

EARLY EDUCATION FOR IMMIGRANT CHILDREN

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MPI and Bertelsmann Stiftung have convened a task force to promote thoughtful immigration policies and assess and respond to the profound challenges of integrating immigrants and building stronger communities on both sides of the Atlantic. It addresses its recommendations to European Union institutions and Member State governments, the governments of the United States and Canada, and state and local governments and civil society everywhere.

The Task Force is composed of the following senior figures:

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Introduction

Most industrialized countries provide preschool education programs targeted at low-income and ethnic or sociolinguistic minority groups.¹ The programs generally aim to promote the cognitive, language, literacy, and quantitative literacy (or numeracy) skills of preschool children. They also aim to develop the social and emotional competence of children to provide them with a fair start in elementary school.

Evaluations of early-childhood education and day care programs indicate that the provision of early education is a viable strategy to improve the educational and socioeconomic position of low-income and minority communities and to promote integration. However, evaluations also show that the design of programs is fundamental to their success.

This policy brief lays out the causes of disadvantage among children of immigrants and the different models of early education provision that are available to policymakers. The evaluation evidence — what works — is then discussed, as are the obstacles to policy reform. The recommendations are drawn from a set of key learning points and a description of good practices in early education.

Causes of Educational Disadvantage

There are four complementary explanations for education disadvantages among the children of immigrants:

1. accumulation of socioeconomic and psychological “risks;”
2. lack of stimulation of cognitive and language development in family interactions;
3. different cultural beliefs that determine parenting style and socialization of personality; and
4. linguistic and educational consequences of bilingualism.

Risk accumulation

An increased number of “risks,” present in the family or wider context of the family, negatively affects the development of intellectual skill, school achievement, social-emotional competence, social adjustment, and health.²

Risk factors at the level of the child include low birth weight, health problems, low IQ, and difficult temperament; at the level of the parents and the family they include parent’s psychiatric problems (e.g., depression, drug abuse), marital conflict, a large number of children, single parenthood, low income, job stress, unemployment, and frequent changes of residence; and at the level of the neighborhood and community they include poor housing conditions, crime and violence, and environmental

pollution. Furthermore, it has become increasingly clear that — related to ethnic-minority status — the experiences of being marginalized, discriminated against, and treated disrespectfully by members of the majority society constitute important risk factors in their own right.

Most of the risks referred to above are strongly related to low income, social class, or ethnic-minority status. Although low income or ethnic-minority status alone may not be a decisive factor in development, it is the frequently observed *combination* with other risks that leads to serious consequences for child development.³

The behavior of parents is an important mediating factor here. Parenting requires a strong, child-centered motivation, often at the expense of parents' own concerns. However, an increased number of risks that cannot be dealt with effectively causes chronic stress among parents. This leads to a shift in the balance between child-centered and self-centered goals, influencing subsequent child rearing negatively. For example, risks can undermine a parent's motivation to stimulate the child and to monitor the child's safety and well-being.

Social support can offset the negative effects of risk accumulation.⁴ Social support comes from individuals who constitute the social network of the family. The net effect of social support is to reduce stress. However, a reduced social network, or a poor-quality social network marked by weak emotional involvement and low cohesion that lead to social isolation, is a risk factor in itself.

Informal education and school preparation at home

Studies examining patterns of informal education in the family — such as the teaching strategies parents use in everyday play or the way parents converse with their children — have consistently revealed big differences between families that correlate with socioeconomic status and immigrant status. Moreover, these variations were found to be a major cause of early-arising differences between children in intelligence, cognitive development, language development, and school achievement.⁵

A particularly important aspect of informal education at home is home literacy, or, more specifically, shared reading and writing in the family. Differences between families in home literacy, depending on the parents' education and own literacy skills, strongly influence children's school achievement and language and literacy development.⁶

Poverty, low social class, low educational level of the parents, nonmainstream cultural background, particular religious traditions, and low-literate lifestyles have a

pervasive influence on the quantity and quality of informal education at home, leading in the end to children being less prepared for formal schooling.

Child-rearing beliefs

Parents' child-rearing belief systems consist of — often religiously inspired — ideas about the nature of children, their learning and development, and their developmental timetables (for example, the age by which parents expect children to have mastered particular cognitive, emotional, or social skills); the roles of parents and teachers in child rearing and development; and more specific values, such as the importance of literacy and school achievement.

A rough but, for the present purpose, convenient distinction is made between “traditional collectivistic” and “modern individualistic” beliefs.⁷ Traditional beliefs are typically characterized by the fact that the interests of the individual child are subordinated to the interests of the greater social unit of the (extended) family and local community (e.g., goals such as obedience and respect for adults and authorities are emphasized). Traditional beliefs are associated with authoritarian parenting styles and relatively late expectations about the age at which children are psychologically mature. Modern beliefs, on the other hand, are characterized by a so-called individualistic orientation that emphasizes goals such as emotional independence, self-will, competitiveness, and intellectual and artistic excellence. Modern beliefs are associated with both authoritative and permissive parenting styles, and relatively early expectations about the age at which children can be taken seriously as individuals.

Parents may hold several conflicting beliefs at the same time, and their beliefs may adapt to particular situations and to changing circumstances. For instance, parents who immigrated from traditional nonschooled cultures often combine collectivist child-rearing beliefs with a strong, individualistic commitment to a successful school career for their children.⁸ Nonetheless, a consistent finding in several countries is that highly educated urban parents with a higher socioeconomic status mostly subscribe to modern, individualistic beliefs, whereas lower-educated and immigrant parents with a lower socioeconomic status mostly subscribe to traditional beliefs.

Generally, traditional beliefs correlate with cognitive delays, lower IQ, psychosocial problems, lower school achievement, and less successful social integration.^{9,10}

Bilingualism

Experimental evidence shows that, in favorable social circumstances, bilingualism is not a detrimental condition.¹¹ On the contrary, being a “balanced” bilingual is associated with cognitive and linguistic advantages in areas such as attention control

and linguistic awareness. The notion of balanced bilingualism needs further clarification. It means that the child's proficiency in its first language (L1, or mother tongue) and second language (L2, usually the school language) has reached the same *mature, age-appropriate level*. This, in turn, implies that L1 and L2 inputs have been balanced in the course of development, both quantitatively (e.g., exposure and instruction time) and qualitatively (e.g., social prestige and level of complexity).

Bilingual development tends to occur either simultaneously or successively. Simultaneous bilingual development means that the child starts acquiring L1 and L2 at the same time, in his or her first year of life. This situation is characteristic for families with parents who fluently speak different mother tongues (often using the one-parent-one-language strategy in communication with the child). Far more common, however, is the situation of successive bilingualism, meaning that a child first acquires L1 up to a certain level of proficiency before starting to learn L2. L1 is the predominant language at home, and the language the parents speak best; L2 is the predominant language used in early education, and it is frequently a language the parents do not speak well. This situation is typical for most bilingual (immigrant) families in Europe and North America today.

Despite the experimental evidence for the advantages of bilingualism, several studies show that successive bilingualism has a negative effect on L2 development and on school achievement in L2 contexts in general, often exacerbated by the home environment. The positive transfer between L1 and L2 therefore does not occur for the majority of bilingual speakers. Instead, there appears to be a competitive relation between L1 and L2 concerning available (formal and informal) instruction time and children's cognitive resources in the acquisition process.¹² This effect is reinforced by structural dissimilarities of L1 and L2, and by different uses of L1 at home — for example, it may not be used for writing — compared to the uses of L2 in school. Studies of young Turkish and Moroccan immigrant children in the Netherlands show significant delays in *both* first- and second-language development.¹³

Responses to Educational Disadvantage: Models of Early Education

There are four major models for early education provision:

1. child-focused and center-based;¹⁴
2. child-focused and home-based;
3. parent/family-focused with diverse support including home support; and
4. child- and parent/family-focused and center-based with home support.

The first and most important model, which accounts for the vast majority of formal preschool education provisions, adopts a child-focused, center-based, and professional delivery strategy. This provision includes center-based child care in day

care, preschool educational intervention programs, and early general schooling (kindergarten). The actual provision and programs differ hugely on such characteristics as when they start, the intensity and duration (the so-called dose), the staff-child ratio, and the pedagogical approach.

The second major model consists of various child-centered, home-based care services and education programs, typically using relatively untrained nonprofessionals — for example, parents and community paraprofessional workers — to deliver services.

The third model consists of a wide array of parent- or family-focused support programs. Usually, these programs offer a diversity of services and activities tailored to the multiple needs of families caring for infants.

The fourth and final model combines a child-centered focus (the primary goal) with parent/family-centered goals, which are seen as instrumental to the primary goals. The provision of care and education tends to be in both a center and at home, and is delivered by professional teachers as well as parents.

Evaluating Models of Early Education Provision

A number of programs, carried out in different countries, have been evaluated. These programs give policymakers insights into which models work best. This policy brief considers the evaluation evidence on the various models and then considers two of the key questions the research raises: What are the effects on educational outcomes? And do any positive benefits last?

Combining a center-based education program with parent support

The available evidence, summarized in a number of recent reviews and statistical meta-analyses, indicates that a center-based approach that combines activities meant to involve, educate, and support parents is most effective.¹⁵

Most successful are so-called model combination programs, which are developed and run under scientific supervision. These programs have sufficient funding for providing education and care in small groups, favorable staff-child ratios, and reasonable staff salaries. They also blend intensive, early-starting, child-focused, center-based education with strong parental involvement, parental education, programmed educational home activities, and measures of family support. Examples include the High/Scope Perry Preschool Project in Ypsilanti, Michigan; the Syracuse Family Development Research Project in Syracuse, New York; the Yale Child Welfare Project in New Haven, Connecticut; the Abecedarian Project in Chapel Hill, North Carolina; the Chicago Child-Parent Centers Program in Chicago, Illinois; and the Turkish Early Enrichment Program in Istanbul, Turkey.

Comparisons of the short- and long-term results of these combination programs with other models have reached broadly the same conclusions. The effects of combination programs on IQ and school achievement are stronger and maintained over a longer period of time. In addition, combination programs have positive effects on social-emotional measures (e.g., self-esteem, work attitude, and sociability).

Less successful are large-scale, center-based programs, such as the US Head Start program,¹⁶ the US state-funded, half-day preschools for poor disadvantaged children,¹⁷ or nationwide public preschools or kindergartens in, for instance, the United Kingdom and the Netherlands.¹⁸ A recent report from the Head Start Impact Study confirms earlier findings on Head Start, namely that cognitive gains faded over time.¹⁹

The mixed results probably indicate that *quality* of the provision matters, in particular so-called structural quality: group size, staff-child ratio, teachers' training level, and teachers' salaries. For instance, Gilliam and Zigler found that preschools in US states with higher levels of staff training and more favorable staff-child ratios were far more effective than preschools in states with lower mandatory quality.²⁰ Gorey's review also suggests that starting age, intensity, and duration of participation are decisive factors, and large-scale (half-day, low-intensity) programs may not optimally meet them.²¹

While most studies show the effects on IQ fade out before adolescence, long-term efficacy appears in above-average school achievement scores in the later grades (concerning reading and math), better-completed school careers, lower dependency on welfare, higher rates of economic independence, fewer psychosocial problems, less juvenile delinquency, less smoking, and lower rates of teenage pregnancy. Three of the aforementioned combination programs have been subjected to cost-benefit analyses, and all indicate high return rates.²² As Heckman has argued, educational investments in human capital are likely to be socially and economically most profitable when targeted at the early-childhood preschool period.²³

Child-focused, home-based preschool education

Widely implemented, home-based preschool education programs include the Parents as Teachers Program (PAT in the United States), the Home-based Instruction Program for Preschool Youngsters (HIPPY in Israel, the Netherlands, Turkey, and the United States), and the Mother (or Parent) Child Home Program (MCHP/PCHP in the United States, Bermuda, and the Netherlands).

The evidence indicates that home-based education programs are less effective than center-based programs and, in particular, combination programs.²⁴ There may be

several explanations. Parents as primary intervention agents may not be sufficiently skilled to carry out the program activities. For example, they may be illiterate or the home language may not be the language of instruction. Another explanation is that the home situation may not be conducive to optimal learning. Multiple stressors may be present, hindering the program's effective implementation.

Yet, the home-based education model may be appropriate for balanced bilingual development. Since it is often not possible to provide bilingual education in preschool centers and elementary schools because of financial or staffing constraints, or because of political objections, involving parents as relative L1 experts may offer an alternative approach. Leseman and van Tuijl reported medium-sized effects of a Dutch home-based education program on Turkish children's L1 (but not their L2) development as well as on general cognitive and academic skills tested in L2, whereas participation in the early-education center and elementary school promoted only L2 development.²⁵

Parent- and family-focused support

Family-support programs or family-support systems that integrate multiple services to families or parents, with children targeted only indirectly, do not yield clear effects on children's cognitive and language development.²⁶ The exception: a high-quality center-based educational program (provided in a day care center or preschool) that offers standard service to all families, as in the Yale Child Welfare Project.

However, family-support programs probably protect children against negative child-rearing conditions and prevent child abuse and dysfunctional social-emotional development.²⁷ Home-visitation programs involving frequent visits to young first-time parents in the prenatal and postnatal periods reduce child abuse and neglect in the family; they also have positive effects on children's physical and mental health, and reduce antisocial behavior.²⁸

Educational effects of day care

Good-quality, center-based day care can have beneficial effects on low-income and ethnic-minority children's language and cognitive skills. If center-based day care is of above-average quality, there will be medium-sized cognitive and language benefits for children of low-income and ethnic-minority families.²⁹ Similar findings were recently reported from the United Kingdom, revealing a significant compensatory effect of good-quality preschool care programs for low-income and immigrant children.³⁰

The effects are increased if a center's quality is higher, if children participate before school for a longer period of time and more intensively, and if children come from

families with a poor informal-education climate. However, many studies have shown that low-income families and ethnic-minority families tend to select lower-quality care types.

The recent outcomes of the Early Child Care study of NICHD in the United States, however, are less conclusive.³¹ In particular, the study focused on the effects of a very early start (within a few months after birth), high intensity of use (30 hours per week or more), and long duration of nonparental day care. The study confirms the overall modest cognitive and language benefits of center-based care. However, the study also shows negative effects of the quantity of day care on social-emotional outcome measures for school-age children (who are more likely to externalize problem behavior), regardless of day care quality or quality of the home environment.

Potential for long-term benefits

Although often documented, the fade-out effects of programs are not as universal and inevitable as they may seem. For instance, the results of a number of programs, referred to in the previous sections, indicate that long-term efficacy (and a very favorable cost-benefit ratio) is possible.

It is likely that, by improving program design and program quality, policymakers can elongate the positive effects of early education. The evidence indicates that an early start (at or before age 3 but perhaps not too early) — together with an intensive, multisystemic, high-quality approach that combines a child-centered developmental preschool with parent involvement, parent education, and family support — is associated with a whole range of long-term gains, both individual and social.³² As noted, another important characteristic is the intensity or “dose” of the preschool intervention: the higher the dose, the more sizeable the long-term effects.³³

One explanation for fading effects is that children who have had early education may be more likely to attend elementary schools of lower educational quality, with a less favorable socioeconomic composition of the student population and more problems of safety.³⁴ Put differently, preschool program effects can be nullified by adverse conditions later on. Research findings like these suggest the need for multisystemic and continued “nurturing” that broadens the scope of the intervention to include the family context and extends the approach far into elementary school.

Policy Obstacles

In most countries, low-income families and immigrant have less access to (good-quality) early-childhood care and education.³⁵ This constitutes a major obstacle to using early education as a means to enhance educational opportunities of low-income and immigrant children.

Another concern is that the early-childhood education and care systems of many countries show a patchy design.³⁶ These systems are marked by numerous discontinuities and major transitions, disrupting children's social relationships with other children and the caregivers. Discontinuities and frequent interruptions render the developmental and learning processes less effective. Moreover, these systems reveal strong tendencies of socially selective use: lower-quality schools tend to be used more by low-income and immigrant families whereas high-quality schools tend to be used more by higher-income, middle-class, and professional families.³⁷

Preschool education and care in most countries are provided in a complex, mixed, and segmented market, with several different types of care and education (such as center-based care, home-based care, and half-day or full-day care), prices, financing systems, and quality regulations. In many countries, this causes socially selective use that tends to reinforce existing disadvantages.³⁸

Private, partly subsidized, and/or fully subsidized organizations provide the educational supply. Subsidies may be centralized (passed directly to centers) or decentralized (through vouchers and tax reduction for parents). There may be different licensing and accreditation regulations, and — correlated with this — there may be strong differences in quality.

In this mixed and segmented market, parents may consider alternatives that do not always benefit the child. They may ask adults present in the home or in the neighborhood to care for the children. One of the parents may stop working as long as the children are young and act as sole carer. Or the parents may use low-priced alternative care provisions, which probably are of low quality.

Available evidence suggests that socioeconomic class and ethnic-cultural differences in the use of preschool services can be explained by four factors:³⁹

1. the family's income, the number of children, and the mother's employment and hourly wages in relation to the parental fee required by the care provider and subsidy provided to the family;
2. the parents' cultural and religious child-rearing beliefs, in particular the view that young children should be cared for by their mothers versus the importance attached to early stimulation of (second) language and literacy development;
3. the parents' degree of social and cultural integration and the number of years of residence in the new country, and, more specifically, the parents' confidence in professional education and care provisions as representatives of the majority society; and

4. considerations of convenience and the availability of informal care by relatives living in the same neighborhood in relation to location, opening hours, and rules regarding care for sick children.

To increase access to high-quality early-childhood education and care, decreasing the fee for low-income groups is an obvious starting point. However, this requires economic redistribution, which constitutes tough policy decisions. Furthermore, it is not clear which method of redistribution best serves all purposes (accessibility, quality, and educational efficacy).

Due to their cultural and religious beliefs, parents in low-income communities and ethnic and sociolinguistic minorities may value having the mother educate the child at home. In addition, they may consider children below elementary-school age as too young to participate in an education program. Although most of these parents probably do value a successful school career for their children, they may not see the connection between this goal and using a day care center or preschool. Guaranteeing quality, and, in particular, efficacy with respect to cognitive, language and social-emotional development, seems to be a crucial next step in policy development.

Immigrant parents rightly observe discrepancies between socialization practices in centers and preschools, and their own socialization goals.⁴⁰ Organizing preschool education and care to more closely match the families' child-rearing goals and values could tackle this problem.

Low-income and minority families have to deal with many additional stresses regarding family income, jobs, daily child rearing, and the neighborhood. For such families, trying to meet the requirements of personal involvement in the education program or observing the time schedule and rules of the day care center may be an extra burden.⁴¹ Tailoring provisions to all the needs of families could solve this problem.

Policy Learning Points

Evaluation evidence indicates that the design of programs is crucial to success. Low-intensity, low-dose, late-starting, and monosystemic approaches are less effective overall. Early-starting, intensive, multisystemic approaches that include center-based education and involvement of professionals as a core activity are superior, with impressive long-term results and very favorable cost-benefit ratios. Investing in high-quality, early-starting, and intensive care and education provisions for young children is socially and economically probably very profitable.

Yet, within this general model, age-appropriate services and sensitivity to differing needs and preferences are essential. For instance, the recent results of the NICHD

Early Child Care Study may be seen as a warning that very early intensive use of center-based care and education can be hazardous for a child's social and emotional development, even if high-quality care is provided. Bearing this in mind, policy considerations must include parental-leave measures and the right to part-time work, and combine them with low-intensity, center-based care for the earliest years.

Balanced bilingual development in early childhood requires balanced bilingual education. The presence of many different first languages in one classroom and the impossibility of finding and hiring staff to serve all these mother tongues equally well require alternative strategies, such as involving the parents and the sociolinguistic communities. This may be facilitated through the provision of home-based programs, in addition to center-based care and education in the national language.

Policy measures that seek to increase participation in early education should seek ways to decrease the costs for low-income groups while ensuring a common, high level of quality of education for all children. Some studies suggest that an indirect form of subsidization, through vouchers and tax measures (demand-side subsidy), may be the best strategy in this regard. However, a distinct risk of indirect subsidization is an increasing gap in the use of high-quality education between high- and low-income groups. A distinct risk of direct subsidization is low or moderately average quality, as in large-scale public preschools. In all cases, strong measures to monitor and ensure minimum quality standards should accompany subsidy strategies.

Currently, there are several problems with the provision of special preschool care and education programs for low-income and ethnic-minority children.⁴² First, many targeted preschool-education programs do not meet the criteria of quality and efficacy. Second, preschool-education programs for disadvantaged children are often temporary projects and vulnerable to economic and political trends. Third, targeted special measures tend to reinforce social and ethnic segregation.

The policy challenge, therefore, is to (re)build (current) systems of early childhood care and education that meet crucial design features as outlined above; provide high-quality care and education for all children; and make sure these systems are integrated, attractive, and affordable to all families regardless of social class or minority status. At the same time, such systems need to be sensitive to differing educational needs and must be able to compensate for early educational disadvantages.

Best Practice

The ideal early-education system is both integrated and differentiated, ensures common developmental and educational goals, is adaptive to individual needs and preferences, and works in both a child- and family-centered way. The system joins up the different types of care, education, and support that are provided, and is marked by equal-quality regulations for all subsystems.

Denmark, Finland, and Sweden provide examples of systems that are at once integrated and differentiated, continuous but age appropriate. Their so-called age-integrated services, which are provided to children between the ages of 1 and 6, have a relatively high uptake among immigrant families.⁴³ Age-integrated services are intended to combine several education and care functions in one local preschool center, including full-day care, playgroups, preschool-education programs, leisure-time activities for young children, and parent-support programs. Another example of a high-quality, full-day integrated service is the public preschool in the province of Reggio Emilia, in Northern Italy, which serves children between the ages of 3 and 6. The province recently expanded the service to include a care system for children up to age 3.

A second interesting model is the “broad-based school,” also known as a “community school” or “full-service school.”⁴⁴ Broad-based schools combine, in one building, and under one management and administration, several services for (young) children, their parents, and the wider community. At the same time, the teaching of reading, writing, and math is a core function. Services that are aligned with elementary schools include compensatory preschool education and language programs for 3- to 6-years-olds, full-day educationally oriented care (“educare”) for children up to age 6, and extended school-day programs and afterschool care for 6- to 12-years-olds. Coherence and interservice cooperation is ensured by periodic interservice staff meetings, joint case management, and occasional staff exchange. Broad-based schools that successfully keep to the educational goals — namely by linking early-starting, intensive preschool programs (or educational day care) and family-support activities to the school’s educational mission — have much in common with the combination programs that have showed such impressive long-term effects.

Policy Recommendations

The following recommendations are built on the platform of learning points and the evidence of best practice that is available.

1. High-quality special-education programs for low-income and minority children should be built into comprehensive systems of (preschool and after-school) day

care and education, and other support services. The combination models of providing early education are the most effective.

2. Early-education initiatives to provide immigrant (bilingual) children with a fair start in primary school should develop into integrated systems that are strongly aligned with the primary school yet serve educational, day care, afterschool care, and special-needs care. They should also be able to attract users from mainstream communities. For serving all these purposes well, quality is a crucial factor.
 3. Evaluation evidence suggests a number of principles of good policy design that can be grouped into three areas: (a) the quality of care, (b) the content of provision, and (c) the continuity of provision.
 - a. Quality provision includes
 - sensitive and responsive care-giving and secure social relationships;
 - a high dose of stimulating verbal interaction;
 - a small group size and favorable staff-child ratio;
 - a richly equipped play room; and
 - a professional and well-paid staff.
 - b. Program content should be
 - based on cooperation between peers and teachers in challenging, authentic, developmentally appropriate activities;
 - made culturally relevant in regards to language, literacy, quantitative literacy, and cognitive and social skills; and
 - tailored to the multiple needs of families and include parent education and family-support measures.
 - c. At the level of systems design, coherence and continuity between stages and contexts should be strengthened. This includes fortifying the transition between
 - home and preschool by involving parents and by extending the program to the home environment whenever feasible;
 - different successive preschool care and educational services by integrating care and education and other services; and
 - preschool and primary school by extending the program into primary school and by aligning preschool services with primary school.
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ENDNOTES

1. OECD, *Starting strong: Early childhood education and care* (Paris: Organisation for Economic Co-operation and Development, 2001).
2. R. H. Bradley and R.F. Corwyn, "Socioeconomic status and child development," *Annual Review of Psychology* 53, Feb. (2002): 371-399; A.J. Sameroff and B.H. Fiese, "Transactional regulation: The developmental ecology of early intervention," In *Handbook of Early Childhood Intervention*, J.P. Shonkoff & S.J. Meisels, eds., 2nd ed. (Cambridge, England: Cambridge University Press, 2000), 135-159; R.L. Repetti et al., "Risky families: Family social environments and the mental and physical health of offspring," *Psychological Bulletin* 128, no. 2 (2002): 330-366.
3. Sameroff and Fiese, "Transactional regulation" (see n.2).
4. K. Crnic, K. and M. Acevedo, "Everyday stresses and parenting," In *Handbook of Parenting. Volume 4: Applied and Practical Parenting*, M.H. Bornstein ed., (Mahwah, NJ: Erlbaum, 1996), 277-298; Repetti et al., "Risky families" (see n.2).
5. Gottfried et al., "Role of cognitively stimulating home environment in children's academic intrinsic motivation: a longitudinal study," *Child Development* 69, no. 5 (1998): 1448-1460; B. Hart and T.R. Risley, *Meaningful Differences in the Everyday Experiences of Young American Children* (Baltimore: Brookes, 1995); E. Hoff, "How social contexts support and shape language development," *Developmental Review* 26, no. 1 (2006): 55-88; P. Leseman and D. van den Boom, "Effects of quantity and quality of home proximal processes on Dutch, Surinamese-Dutch and Turkish-Dutch pre-schoolers cognitive development," *Infant and Child Development* 8, no. 1 (1999): 19-38; J. Palacios et al., "Stimulating the child in the zone of proximal development: The role of parents' ideas", In *Parental Belief Systems: The Psychological Consequences for Children*, I.E. Sigel et al. Eds., 2nd ed. (Hillsdale, NJ: Erlbaum, 1992), 71-94; Z.O. Weizman and C.E. Snow, "Lexical input as related to children's vocabulary acquisition: Effects of sophisticated exposure and support for meaning," *Developmental Psychology* 37, no. 2 (2001): 265-279; G. Wells, *Language Development in the Pre-school Years* (Cambridge: Cambridge University Press, 1985).
6. L. Baker et al., "Parents' interactions with their first-grade children during storybook reading and relations with subsequent home reading activity and reading achievement," *Journal of School Psychology* 39, no. 5 (2001): 415-438; A.G. Bus et al., "Joint book reading across cultures: A comparison of Surinamese-Dutch, Turkish-Dutch, and Dutch parent-child dyads," *Journal of Literacy Research* 32, no.1 (2000): 53-76; P. Leseman and P.F. de Jong, "Home literacy: opportunity, instruction, cooperation, and social-emotional quality predicting early reading achievement," *Reading Research Quarterly* 33, no. 3 (1998): 294-318; P. Leseman and C. van Tuijl, "Cultural diversity in early literacy," in *Handbook of Early Literacy Research*, vol. 2, S.B. Neuman and K.K. Dickinson eds. (New York: the Guilford Press, 2005), 211-228.

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7. Palacios et al., "Stimulating the child in the zone of proximal development" (see n.5); S. Harkness et al. "Individualism and the 'Western mind' reconsidered: American and Dutch parents' ethnotheories of the child," *New Directions for Child and Adolescent Development* 87, spring (2000): 23-39; H.C. Triandis, *Individualism and Collectivism* (Boulder: Westview, 1997).
 8. O.M. Espin and B. Warner, "Attitudes towards the role of women in Cuban women attending a community college," *The International Journal of Social Psychiatry* 28, no. 3 (1982): 233-239.
 9. Palacios et al., "Stimulating the child in the zone of proximal development" (see n.5); L. Okagaki and R.J. Sternberg, "Parental beliefs and children's school performance," *Child Development* 64, no. 1 (1993): 36-56; M. Stoolmiller et al., "Parental discipline and child antisocial behaviour: A contingency-based theory and some methodological refinements," *Psychological Inquiry* 8, no. 3 (1997): 223-229.
 10. However, the pattern actually may be more complex. For instance, Okagaki and French (1998) found that, in Asian American (and to a lesser extent Latino American but not in African American) communities, traditional beliefs and authoritarian parenting were associated with better school achievement. A possible explanation is that, in both these communities, traditional beliefs functioned in the context of cohesive extended families that had a strong sense of cultural identity and were economically rather successful. See L. Okagaki and R.J. Sternberg, "Parenting and children's school achievement: A multi-ethnic perspective," *American Educational Research Journal* 35, no. 1 (1998): 123-144.
 11. E. Bialystok, *Bilingualism in Development: Language, Literacy, and Cognition* (Cambridge: Cambridge University Press, 2001).
 12. Bialystok (see n.11); B.Z. Pearson and S.C. Fernández, "Patterns of interaction in the lexical growth in two languages of bilingual infants and toddlers," *Language Learning* 44, no. 4 (1994): 617-653.
 13. A.F. Scheele, A.Y. Mayo, and P. Leseman, *Home Determinants of Language Development of Dutch, Turkish-Dutch, and Moroccan-Dutch Three-year-olds* (Utrecht: Utrecht University, DASH-project, forthcoming).
 14. Center-based care may be known as a child care center, preschool, nursery school, or learning center. Center-based care also may have different sponsors; in the United States this might include churches, schools, colleges, universities, social service agencies, Head Start, independent owners and chains, and employers.
 15. W.S. Barnett, "Long-term effects of early childhood programs on cognitive and school outcomes," *The Future of Children* 5, no. 3 (1995): 25-50; H. Blok et al., "The relevance of delivery mode and other program characteristics for the effectiveness of early childhood intervention with disadvantaged children," *International Journal of Behavioral Development* 29, no. 1 (2005): 35-47; D.C. Farran, "Another decade of intervention for children who are low

income or disabled: What do we know now?" in *Handbook of Early Childhood Intervention*, J.P. Shonkoff and S.J. Meisels eds., 2nd ed. (Cambridge: Cambridge University Press, 2000), 510-548; K.M. Gorey, "Early childhood education: A meta-analytic affirmation of the short- and long-term benefits of educational opportunity," *School Psychology Quarterly* 16, no. 1 (2001): 9-30; H. Yoshikawa, "Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks," *Psychological Bulletin* 115, no. 1 (1994): 27-54.

16. H.R. McKey et al., *The impact of Head Start on Children, Families and Communities. Final Report of the Head Start Evaluation, Synthesis and Utilization Project* (Washington, DC: CSR Incorporated, 1985).

17. W.S. Gilliam & E.F. Zigler, "A critical meta-analysis of all evaluations of state-funded preschool from 1977 to 1998: Implications for policy, service delivery and program evaluation," *Early Childhood Research Quarterly* 15, no. 4 (2000): 441-473.

18. K. Sylva et al., *The Effective Provision of Pre-school Education (EPPE) project: Findings from Pre-school to end of Key Stage 1* (London: Institute of Education, 2004); C. Van Tuijl and P. Leseman, "Preschool increases verbal and fluid intelligence of disadvantaged children," *Early Childhood Research Quarterly* (forthcoming).

19. US Department of Health and Human Services, *Head Start Impact Study: First Year Findings* (Washington, DC: US Department of Health and Human Services, Administration for Children and Families, 2005); J.M. Love et al., "The effectiveness of early head start for 3-year-old children and their parents: Lessons for policy and programs," *Developmental Psychology* 41, no. 6 (2005): 885-901.

20. See note 17 above.

21. Gorey, "Early childhood education: A meta-analytic affirmation of the short- and long-term benefits of educational opportunity" (see n.15).

22. The three combination programs where a cost-benefit analysis has been carried out are Perry-Preschool, Abecedarian, and Chicago Child-Parent Centers. The results indicate very high return rates, ranging from 1:2 (Abecedarian), 1:4 (Chicago CPC) to 1:14 (Perry Preschool). See Barnett, "Long-term effects of early childhood programs" (see n.15); L.N. Masse et al., *A benefit-cost analysis of the Abecedarian early childhood intervention* (New Brunswick, NJ: National Institute for Early Education Research, 2002); A.J. Reynolds et al., *Age 21 Cost-benefit Analysis of the Title I Chicago Child-Parent Centers* (Washington, DC: Institute for Research on Poverty, Discussion paper no.1245-02, 2002).

23. J. Heckman, "Skill formation and the economics of investing in disadvantaged children," *Science* 312, no. 5782 (2006): 1901-1902.

24. H. Blok et al., "The relevance of delivery mode and other program characteristics for the effectiveness of early childhood intervention with disadvantaged children" (see n.15).

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25. P. Leseman and C. van Tuijl, "Home support for bilingual development of Turkish 4-6-year-old immigrant children in the Netherlands: Efficacy of a home-based educational programme," *Journal of Multilingual and Multicultural Development* 22, no. 4 (2001): 309-324.
26. B.D. Goodson et al., "Effectiveness of a comprehensive, five-year family support program for low-income children and their families: findings from the comprehensive child development program," *Early Childhood Research Quarterly* 15, no. 1 (2001): 5-39; Blok et al., "The relevance of delivery mode and other program characteristics" (see n.22).
27. J. MacLeod and G. Nelson, "Programs for the promotion of family wellness and the prevention of child maltreatment: A meta-analytic review," *Child Abuse & Neglect* 24, no. 9 (2000): 1127-1149.
28. D.L. Olds et al., "Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial," *Journal of the American Medical Association* 280, no. 14 (1998): 1238-1244.
29. B.E. Andersson, "Effects of day-care on cognitive and socioemotional competence of thirteen-year-old Swedish schoolchildren," *Child Development* 63, no. 1 (1992): 20-36; A.G. Broberg et al., "Effects of day care on the development of cognitive abilities in 8-year-olds: A longitudinal study," *Developmental Psychology* 33, no. 1 (1997): 35-47; M.R. Burchinal et al., "Relating quality of center-based child care to early cognitive and language development longitudinally," *Child Development* 71, no. 2 (2000): 339-357; NICHD Early Child Care Research Network, "Early child care and children's development prior to school entry: Results from the NICHD study of early child care," *American Educational Research Journal* 39 (2002): 133-164.
30. Sylva et al., "The Effective Provision of Pre-school Education (EPPE) project" (see n.18)
31. J. Belsky, "Effects of child care on child development in the USA," in *The quality of early childhood education*, J.J. van Kuyk ed. (Arnhem, Netherlands: Cito, 2006), 23-32.; NICHD, "Early child care and children's development" (see n.29).
32. H. Yoshikawa, "Prevention as cumulative protection" (see n.15).
33. Gorey, "Early childhood education: A meta-analytic affirmation of the short- and long-term benefits of educational opportunity" (see n.15).
34. See Lee and Loeb's 1995 follow-up study of Head Start participants, V.E. Lee and S. Loeb, "Where do Head Start attendees end up? One reason why preschool effects fade out," *Educational Evaluation and Policy Analysis* 17, no. 1 (1995): 62-82.
35. L.K.S. Chan and E.J. Mellor 2002 eds., *International developments in early childhood services* (New York: Peter Land, 2002); OECD, "Starting strong" (see n.1).
36. OECD, "Starting strong" (see n.1).

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37. P.P.M Leseman, *Accessibility of early childhood education and care provisions for low income and minority families* (Paris: OECD, 2002); Sylva et al., "The Effective Provision of Pre-school Education (EPPE) project" (see n.18).
38. OECD, "Starting strong" (see n.1).
39. Leseman 2002, "Accessibility of early childhood education" (see n.35).
40. M.K. Rosenthal, "Out-of-home child care research: A cultural perspective," *International Journal of Behavioral Development* 23, no. 2 (1999): 477-518.
41. Farran, "Another decade of intervention for children who are low income or disabled" (see n.15).
42. Ibid.
43. OECD, "Starting strong" (see n.1).
44. See Children's Aid Society, *Building a Community School* (New York: Children's Aid Society, 1997).

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