote particular values which they deem important to their children’s success and, indeed, to value success in school as a route doing well in later life. For example, both authors suggest that advantaged parents will value independence and autonomy while less educated parents often give priority to obedience and respect for authority. Parents command a very different view of required to enter higher-level occupations when they themselves hold those jobs. It is difficult to train parents who lack the experience of the educational and work worlds to prepare their children to enter these worlds. This line of research has continued to the present, with important studies by Mortimer and Mengagan among others [CITES) .

Annette Laureau, an urban ethnographer, has also amplified and extended this cultural model of the family’s influence. In her book, *Unequal Childhoods*, in which she illustrates just how different the world of school looks to working-class and upper-middle-class families. The “culture” of families—their belief systems and related stock of daily practices—is created in part by family members’ own knowledge of the world (cultural capital). On the basis of family background (how they were brought up) and their education and occupation, these families display a different understanding of their job as parents. Laureau contrasts the general style of “concerted cultivation,” involving teaching their children how to negotiate in unfamiliar environments by inquiry, with “natural growth,” primarily aimed at keeping children in line and out of trouble.

In a related vein in developmental psychology, researchers have explored the connection between class differences in parenting styles and later school behavior. Different practices of support, punishment, and control shape broad habits of interaction between parents and children. A long tradition of studies, beginning with the seminal work of Baumrind, Maccoby, and Hess, to mention but a few of pioneering studies, show that the formation of relationships in the family, habits of managing emotion, anger, and disobedience may shape children’s ability to function outside the home, particularly in school. Therefore, altering parenting practices has been an important arena of intervention.

Some of the earliest studies on family influences, as I mentioned earlier, grew out researchers’ interest in how social disadvantage (less so than social advantage) is perpetuated in the family. The work of Blau, Duncan, Sewell, Mare, and more broadly the Wisconsin tradition of examining intergenerational mobility, are especially informative. Research has shown that education, occupation, and income--the basis of

economic stratification--separately and in combination are strongly related to academic success via a host of direct and indirect ties that ultimately determine mobility. As some of the earliest studies of stratification revealed, families realize their material, social, and cultural knowledge gained from their position in society to shape their children's values, expectations, and schooling practices.

This process of "family socialization" is not just conducted inside the household. Money buys neighborhood access to quality schools, which reinforce school advantage, and lack of money constrains how effective parents can be in implementing educational ambitions for their children. Parents who have the resources (education, income, and occupation standing) will generally be more effective in promoting their educational ambitions for their children, and their children will in turn be more receptive and responsive to these goals when peers and peers' parents also share these goals (Coleman). In other words, families are operating in a socioeconomic context (or, more loosely, a social class system) that pervasively influences how effective parents are in promoting their educational ambitions.

Numerous nonexperimental studies have also examined family structure and educational values. As far back as the 1960s, Elizabeth Herzog, a government researcher who conducted an extensive review of the literature, noticed that family structure was often confounded with unequal resources, obscuring the interpretation of its effect on child outcomes. Over the years, researchers have been able to devise new methods of adjusting for social selection. Though controversy remains, it appears at least from the nonexperimental literature, that family structure (two biological parents versus single-parent households) is strongly related to academic success and educational attainment. There have been numerous efforts to model how social class influences family structure (and is also influenced by family structure), but only a tiny fraction of these studies have traced how these processes operate inside the family to create academic disadvantage. However, we know that family change creates neighborhood and school instability, it increase children's mental health problems, and reduces parental supervision. Perhaps it would be more accurate to say that we have not learned how to compensate for the pervasive influence of class, family structure, and the availability of a wide array of resources.

Another important line of studies looks at the ability of parents to reach beyond the home, connect to the school, and seek resources that may promote both school skills and educational attainment (Litwak, Sussman, Epstein). James Coleman's notable article on social capital identified the fit between the family system and the school system as an important condition for integrating the home-school agenda. When families are embedded in a community of like-minded parents, they are more likely to succeed in promoting their own values. Both the ability to make such connections and employ them to advance their educational objectives, Coleman noted, is linked to how families are situated in the community, their access to alternatives to public schools, and parents' skills at ferreting out educational resources.

Reginald Clark () would weave these different strands of research together in a remarkably in-depth qualitative study, finding that families that produce successful students are organized differently and have very different cultural styles. Clark also sought to explain why some families were successful in promoting school success despite seemingly limited assets. The study examined a small group of

disadvantaged African-American parents, carefully comparing families that were rearing children who were succeeding in school with those that were not. Drawing together theoretical insights from the emerging studies on the significance of early education, strong and cohesive values, and good management skills for advocacy and location of resources, Clark found that a constellation of values, habits, and practices gave children “school survival skills” to beat the odds.

Specifically, Clark’s findings supported the notion that families that instill high educational values took a set of discrete actions to reinforce their expectations. These actions include engendering a culture of literacy in the home through activities and speech practices; closely monitoring their children’s schoolwork; providing feedback and responding to their children’s educational activities; creating rituals and routines to establish good habits; advocating for their children; and finding resources in the community. Clark was not at all oblivious to the active role that children play in responding to parental influences. He acknowledged that children’s own personalities and aptitudes affect the outcomes, although parents in high-achieving families tend to persist in their efforts to promote academic success, even if they did not always succeed, regardless of their child’s personality. Clark’s work provided an important guide for community-based programs and influenced many of the leading educational figures in the 1980s and 1990s (cite Comer,).

This cursory review of the nonexperimental literature is intended to illustrate how many different processes within the family operate concurrently to produce differences in school success. The different studies are not competing ways of explaining why such sharp differences in school readiness and success occur across social strata. Rather, they are overlapping, mutually reinforcing, and play out over time because they are linked in large part to the family’s social position. This is not to say that social position “determines” what families do, but the recurrent and consistent patterns of family beliefs and practices means that these behavioral patterns vary sharply by education, occupation, and income. They influence what the child brings to the classroom on the first day of school (or preschool) and they continue to affect children’s performance in the school system. No less important, they are reinforced by teachers’ perceptions and the quality of schooling available to children. In short, the family system is embedded in a neighborhood and school system that on average reinforces social inequities.

As I have argued in greater detail elsewhere (Furstenberg, 2009 Not so invisible hand of social class) these practices established in the home not only set the course of school success very early in life, but they are generally cumulative overtime (cite Alexander and Entwistle studies). Parents are differently positioned to take actions when things are not going well in schooling. Privileged parents can seek help, advocate more effectively for change, and can often exit the school system when things are not going well. Such actions are much less likely to be available to the underprivileged.

In examining the causal impacts in the next section, it is important not to lose sight of the possibility that families are creating very different learning environments for their children, differences that flow from their own social position. The repertoire of skills they bring as parents to educate their children, the assets they can command to introduce their children to attractive school settings and like-minded playmates and peers, and their capacity to take action when they discern learning problems all contribute to the distinctions that play out over children’s school lives.

Experiments to Strengthen the Family's Influence on School Readiness and Success

Researchers over many decades have attempted to put into practice many of the discoveries from the nonexperimental literature. Reaching as far back as the early antipoverty, community-based programs of the late 1960s, we have witnessed a long progression of interventions aimed at altering features of family life and practice in attempts to enhance children's school readiness and performance. Many of these programs include explicit attempts to involve parents and augment their role as educators. These include home visiting, parent education, outreach efforts to spur parent involvement, not to mention preschool programs. By now, there is a strong tradition of random assignment experiments to test the efficacy of these programs. Therefore, in looking broadly at this research, I ask, What have we learned about our ability to enhance the family's capacity to improve children's school outcomes?

In addressing this question, I must acknowledge several limitations of the experimental work. First, the research largely addresses the most disadvantaged portion of the population. Therefore, much of what we have learned comes from comparing low-income families that have received a treatment or intervention with those that have not. Within this low-income subset, researchers generally compare volunteers or recruits who are, in turn, randomly assigned to program or control groups. This means that we cannot easily generalize beyond relatively "motivated" populations. Sometimes, as in the case of preschool programs, it is possible to reach very deep into the population of the "truly disadvantaged." Other programs may do less well in reaching the least well-off and least organized families. In any event, little of what we have learned could be safely generalized to families of modest to moderate means.

A second limitation is that although most of the programs are fairly comprehensive and long-lasting by standards of most interventions, few are designed to be both intensive and long-lasting. There are some exceptions, such as the Harlem Project, but I am not familiar with evaluated programs that work intensely with parents or whole families over long spans of their children's lives. Such efforts, even if they worked, most likely could not be implemented on a large scale because of cost considerations. Yet, as I will argue later in the chapter, most short-term programs aimed at creating lasting influences do not fulfill their promise. At least to date, I know of none that have similar impacts to, let us say, the premier preschool interventions.

Third, although there are some important exceptions (for example, Cowan and Cowan, XXXX), few experimental programs are explicitly aimed at changing family practices by working with more than one parent, much less whole families. The difficulty of launching and sustaining services for couples or for couples and children are monumental. There are some encouraging efforts in this direction, but the vast majority of experimental programs attempt to change, improve, or augment one or another of the mechanisms by which families appear to influence their children's prospects in school. In short, few adopt a holistic approach to changing families as might be advocated by clinicians who adopt a "family systems" approach (cite Minchican, Haley)

There is a literature on changing families with behavioral problems growing out of the work of clinicians such as Paterson, Reiss, Dodge, and others (citations) that follow a family systems model and many interventions have been subjected to random

assignment evaluations. It is an open question whether this work might be generally extended to improving school performance or ultimate educational attainment among a nonclinical population. Clearly, children with serious behavioral problems often have problems in school, but a review of this work falls outside the purview of this chapter.

Finally, and a source of frustration to any reviewer of the experimental literature, most studies suffer from serious limitations in measurement that make it difficult to discern how interventions actually play out within the family. Namely, the vast majority of experimental studies do not adequately assess how family processes are affected by the intervention. They also frequently do not measure child impacts directly. Rarely do we find examples of experiments aimed at changing family practices that contain both good measures of family processes and resulting school outcomes.

Nonetheless, there is much to be learned from existing experiments, and I summarize some of the prominent meta-analyses and meta-summaries of policies and programs aimed at affecting family features believed to be causally linked to child achievement.

1. Home Visitor Programs

The home visitor program is among the most widely adopted and evaluated programs involving a family intervention in very early childhood. This program is considered a model for educating, monitoring, and supporting parents after birth (Olds et al., XXXX). One reviewer estimates that this program, in one form or another, reaches nearly a half-million families with newborns every year (Daro, XXXX). The program is a continuing effort to educate, monitor, and assist parents (recent mothers) usually with an intensive schedule of visits, sometimes extending up to three years. A nurse or health educator reaches parents in the home and instructs families on best practices in early infant care and development, including nutrition and health, parenting skills (involving such things as infant stimulation), and management practices for getting help and services. The program has been widely evaluated.

Relatively recently, several teams of researchers carried out a meta-analysis of the evaluations (Sweet and Rosenbaum, etc.) The assessments (or interpretations of them) do not always concur, but almost all show some positive effects on certain parent and child outcomes. The most consistent of the results points to reductions of child maltreatment and visits to emergency rooms. It is less clear whether such programs affect school readiness either directly or indirectly. Although there is some evidence that home visitor programs can improve behavioral adjustment in the transition to school, the results are typically smaller for the better-designed random evaluations.

The long-term impacts on school readiness are inconsistent, but the evidence suggests there could be very modest effects on children's social adjustment and cognitive skills. In short, the program, when faithfully implemented, is successful at bending the twig but only slightly.

2. Early Parent Involvement and School-Readiness Programs

When we turn more broadly to parent education programs aimed at enhancing parents' ability to provide a stimulating home environment, the results are less consistent and less encouraging. A randomized experiment of Even Start, a federally supported family literacy program providing early childhood education, produced few measurable

impacts (Ricciuti, Ricciuti, and Rimdzius, 2005; Brooks-Gunn, 2003). In a review of some 200 parenting-support programs, including experimental and nonexperimental evidence, Dillon Goodson (2005) reports no effects to modest effects (the strongest were about one-quarter of a standard deviation on the outcome variable). She concludes:

Debate continues about the effectiveness of parent support interventions on outcomes for children. Program evaluations have shown the difficulty of producing sustained and comprehensive changes in parents. The subsequent link between changes in parents and positive consequences for their children's development has been even hard to provide. (4)

In another recent review of pre-K through Grade 3, including efforts to change family behavior, Reynolds, Magnuson, and Ou (2006) concluded that programs are more effective when they extend services for a longer period of time and include "intensive family support component." Yet, as they note, few of the existing studies of such comprehensive programs are able "to parse out the unique effects of parental involvement."

Waldfoegel (2006), in a recent assessment of the international literature on early education and parenting programs, concluded that although the nonexperimental evidence suggests parenting matters, the effectiveness of parenting programs in enhancing parental skills, much less affecting children's school achievement, is far weaker (see also Magnuson and Duncan, 2004; Magnuson and Votruba-Drazal, 2008).

A similar review in Britain by Desforges (2003) reached similar conclusions. Desforges (p. 5) concluded that the nonexperimental literature shows that the "spontaneous" influence of parents is even greater than the quality of the schools. However, policy and program interventions to alter parental involvement have been extensive but "so technically weak that it is impossible on the basis of publicly available evidence to describe the scale of the impact on pupils' achievement." Desforges goes on to conclude that the programs can raise "nonspontaneous" parental involvement, but it is unclear that such increases make a difference for student achievement.

On the basis of several independent reviews of the experimental and quasi-experimental literature, we still do not know whether programs designed to improve parents' skills in preparing their children for school can be successful. My own conclusion is that, at best, when combined with early school education and programs aimed at easing the transition to primary school, such efforts might have a small, positive effect. The effects of increasing family involvement appear to be greater when they are integrated with early school education (Love et al., 2005).

3. Programs to Increase Parental Resources

The strong link between resource deprivation and school readiness and later school success has led many developmental and educational policy researchers to consider programs to provide income or material resources to low-income families as a means of improving their adjustment to school (Dearing, McCartney, and Taylor, 2001). There are numerous reasons for believing that resource-starved parents have a harder time preparing their children for school. Poor parents are continually stressed, moves are

more frequent, and high-quality child care is less available, among other reasons (Yeung, Linver, and Brooks-Gunn, 2002). Much of the experimental evidence seems to support the importance of resources, particularly in preschool and during the transition to primary school.

Duncan, Magnuson, and their colleagues have done extensive reviews of this literature (CITES for Duncan et al, XXXX. See also Huston et al., 2005; Morris and Gennetian, 2003). Some of the important interventions have tried to improve child outcomes by increasing parental education and employment; others have examined the impact of programs that increase income directly through income transfers or the Earned Income Tax Credit. As I noted earlier, few studies have examined increases in income with changes in how parents function, much less the impact of changed parental behaviors on child outcomes.

Morris, Duncan, and Rodrigues, drawing on data from random-assignment experiments, developed a set of instruments to identify causal effects of added income. They report “selective effects of income on school achievement,” particularly in families with young children. These impacts disappear for children in middle childhood, however. In another study focusing on the impact of New Hope, a program aimed at increasing income, Huston et al. (2007) found significant impacts in school achievement, motivation, and social behavior, particularly for males. They suggested that the added income allowed parents to make better use of organized child care and afterschool activities. Magnuson and Votruba-Drzal’s (2008: 22) recent review of nonexperimental and experimental studies of the effects of poverty on child development concluded that it was “difficult to isolate the causal effects of income from that of other related disadvantages and family characteristics.” These authors note that impacts on educational attainment may amount to one-third of a standard deviation.

Again, the studies conflict to some degree, but generally suggest a modest to moderate impact of interventions to enhance resources in low-income families. The problem is attempting to isolate the specific causal effects of bolstering resources, in part because most studies do not trace these effects through changes in family processes. The results similar to other intervention programs indicate effects are greater on families with young children, and particularly young boys.

Stepping back from these three separate literatures on interventions among families with preschool and primary school children, a reasonable (though hardly iron-clad) conclusion is that programs aimed at affecting developmental processes through direct intervention with parents or by increasing parental resources have modest causal impacts on children’s school performance. Combined with early education programs, these impacts might become larger. Their impact on boys may be greater than it is for girls. How much these effects persist into the middle-school or high school years is an open question, but there is little support from the experimental and quasi-experimental studies to suggest that any interventions with parents or, more broadly, the family, have a strong and lasting effect on children’s school performance beyond the primary grades.

Family Interventions in Middle Childhood

For both theoretical and practical reasons, interventions aimed at increasing parental involvement decline after preschool and the transition to primary school.

Nonetheless, this decline is a gradual one, and there is a large and growing literature on efforts to support parents and provide guidance, monitoring, and outreach during the middle childhood years. Indeed, in part stimulated by the efforts of the MacArthur Foundation Network on Middle Childhood and the work of leading developmental psychologists, researchers have paid considerable attention to designing programs to keep parents involved, particularly as children make the transition from primary to middle school (Cooper et al., 2005; Huston and Ripke, 2006).

The nonexperimental studies offer strong evidence that when parents communicate with children, show interest in their school, offer assistance, monitor their children's participation in school, and most important, when they set clear expectations about school, their children do better in school (see Fan and Chen, 2001; Magnuson, Duncan, and Kalil, 2006). The experimental evidence examining program interventions is less extensive, and unfortunately, the results of the two main meta-analyses are not in accord. Jeynes (2005) examined 41 studies of school programs involving urban students, only some of which involved random assignment evaluations. He found a fairly strong impact of parental involvement on student achievement (on average, about three-quarters of a standard deviation). Moreover, the quality of the evaluation and the specific nature of the intervention were not generally linked to the effect size, although homework supervision seemed unrelated to student outcomes. The results were not specific to population subgroups.

Jeynes' assessment stands in contrast to a meta-analysis by . Mattingly and colleagues (2002:549). They found, also summarizing 41 studies, "little empirical support for the widespread claim that parental involvement programs are an effective means of improving student achievement or changing parent, teacher or student behavior." Compared with Jeynes' assessment, Mattingly and colleagues concluded that most of the studies they reviewed did not meet rigorous design criteria. Although it is possible to explain away the differences between these two papers by the differences in the studies included and the attention to research design, I am inclined to put more weight on the paper by Mattingly and colleagues because of its careful attention to the quality of the evaluation. They concluded that efforts to enhance parental involvement possibly might be effective; so far, studies using rigorous designs have not demonstrated a *casual* effect (See also Taylor and Moss, 1992).

In still another study focused on the impact of family resources in middle childhood, Morris et al. (2005) reviewed the longer-term effects of welfare policies designed to improve employment and income among families in poverty. On the basis of seven random-assignment experiments, they concluded that the policies had positive effects on children's transition into middle childhood but slight negative effects on children's transition into adolescence (see also Epps and Huston, 2007; Huston et al., 2006). These results also mirror the results of a large-scale federal program, Moving to Opportunity. The MTO program relocated families from high-poverty neighborhoods to communities with lower rates of poverty, on average. Younger children in these families generally fared better than older children entering school in their early adolescent years.

Finally, it is worth taking note of another line of research aimed at improving parental and family functioning as a means to reduce children's problem behaviors in the middle years. Building on a long line of experimental studies by Patterson and associates (ref), program designers have made concerted efforts to strengthen parenting processes to

reduce child misbehavior in home and at school. A particularly intriguing set of studies by Cowan and Cowan () indicate that couple and father interventions may help to reduce problem behaviors. Clearly, family-oriented interventions have had some success in easing problem behaviors; however, it is less clear whether this family-oriented, therapeutic and educational approach translates into better school performance.

All in all, the studies in middle childhood reveal a more mixed pattern of success in promoting family involvement, changing parental practices, and thereby improving child outcomes. I am inclined to concur with Desforges (2003:70), who says, "The available evidence...would seem to suggest that levels of involvement can be raised. The jury is still out on whether this makes a difference to pupil achievement."

Family Interventions in Adolescence and Early Adulthood

The experimental research on family interventions during adolescence and early adulthood becomes very thin. Most social scientists and policymakers believe it is difficult to alter family practices at this stage, that the family exerts less direct influence on adolescents and young adults, and regular involvement by parents in school activities drops off (Booth and Dunn, 1996). In part, schools tend to distance parents, and parents, particularly those with low education, may feel intimidated by teachers and the curriculum (Eccles and Harold, 1993). At the same time, there is mounting evidence that the major school transitions (into high school and into postsecondary education) need parental guidance and support (Patrikakou, 2004; Strom, 2007). For example, school choice and curriculum selection have important consequences for educational attainment. Similarly, nonexperimental studies show that parental encouragement and economic support have powerful consequences on whether young adults attend college and obtain a postsecondary degree (Hobcraft, 1996, in Booth and Dunn, XXXX; Teachman, 1987).

It might be possible to examine the experimental literature cited above to take account of the child's age and stage in school to determine whether enhancing parental involvement or resources has specific effects for high school children. There is a growing literature on parental involvement in choice of high school; however, few of the studies involved random assignment experiments or quasi-experimental designs that manipulated parental characteristics (Falbo et al., 2001). Potentially, this could be a promising area for experimentation.

Dropout prevention programs similarly command a great deal of attention in the educational literature. A subset of these programs is aimed at increasing parental monitoring and control. Again, however, I was unable to locate experiments that permit one to assess the components including enhancing parental support or helping parents to coordinate their efforts with schools.

Although we know that parents contribute heavily in supporting their children in college or technical school, there are no experiments aimed at increasing parental resources (Schoeni and Ross, 2005). Virtually all of the literature looks at the role of educational support for students directly, even though family income is taken into account in most programs (Bloom, 2009 in FOC). We really do not know whether increased support provided to parents would result in increased rates of matriculation in post-secondary education or college completion. In sum, we know little about whether

we can affect student performance in high school or increase the number of students entering higher education by increasing parental information, support, and resources, even though the nonexperimental studies suggest that parents continue to have relevance for school success and educational attainment.

The Gap between Nonexperimental and Experimental Studies

Nonexperimental studies uniformly show pervasive and powerful effects of parental socialization and management on school success and educational attainment in later life. However, results of family interventions involving random assignment experiments have been mixed at best. Clearly it is difficult to translate what we think we know about how the family shapes children's school readiness into programs to improve their performance in primary and middle school, much less their success in secondary and postsecondary education.

There are many reasons why this gap between experimental and nonexperimental results might exist. Examining this gap would help us understand why experiments aimed at changing family practices produce such a limited yield and, more important, what is required to achieve greater success in altering the family environments to promote better school performance and educational attainment.

Families are small social systems that operate like tiny subcultures. They pass on cultural values and beliefs, rituals and routines, all of which manifest in patterns of behavior and expressions of values and expectations. Furthermore, educated (and usually affluent) parents behave very differently from less-educated (and usually poorer parents) when it comes to inculcating education. The combination and accumulation of strategies and resources produce yawning differences by a very early age and only grow wider during preschool years. It is difficult to imagine any interventions that could even begin to narrow substantially the disparity that exists by the time children enter primary school. And this disparity between affluent and disadvantaged children continues to widen during the early and middle years of school (Alexander and Entwistle). By adolescence, the inequalities have become, it might be said, over determined by a set of conditions that are increasingly difficult to alter: extra-curricular activities, summer camp, associations with peers, coaches and mentors, to mention but a few of the sources that contribute to the advantage of the well off.

Because of the high degree of redundancy in resources or the lack of them, it is difficult to conceive of interventions in the family are simply not up to the task of permanently altering family cultures or changing parenting processes linked to school skills. The problem is that the family system and ecology in which it is embedded tends to be highly reinforcing and difficult to modify by existing programs aimed at changing one feature or another. This means that efforts to better inform parental decision making or adequate resources to affect parental guidance and support as children move through the education system are typically too small to make much of a difference to children's outcomes compared to the accumulated history of family impacts that build up over time and are often reinforced on a daily basis. Families, much like larger organized systems, are sensitive to external influences of policy and programs, but the change must be big enough to offset, overcome, or compensate for huge pre-existing differences in social position.

It is instructive to think about huge shocks to the family system that conceivably should alter children's education trajectories, such as the death of a parent or divorce. Important as they are, research indicates that these significant shocks to the family generally have only moderate impacts on children's school success or its extent (Amato, ; Furstenberg and Kiernan ; Rush-Singleton and MacLanahan). Why then should we expect that most programs aimed at reorienting parents' beliefs and behaviors would produce large and lasting impacts?

There are many barriers to overcome before we can successfully alter family beliefs and practices. First, most programs assume that parents' actions shape, if not determine, their children's behaviors, but we know that children influence their parents as well (Maccoby, 200?). Genetic predispositions interact with parental practices (any parent with more than one child can testify to that!) As children age, their part in shaping their own course of development only becomes more pronounced. Harris (), among others, has argued that ignoring genetic factors, as well as the influence of peers, has led researchers to overstate the influence of parents in the socialization process. Her views are controversial and perhaps overstated, but she does make an important point. American social beliefs assign an unusually powerful role to parents in shaping their children's destinies, yet a host of factors, including genetics and peer influences and most of all schooling opportunities, affect their success. Notably, Harris argues almost exactly the opposite of Coleman and his colleagues () in their earlier study of the impact of schools on children's attainment.

The efforts of policymakers and practitioners to influence parents' beliefs and childrearing practices may also simply be too puny in most educational programs to accomplish more than a slight and temporary impact. Encouraging parents to use less harsh treatment, to engage in play to promote skill development, to read to their children, to teach their children to reason and manage emotions are probably useful techniques to impart, but these efforts are surely not sufficient to overcome the huge disparities that exist by parental education level and social position. Just imagine the impacts of a visiting nurse program lasting for the first three years of a child's life born to an unmarried mother who dropped out of school. Now compare that situation to one where the mother gives up the child for adoption to a couple both of whom have a college education. In which circumstance is the child more likely to be prepared for school or to achieve a college degree? Absent dramatic and lasting interventions, it may be extremely difficult to change educational prospects.

Added to these impediments is the problem of resources, which in the nonexperimental research are strongly linked to educational outcomes of children. Income begets better schools and neighborhoods. Low-income parents are constantly preoccupied with emergencies and stresses that consume time and energy, upset family routines, and increase flux in household composition, moves, and school changes. Higher income allows parents to purchase favorable peer environments; low income constrains parents' ability to manage peers and other adult influences. To put a differently, the availability of resources allows families to select more protective and positive environments, while lack of resources generally leaves the families to fend for themselves in an otherwise uncongenial environment.

Families, of course, consist of more than parents and a child. They include siblings and often extended kin living nearby who take an active part in child care and

child-rearing. Siblings constitute a special form of peer influence that may reinforce or undermine parents' actions. Similarly, regular involvement by extended kin may support parents' actions or divert the influence of parents. We know relatively little about the impact of these influences on school readiness or long-term achievement. However, it is not unreasonable to assume that siblings and extended family reinforce the ability of better-off families to promote educational success while having just the opposite impact in disadvantaged families.

The notion that families are interacting systems, dependent on support from the surrounding contexts of school and community, makes the task of intervention far more challenging than most policymakers generally perceive. Changing one feature of the system rarely produces of the ripple effect on children that is often imagined. Systems are generally redundant and self-reinforcing; that is, the various components are interrelated. Efforts, for example, to raise parental expectations for their children's educational attainment are rarely matched by the multiple ways that parents implement those expectations. Without the implementation in everyday practice, higher expectations by themselves remain abstract and relatively meaningless for children. In other words, interventions aimed so narrowly at parents rarely alter other parts of the system: they do not mobilize extended relatives to support the changes, they do not alter the peer or sibling environment, and they do not provide parents with the means to help the child realize their ambitions.

Thinking of the family as an interacting system of cultural beliefs and everyday practices set in an immediate context that both helps to generate these beliefs and practices and reinforces them helps us to understand the generally weak impact of interventions aimed at changing the family. Most of these interventions do not, in fact, engage the system, but instead target one element to leverage more general change.

How can we get inside families to make more radical change? I turn to that question in the final section of this chapter.

Rethinking Family Interventions to Promote Educational Success

Available evidence suggests that the influence of families, parents in particular, on their children's school success is very difficult to modify, especially in the long term, by programmatic interventions aimed changing parental socialization practices. This is not to say that efforts such are not worthwhile or even cost effective; rather, for a number of reasons discussed in this chapter, these programmatic interventions are bound to have relatively small impacts and go only a small way toward mitigating the huge family differences created and sustained by the uneven opportunities provided children in different social strata. Reginald Clarke demonstrated years ago, individual families can overcome the educational handicaps imposed by cultural and social milieus if they are very motivated and highly directed. However, most parents lack the repertoire of skills that the odds-defying families have. It is unrealistic to build a policy to reduce educational inequalities by mobilizing parents to adopt and mimic the techniques of most motivated and capable families.

The main line of attack instead must involve better schools equipped with more skilled teachers that provide a more extensive program of education with longer days and summer months. The less affluent, and in particular low-income families, need access to

better schools, better trained teachers, and more instruction time to compensate for skills not acquired in the home. Most parents will welcome such efforts, particularly if day care and summer care programs offer more in the way of school preparation, tutoring, and support. Direct efforts to increase parental involvement with schools, teachers, and educational information should be a strong component in preschool education, as it often is in many high-quality programs, but as a stand-alone program it is probably not going to have a large impact on school success, much less long-term educational attainment.

There are other potentially promising alternatives in reducing educational inequality that have not yet been carefully assessed or evaluated. It would be highly desirable, for example, to examine the long-term impacts on children of efforts to increase parental education and income. Many parents return to school after having children. In the Baltimore Study, which followed teenage mothers after their first child was born, a very high fraction of women returned to school in their twenties and thirties. It appears that the children of these mothers did better in school than the counterparts who did not go back to school. Given the widespread availability of adult education, it is possible that increasing parents' educational attainment could have a very positive benefit for their children's school success. However, the findings of this small study are only suggestive and should be examined in experimental settings. It might be possible to pool data from MDRC and other research organizations that routinely evaluate educational and income programs with an eye toward examining their long-term impacts on children.

A second strategy for getting greater traction with existing programs is to build longer-lasting structures of opportunity for children by linking preschool programs (with parent involvement) to enhanced educational programs in the schools. The idea of building more continuous enrichment efforts is not a new one, but it has not been a prominent approach in changing children's educational trajectories. More typically, children complete preschool programs only to enter poor schools with limited and often retarding curriculum. These schools extinguish whatever gains the child achieved in preschool. We know that quality preschool education produces gains for children, but we also know that most of these gains will be erased later on. Building quality educational tracks that resemble the schooling offered to more affluent children is absolutely necessary if there is any hope of improving children's long-term educational prospects.

A third strategy involves immersing parents and children together in intensive programs. Some communities offering high-quality summer programs or camps for disadvantaged and moderately disadvantaged children have applied this approach already though not many have made it part of a deliberate attempt to engage, if not immerse, the family in building school skills and management strategies aimed at promoting educational success.

An annual summer camp could offer classes to both parents and children simultaneously along with recreational and skill-building opportunities. Such programs, of course, face formidable challenges because parents are frequently unable to miss work, but it is possible to negotiate with employers to permit a week or two weeks in which parents and their children would be exposed to a range of enjoyable and educational activities. The purpose here is to immerse parents in an environment with like-minded families aimed at providing information and imparting skills. A program of this sort might be designed to maintain contact with parents during the year, offering counseling and assistance when problems in schooling arise. This sort of program might target

preschool children, but it would be appropriate for families with older children as well. Indeed, it might be desirable to direct this sort of programmatic intervention at families whose children are making transitions in the school system: to primary, middle, and high school.

A fourth strategy simply involves enhancing communication between schools and parents by making better use of the internet and email. School districts are gradually adopting these communication tools. Of course, the digital divide continues but it has narrowed over time. School districts might be able to mount programs to make the internet available to all families (with supplementary grants from government or private funding sources). This would permit teachers to communicate with parents on a more regular basis, but it might require training teachers to make better use of the internet to keep parents informed and more involved in what is happening in the classroom, to provide information on community resources such as tutoring or afterschool programs, and to explain policies and practices in the school. This sort of program might be useful as children move into middle school and high school, where parent involvement generally drops off. Such programs may only help the more motivated and capable parents, but they are a low-cost way of enhancing communication and family involvement.

Limited financial resources affect the capacity of low- and moderate-income families to implement their educational goals, apart from the disadvantages they face owing in part to inadequate cultural and social capital. Although much of the research indicates that restricted resources are particularly consequential during early childhood, resources also play a part in constraining children's chances of making it through high school and beyond. In particular, adolescents and young adults from low-income households confront a number of income-related barriers to college. The children of poor and near-poor families are less likely to enter college, taking account of other factors that influence education, and are less likely to complete a degree. Poorer families may also be less knowledgeable about sources of support for higher education; they may be less willing and able to borrow funds to assist their offspring. In experimental studies on community college achievement, MDRC found that financial aid for low-income students increased course completion. In other words, providing direct monetary assistance to students may be one of the most effective ways of converting early school success into educational attainment. This strategy reminds us that supporting families' ambitions for their children ultimately requires greater aid for higher education, no matter how diligent policymakers may be about helping children get off to a good start in school.

Some have argued that directing resources to lower-income families either through tax policies such as the Earned Income Tax Credit or child care, preschool programs, health care, afterschool tax rebates, summer education programs, or tuition assistance would do more to help reduce educational inequality than interventions aimed at changing family practices. However, we need not pose the macro-level policies and the micro-level policies as strict alternatives. Instead, they can be seen as complementary approaches to reducing educational inequality.

Without resources to promote stability in the family, however, we are unlikely to make headway in promoting school achievement. At the same time, this review shows that parents can also benefit from information and knowledge as well as assistance in dealing with intermittent crises that inevitably occur in all families but more frequently in

families that are poor or near poor. It seems likely that for such interventions to be successful, they must be present throughout children's lives, not just during the preschool and primary school years. Building on earlier programs and paying particular attention to transitional points in school are potentially propitious approaches to assisting parents with limited cultural and social capital.

Conclusions

Policymakers appear to believe that intimately involving parents with low education and income in preparing children for school and helping them to succeed is a potent way to reduce educational inequality. Although this idea has some plausibility and merit, both theory about how family systems operate and empirical evidence suggest we may be overestimating our capacity to alter family practices in ways that will reduce the achievement gap between advantaged and disadvantaged children.

It seems unlikely that children's mobility will be changed dramatically by micro-level programs aimed at helping families. Certainly, such efforts by themselves, especially in their current restricted form, will not do much to change the inequality gap. Macro-level programs that address income inequality and permit less-advantaged families greater access to higher-quality day care, preschool, summer learning opportunities, and ultimately better schools, offer more promise of later success in the educational system. If such macro-level policies are in place, it seems more likely that the micro-level interventions that help parents make better educational decisions for their children may have an even greater payoff than they currently do.

Ultimately, we may learn more about the role of both macro- and micro-level policies by cross-national comparisons that focuses on how to mitigate the pervasive effects of social class on educational success. How and how much redistribution policies, educational policies, and programs aimed at increasing educational involvement mitigate the level of intergenerational educational mobility would provide what works in other nations to reduce educational inequality.

Finally, there may be other indirect strategies about which we have only limited evidence from nonexperimental studies that could lessen the burdens on disadvantaged parents, such as helping them to increase their own educational standing, control unintended childbearing, improving their health, or reducing involuntarily housing moves (many of which require children to switch schools) that ultimately affect their children's chances of educational attainment.

American policymakers (and the public at large) strongly believe that the route to educational success runs largely through the family. Nonexperimental studies support this conviction, although the support is less convincing in experimental studies aimed at changing family practices. Although the nonexperimental studies may exaggerate the impact of families, results from the experiments probably underestimate the effect, largely because intervention programs have had little traction in altering family practices in a meaningful way.