

Chapter 1

Poor Families, Poor Outcomes: The Well-Being of Children and Youth

Jeanne Brooks-Gunn, Greg J. Duncan, and Nancy Maritato

In any given year from 1987 to 1996, about one in five of all American children—some twelve to fourteen million—lived in families in which total income failed to exceed even the spartan thresholds used to define poverty. That so many of the youngest citizens of the wealthiest nation in the world are living poor is cause for concern. Indeed, the United States has a higher rate of poverty than most other Western industrialized nations (Smeeding and Rainwater 1995). And that child poverty has increased since the 1970s is also troubling (Hernandez 1993; see chapter 2). This volume explores the consequences and correlates of growing up poor as well as the mechanisms through which poverty influences children. The volume is organized around three key topics, with a primary focus on the research findings and a secondary concern with their policy implications.

First, we examine the consequences of income poverty for children and youth and show that children raised in low-income families score lower than children from more affluent families do on assessments of health, cognitive development, school achievement, and emotional well-being. We examine both the effects of longer- and shorter-term poverty upon children and the effects of the timing of poverty bouts upon well-being in the first two decades of life. The last two themes have implications for public policy vis-à-vis the timing of income supports to families.

A second key topic is whether or not links between income poverty and child well-being are due to income per se or to the other family conditions that often occur with poverty. For example, poor families are also more likely to be headed by a single parent, a parent with low educational attainment, an unemployed parent, a parent in the low-wage market, a divorced parent, or a young parent. These familial conditions might account in large measure for the association between low income and less favorable outcomes for children. Specifically, we ask whether or not the effects of income poverty are due to household structure, parents' age, or parents' education. If, for example, family income does not matter

much (in a statistical sense, with controls for other family conditions), then policies aimed at altering those family conditions might alleviate poverty. For example, if mothers' education turns out to be the most important predictor of children's well-being and if income plays a very minor role, then enhancing parents' education, rather than raising the minimum wage, increasing the earned-income tax credit, or providing unemployment insurance, might become a primary policy objective.

A third consideration is the pathways through which income, or lack thereof, might influence children's outcomes. Families who are poor may not be able to purchase goods for children, such as food, housing, stimulating toys, books, and so forth. Income poverty may affect more than purchasing power in a family, however. Poor parents might exhibit less adequate emotional health; they may be more depressed, more irritable, or more labile in their emotions. These emotional moods might result in less consistent parenting, more punitive behavior, or less firm behavior. The struggle to make ends meet might also leave parents with little time to spend with their children or leave them feeling too drained to interact with their children when they are with them. When poor parents do work, they may not be able to obtain high-quality or consistent child care, resulting in less verbal interaction, more chaotic and less regular routines, and so on. The point is that income poverty may have much to do with what goes on within the family, which then affects the child (Brooks-Gunn and Duncan 1997; Chase-Lansdale and Brooks-Gunn 1995; Wilson, Ellwood, and Brooks-Gunn 1995). In chapters 5–17, research teams examine possible “mediators” of links between child and youth outcomes and family income.

The determination of mechanisms or pathways through which poverty influences children may provide insight into the types of interventions that might lessen that influence. That is, if parenting skills are critical for the well-being of young children, then home visiting programs such as Parents as Educators, Healthy Families America, and Home Instruction for Young Preschool and Primary School Youngsters might be expanded (Brooks-Gunn, Denner, and Klebanov 1995; Smith 1995).

A topic not covered in this volume is the way poverty may influence children not through intrafamilial life but through extrafamilial experiences. Poor families are more likely to live in neighborhoods with other poor families, and their children are more likely to attend schools with fewer resources and more poor classmates than more affluent families are. Poor children may not fare very well in large part because of their communities of residence, not just because of their family situations (Brooks-Gunn, Duncan, and Aber forthcoming; Brooks-Gunn, Duncan, and Klebanov 1996; Brooks-Gunn, Duncan, Klebanov, and Sealander 1993; Crane 1991; Jencks and Petersen 1991; Wilson 1991). However, an examination of the effects of neighborhood income on families is beyond our scope.

Another topic not addressed in this volume is whether or not income is an adequate measure of impoverishment. Income, while important, is surely not the only determinant of well-being. Many other dimensions of impoverishment can exist, from anxiety and fear about one's personal safety when living in a high-

crime neighborhood or with abusive family members to suffering from inadequate medical care, and from homelessness to loneliness or helplessness.

In this introductory chapter, we first review trends in poverty in the United States. Then we briefly discuss the developmental frameworks that have guided inquiry into how lives unfold and change outcomes. The next section reviews the effects of poverty for four age groups—prenatal-infancy, early childhood, late childhood, and adolescence.¹ We end by describing the way in which the volume is organized.

POVERTY TRENDS

Measuring Income Poverty

As discussed in detail in chapter 2, one in five of all children in the United States reside below the poverty threshold. In 1993 this figure was a little under \$12,000 for a family of three people. Poverty thresholds take household size into account and are adjusted each year for cost of living using the consumer price index. Families whose incomes are above the threshold are considered “not poor,” and families below the threshold are classified as “poor,” for any given year. Income-to-needs ratios are often calculated (needs being based on family size); when translated into a ratio based on the poverty threshold, poverty is defined as 1.0 (see chapter 2).

Children from families whose yearly incomes place them above the poverty threshold but not very much above it are classified as “near poor.” For example, some federal programs provide services for families whose income is up to 1.85 times the poverty threshold. About another 20 percent of all children are living in families whose incomes are above the poverty line (1.0) but not above 1.85 (for a family of three, an income of between \$12,000 and \$22,000). Thus, two in every five children live in poor or near-poor families.

Rates of Poverty for Children

In 1959, the first year for which official poverty rates are available, 27 percent of children were living in poverty (see table 1.1). The poverty rate for children was substantially higher than that for adults aged eighteen to sixty-four but lower than that for the elderly. Over the subsequent thirty years, the proportion of each age group in poverty declined. After 1989, however, as the rate of poverty rose overall, the proportion of children in poverty climbed more rapidly and in the 1990s was about twice as high as that of adults aged 18–64 and 70 percent higher than that of the elderly. This change was principally a result of the more generous social security benefits for the elderly, which lifted many out of poverty since the mid-1970s (see Hernandez 1993; chapter 2).

TABLE 1.1 / Poor Children and Adults in the United States, 1959–89 (Percent)

Year	Children (<18 years)	Adults (18–64 years)	Elders (>65 years)
1959	27.3	17.0	35.2
1969	14.0	8.7	25.3
1979	16.4	8.9	15.2
1989	19.6	10.2	11.4

Source: Current Population Survey, 1996.

The demographic trends in family patterns and in individual behavior—changes in marriage and divorce rates, nonmarital fertility rates, and unemployment rates (especially for less educated and younger adults)—help explain the relative increase in the proportion of children in poverty. The increase in the number of single parents, both those who have children outside of marriage and those who experience a divorce, is one of the important causes of the rise in the number of poor children (see chapter 3). The number of unmarried women having children has risen dramatically, and childbirth outside of marriage is not confined to teenagers. In 1990, two-thirds of black women and almost one-fifth of white women (19 percent) had children outside of marriage (Ventura 1995). Rates were highest for teenagers but were also high for women in their early twenties. Poverty rates are high for children in families with one adult, particularly because employment rates are low among single mothers, many of whom are young and have not completed high school. (For descriptions of these trends, see Cherlin 1992; Hernandez 1993; chapter 2; for a discussion of unmarried mothers and their children, see Garfinkel and McLanahan 1986 and Furstenberg, Brooks-Gunn, and Morgan 1987; for a discussion of single parenthood, see McLanahan and Sandefur 1994; and for an analysis of the family, see Becker 1991.) Marital disruptions also have increased since 1970. Since the remarriage rate is lower than the divorce rate, the number of formerly-married, single mothers has increased. Poverty rates for children in families in which a divorce has occurred are high, especially since incomes for custodial mothers drop precipitously after a divorce (McLanahan and Sandefur 1994; Duncan 1991; chapter 3).

Family demographic changes are only part of the story of children in poverty. Hernandez (1993) has estimated that 28 percent of children whose families were poor following a marital separation were poor before their parents separated. If fathers rejoined their children in families, it has been estimated, about 40 percent of children would move from below to above the official poverty line.

Persistent Poverty

The aforementioned estimates are for single years only. Poverty often continues for years. Both single-year and multiple-year estimates of poverty indicate that

TABLE 1.2 / Six-Year Family and Neighborhood Poverty Levels for White and Black Children, Ages 0–3, 1980

Years Family Was Poor	Average % of Individuals in Neighborhood Who Were Poor over Six Years					Total
	0–10	10–20	20–30	30–40	40+	
White (<i>n</i> = 796)						
None	50.6	19.5	3.1	1.0	.0	74.2
1–4 years	8.6	9.2	1.8	.4	.3	20.2
5–6 years	1.6	3.0	.9	.1	.0	5.6
Total	60.8	31.7	5.8	1.4	.3	100.0
Black (<i>n</i> = 568)						
None	4.6	12.4	12.5	2.5	1.5	33.6
1–4 years	1.7	7.0	10.9	5.4	2.4	27.4
5–6 years	3.7	13.4	13.8	3.5	4.5	39.0
Total	10.1	32.8	37.2	11.5	8.4	100.0

Source: Panel Study of Income Dynamics; Duncan, Brooks-Gunn, and Klebanov 1994.

black and Hispanic children are much more likely to be poor, and for longer periods of time, than white children are. Among black and white children who were under three years of age in 1980 and were part of the Panel Study of Income Dynamics (PSID), a nationally representative sample of families, black children were more likely to be poor in any given year, and were much more likely to be poor for multiple years (table 1.2). For example, about three-quarters of white children were never poor in the six-year period, compared with only one-third of black children (Duncan, Brooks-Gunn, and Klebanov 1994). Such differences account for over one-half of the black-white differences in children's IQ scores (Brooks-Gunn et al. 1996).²

CHILDREN IN FAMILIES IN COMMUNITIES

The study of children generally and particularly of those in poverty has taken a variety of approaches involving demography, developmental and social psychology, economics, ethnography, and sociology—all looking at the causes and consequences of poverty for children. The disciplines naturally highlight different aspects of children's lives and yield perspectives and insights that are sometimes difficult to integrate (Brooks-Gunn et al. 1991; Cherlin 1992; Duncan 1991). Consequently, the collective "pictures" of poor children and of the diversity in their individual and family lives are somewhat fragmented. We cannot do justice to this range of inquiry here; we refer the reader to several excellent volumes on the current state of knowledge about children in poverty: Chase-Lansdale and Brooks-Gunn (1995), Huston (1991a), Huston, McLoyd, and Garcia-Coll (1994),

and Fitzgerald et al. (1995). For more general treatments of the economics of children in families, see Browning (1992) and Haveman and Wolfe (1994).

Three of the more prominent frameworks used to study how the family and the community and its social institutions influence children are theories of individual risk and resilience, theories that feature resource allocation decisions within families, and ecological theory. Three levels of analysis of children and their development illustrate the variety of approaches found in the various literatures on children, in particular on children in poverty: the individual, the family, and extrafamilial contexts.

The Child as Individual

One framework focusing on individuals and their own developmental process is that of risk and resiliency, developed to explain why children are likely to show lower well-being in the face of certain biological and environmental conditions (Garmezy and Rutter 1983; Werner and Smith 1982). Biological factors typically are early indicators of physical health (such as illness at birth, low birth weight, and physical disability). Environmental factors include a variety of family conditions and parental characteristics as well as neighborhood and school conditions.

Neighborhood, family, and school poverty are sometimes studied as environmental threats to children's well-being. They are said to increase a child's risk for less-than-optimal outcomes. However, not all children react the same to biological or environmental risks. Some children from poor families do well, while some children from more affluent families have difficulties. In the view of Garmezy and Rutter (1983), some children are resilient to the untoward consequences of negative conditions. Risk and resilience models have been used to study poor children and their families and to assess the impact of impoverishment on children (see, for example, Elder 1974; Furstenberg, Brooks-Gunn, and Morgan 1987; Sameroff et al. 1993).

A related line of inquiry, also focused on the individual, considers continuities and discontinuities in the development process. Here the biological notion of critical periods in normal development, as noted in certain nonhuman species, arises as possibly applicable to the development of poor children. If in certain periods of development deprivation cannot (or cannot easily) be overcome by subsequent intervention, being in poverty during those periods may be particularly detrimental. (See Rutter 1994 and Carnegie Corporation of New York 1994 for contributions to this important debate.)

The Child's Family

One important framework for looking at the role of the family in children's well-being is that of decisions regarding the allocation of the family's resources. Fami-

lies make decisions about the number of children they have, the expenditure of various resources—of time and money—on each child, and a variety of family circumstances, processes, and activities that influence their children. In part the children partake of the economic condition of the family, and this is the rationale for defining poverty at the level of the family unit. The children share the resources with their adult family members but do not necessarily share them equally, and generally children do not have a major say in decisions about the allocation of the family's limited economic resources.

The literature on the family includes explorations of altruism, incentives to support children after divorce, and sometimes implicit and subtle contracting among family members. For example, an overlapping intergenerational implicit contracts model hypothesizes that family members agree that in exchange for nurturance, care, and economic support during times of dependency (as during childhood and old age), family members will fulfill their incurred obligation to work and produce sufficiently during their middle years and will share their income with their dependent family members; in this manner the family offers one solution to the problem of caring for dependents, including children.

Investments in children—human capital investments—by the family are an important focus of research. Families expend resources on their children's health, education, and nurturance as investments that pay off later in the child's well-being as an adult. Wealth levels; farsightedness (that is, low discount rates); the structure and stability of the family; tax structures and their implicit incentives; the yield on investments in formal schooling, training programs, or social networks; and the extent of altruism in the family have all been suggested as affecting the levels of these investments. Families that have limited economic resources or are dysfunctional are much less capable of making substantial investments in their children, thus offering the rationale for collective intervention on behalf of the child's well-being and future capabilities. (As representative of this broad literature of family resource allocation to children, see Espenshade 1984; Ellwood 1988; Lazear and Michael 1987; Betson 1990; Haveman and Wolfe 1994; Becker 1991; Browning 1992; Weiss and Willis 1985).

The Child in Larger Contexts

A third level of analysis emphasizes that children grow up in a number of contexts or ecologies. The first two decades of life are almost always spent in families, and while early development takes place primarily in the family context, the family itself resides in multiple contexts (for example, occupation, neighborhood, kin networks, friendship networks). Each of these contexts has an influence on family systems as well as on the individuals within families. Even an examination of the effects on children of a social institution such as schools, for instance, must consider the family; without parents' cooperation and a consistency of indications to the child about what is important and expected, it is difficult to teach children

(Brooks-Gunn, Denner, and Klebanov 1995). The most effective school experiences are thought to be based on partnerships among parents, teachers, and children. These partnerships are more difficult to achieve in conditions of poverty, and frequently economic poverty in the family accompanies impaired health in the child and poor-quality schools, illustrating the interconnections among the institutions of family, school, and neighborhood as influences on children.

Perhaps the most influential theory of this broader context in the child development literature is the ecological system model closely associated with the writing of Bronfenbrenner (1979, 1989). Bronfenbrenner and his colleagues identify family, kin, peers, schools, neighborhood, community, region, and country as the relevant contexts or ecological systems in which children learn. The division of these contexts into various levels emphasizes the importance of sustained, consistent interactions, and the insistence on looking at the ways in which various levels interact with one another to produce personal development has had a major impact on the study of children and youth (Moen, Elder, and Luscher 1995).

Best known in Bronfenbrenner's work is the division of contexts into five systems—microsystems, mesosystems, ecosystems, macrosystems, and chronosystems. Microsystems are those in which face-to-face interactions occur (family, school, peer group, workplace). Most work on interchanges at this level focuses on the family. Mesosystems are the linkages between two or more settings containing the individual (that is, processes involving school and family). Ecosystems also involve linkages between settings, but in this case those in which the person is not present (for example, the association between the parent's workplace and the parent's home or marital relationship influences the child even though the child is not present in either system). Macrosystems consist of the culture in which the first three systems operate, referring to belief systems, knowledge, customs, and lifestyles, for instance. Changes in the individual and in the environment over time are the domain of chronosystems.

These contextual systems focus on the interchanges among individuals, among systems, and among individuals and systems. Children whose families are poor are thought to live in different ecological systems than children whose families are not poor. Of particular importance is the fact that differences are probably present in the ecosystems larger than the family and that the interactions among systems probably differ for poor and not-poor families. However, little work has directly tested these premises (see Garcia-Coll et al. 1997; Gottfried 1984; Wachs and Gruen 1982).

THREE POVERTY ISSUES

In this section we briefly review the literature on the consequences of childhood poverty, the links between family characteristics and poverty, and the pathways through which poverty operates.

Consequences of Poverty during Childhood

Our review of transitional periods over the life course is organized into four age groupings: the prenatal-infancy period, the young childhood period, the middle-childhood period, and the adolescent period (Brooks-Gunn, Guo, and Furstenberg 1993). Each covers one or two major transitions in the child's life that involve role changes; school entrances, moves, and exits; biological maturation; possible cognitive reorganizations; or some combination. Borrowing from Rutter's turning points framework (1994), Graber and Brooks-Gunn (1996) have suggested that many turning points are linked to transitions. Transition-linked turning points involve events that might alter behaviors or contexts in which children operate. The premise underlying this framework is that "transitional periods are characterized by developmental challenges that are relatively universal; that most individuals navigate transitional periods; and [that] these periods require new models of adaptation to biological, psychological, or social changes" (Graber and Brooks-Gunn 1996, p. 769).

What is relevant here is that each of these periods (1) is characterized by somewhat different indicators of well-being, (2) may be affected by income poverty in various ways, and (3) might have a unique constellation of pathways through which income poverty affects development. For example, nutrition is expected to be a more important pathway in the prenatal-infancy period than in the middle-childhood, adolescent, and young adulthood periods. Indeed, the Women, Infants, and Children (WIC) program targets the prenatal-infancy period for exactly this reason.

We review results from either large multisite studies or national studies, such as the PSID, the National Longitudinal Study of Youth (NLSY), the National Health Insurance Study (NHIS), and High School and Beyond (HSB; see Brooks-Gunn, Brown, et al. 1995 for a review of national data sets containing measures of child and adolescent developmental outcomes). We review only smaller-scale studies that are longitudinal and have data on family income and household size available. Additionally, almost all the studies cited here provide estimates of income poverty in regression equations that control for other family conditions, such as ethnicity, maternal education, maternal age at the child's birth, and marital status. Other family characteristics that are not measured and not included in the regression equations may account for the family income effects reported here. The more family characteristics controlled, the more likely that estimates of family income effects are not due to selectivity.

PRENATAL-INFANCY PERIOD The literature on the effects of income poverty upon the pregnant woman, the neonate, and the infant in the first year of life includes a variety of outcomes. The most frequently studied are the perinatal outcomes—timely receipt of prenatal care, smoking during pregnancy, low birth weight, and perinatal complications. In the first year of life, growth, receipt of recommended well-baby visits, and up-to-date immunizations are the typical measures of well-being studied.

Receipt of timely prenatal care (in the first trimester of pregnancy), smoking during pregnancy, and low birth weight (2,500 g or less) are all related to low income (Egbuonu and Starfield 1982; Kleinman and Kessel 1987; Klerman 1991; McGauhey and Starfield 1993). The first two are themselves associated with low birth weight and intrauterine growth retardation (the latter defined as *small for gestational age*). Relatively long-term effects of low birth weight, found through middle childhood and adolescence, include grade failure, receipt of special education, lower school achievement, behavior problems, and the like (Klebanov, Brooks-Gunn, and McCormick 1994a, 1994b; McCormick 1989; McCormick et al. 1992; McCarton et al. 1997). These negative effects are most pronounced in children with a very low birth weight (under 1,500 g), although children who weigh 1,500–2,500 g at birth are also, as a group, at risk for less positive outcomes than are children weighing over 2,500 g at birth. Such effects persist into the childhood years, even controlling for current parental income, education, and age, as reported in large multisite samples of children followed from birth through age eight or nine. At the same time, postpartum income affects low-birth-weight children's intelligence test scores and school achievement scores (Brooks-Gunn, Klebanov, and Duncan 1996; Klebanov, Brooks-Gunn, and McCormick 1994a). Children who suffer from perinatal complications, such as low birth weight, as well as family income poverty have been termed at double risk (Liaw and Brooks-Gunn 1994; Parker, Greer, and Zuckerman 1988; McCormick and Brooks-Gunn 1989; Sameroff and Chandler 1975).

Infants from poor families are less likely to have immunizations that are up-to-date and to follow the recommended pediatric guidelines for well-baby care (Cunningham and Hahn 1994; Brooks-Gunn et al. forthcoming; Monheit and Cunningham 1992). However, poor children who are covered by Medicaid (that is, public insurance) are more likely to meet health visit guidelines than are both poor children without public insurance and near-poor children without any insurance. That is, in some analyses, receipt of insurance predicts early health care more strongly than income poverty does.

EARLY CHILDHOOD YEARS A few studies of the young childhood period have examined income poverty's association with intelligence test scores and behavior problem scores when children are five years of age (Duncan, Brooks-Gunn, and Klebanov 1994; Korenman, Miller, and Sjaastad 1995). Research on two data sets, the NLSY—Child Supplement and the Infant Health and Development Program (IHDP), has found that, controlling for other family characteristics, income's effects on intelligence and verbal test scores at ages two, three, and five years are quite large—about one-third of a standard deviation (Chase-Lansdale et al. 1991; IHDP 1990; Brooks-Gunn et al. 1994).³ In addition, the literature on behavior problems during the early childhood years is based on mothers' reports of children's behavior problems, including aggression, tantrums, anxiety, and moodiness. Income-to-needs ratios are associated with behavior problems for five-year-olds (Smith et al. 1996).

Both well-baby health care and nonmaternal child care during this age period

have been examined vis-à-vis income poverty. Well-baby health care continues to lag for poor young children; again, the links with income poverty are primarily found for those poor and near-poor children without health insurance (Cunningham and Hahn 1994). The type of child care used is associated with income poverty, as poor mothers are more likely to use relative care than nonrelative care, presumably because of its lower cost (Baydar and Brooks-Gunn 1991; Cattan 1991; Hofferth and Phillips 1991). Additionally, more affluent families seem to use center-based care most frequently, followed by poor families. Near-poor families are least likely to use center-based care (NICHD Child Care Research Network in this volume). This last finding is thought to be due to the availability and cost of center-based child care for poor versus near-poor families; the most notable example is that poor families are eligible for Head Start (Currie and Thomas 1995; Lee et al. 1990; Phillips et al. 1994; Volling and Belsky 1993). In addition, the availability of child care is restricted in poor communities (Collins and Hofferth 1996). This brief summary of health care and child care in the young childhood years does not take into account the quality of the services provided to families of different income levels. Chapter 6 reports the results of a study incorporating a measure of quality by the National Institute of Child Health and Human Development Early Child Care Research Network.

LATE CHILDHOOD YEARS Measures of child well-being after entrance into school include school achievement test scores, behavior problems as reported by teachers and parents, grade failure, and learning and attention problems. Current work involves other domains of well-being, such as children's reports of school disengagement, of self-efficacy and self-esteem, and of depressive and aggressive behavior (Harter 1990; Cairns and Cairns 1986; Nolen-Hoeksma 1994; Connell et al. 1994). However, almost nothing is known about links between these domains and income poverty. Chapters 5, 7, 8, 9 and 11 report on studies of the late childhood years.

ADOLESCENT YEARS The adolescent period is often divided into two epochs. The early adolescent period covers the transition from elementary school to junior or middle school as well as pubertal and family transitions (Brooks-Gunn and Reiter 1990; Eccles, Lord, and Buchanan 1996; Eccles et al. 1993; Flanagan and Eccles 1993; Paikoff and Brooks-Gunn 1991). Outcomes that have been studied include school engagement, peer relationships, juvenile delinquency, self-esteem, grades in school, and, to a much lesser extent, achievement test scores. Almost no national studies on young adolescent outcomes have included both income and other family characteristics in the analyses.

The late adolescent period focuses on the transition to high school and, for some youth, the transition to sexual intercourse, drug and alcohol use, and smoking. Outcomes include those listed for the young adolescent period as well as pregnancy, childbirth, school dropout, and high school graduation. Many studies have examined the effects of income on teenage childbearing in girls and on high school dropout or completion for boys and girls (Brooks-Gunn, Guo, and Furstenberg 1993; Graham, Beller, and Hernandez 1993; Haveman and Wolfe 1995; Haveman,

Wolfe, and Spaulding 1991). In this volume, chapters 10, 12, 13, 14, and 17 report on studies of schooling outcomes.

PERSISTENCE AND TIMING OF POVERTY Thus far, we have only considered the effects of family income upon child and youth outcomes. We next examine poverty per se, beyond the income-to-needs ratio, and review the literature on the persistence and timing of poverty.

The fact that income-to-needs ratio is associated with children's outcomes does not reveal whether there are differences between children just above and those just below the poverty line. From a policy perspective, the question is whether or not increasing the income of poor and near-poor children might make a difference in their lives. Chapters 5–17 report on studies of this issue.

Some children live in poverty for a short time while others spend a significant portion of their childhoods in poverty. The number of years in poverty is significantly associated with negative outcomes for children. For example, based on IHDP data on five-year-olds, children who lived in poverty for four or five years had IQ scores 9 points lower than children who had never lived below the poverty line in their first five years. In contrast, children who had been poor for some but not all of the years had IQ scores that were, on average, 4 points lower than those of nonpoor children (Duncan, Brooks-Gunn, and Klebanov 1994). In this volume, chapters 5–7 and 9–16 look at the effects of persistent versus short-term poverty.

Developmental theory postulates that the timing of events is critical to an understanding of their effects on children. That is, various events or environmental conditions might influence the cognitive and social skills and competencies children have acquired as well as the contexts in which they reside. Prior environmental conditions also may influence children's experience of current environmental conditions. Family income or poverty is just one of a series of environmental conditions of interest (Brooks-Gunn 1995; Bronfenbrenner 1979). Given that family and neighborhood resource theories now include developmental perspectives, more attention is being paid to possible timing effects (Brooks-Gunn et al. 1995; Haveman and Wolfe 1994). For example, Haveman, Wolfe, and Spaulding (1991) and Brooks-Gunn, Guo, and Furstenberg (1993) have built models for predicting high school completion and dropout based on events that occurred in various periods of childhood. In the Baltimore Study of Teenage Parenthood, for example, welfare receipt and income in the early childhood years were associated with high school dropout more strongly than were similar measures of family economic well-being from the late childhood and early adolescent years. Welfare receipt in the early years was highly associated with school readiness scores, which in turn predicted grade failure, school completion, and literacy (Baydar, Brooks-Gunn, and Furstenberg 1993; Guo, Brooks-Gunn, and Harris forthcoming). In a similar approach using the PSID (which has income data for each year of the child's life, unlike the small Baltimore study), Duncan et al. (in press) constructed age-specific estimates of income effects for early childhood, late childhood, and early adolescence. The study also looked at the effects of income by age for children in lower- and higher-income families. Income as measured in early childhood affected the

completed schooling of children from lower-income families. In chapter 18 we examine the findings from the eleven longitudinal studies in this volume based on the timing of the income measure.

Income, Education, and Family Structure

Poverty, low levels of parental education, and single parenthood often go hand-in-hand, and it has been difficult to tease apart the effects of each upon children. However, large data sets include enough children who are poor and live in two-parent households and children who are not poor and live in single-parent households to allow for statistical controls of variables such as family structure and parents' education. All of the studies described here looked at income, education, and family structure in sets of regressions and coded these variables the same way.

The most recent literature on parents' education has focused mainly on mothers' education because so many children live in single-mother households, making the father's education perhaps less salient (at least on a day-to-day basis). More practically, often data on the father's education are missing. In any case, mothers' education is a strong and consistent predictor of children's outcomes—from IQ test scores at age five through school completion rates at ages nineteen and twenty (Duncan, Brooks-Gunn, and Klebanov 1994; Haveman and Wolfe 1995). It is unclear whether the effects of mothers' education are larger or smaller than those of family income. This issue is a facet of each of the studies in chapters 5–17.

Turning to family structure, research has demonstrated that being reared in a single-parent family is associated with less positive child and youth outcomes than is being reared in a two-parent family (McLanahan and Sandefur 1994; chapter 3). Chapters 5–17 look at family structure effects even with controls for income effects.

Pathways through Which Poverty Operates

How does income influence children's outcomes? A number of pathways might exist, but little research has investigated most of these possible mechanisms. Most work has focused on the provision of learning experiences, parents' emotional and physical health, and parenting behavior (Brooks-Gunn 1995; Conger et al. 1993, 1994; McLoyd et al. 1994). In this volume, chapters 5–17 examine possible mediators of income-outcome links.

ORGANIZATION OF THIS VOLUME

As we have just reviewed, many studies have shown that children raised in low-income families score lower than children from more affluent families do on assessments of health, cognitive development, and positive behavior. In general,

the better the measure of family income and the longer the period over which it is measured, the stronger the association between the family's economic well-being and children's outcomes. Understanding why and when these associations exist is the goal of the research presented in this book.

The distinction between correlation and causation is crucial for understanding our motivations. That children from poor families fare worse than others is consistent with a variety of causal explanations. An obvious one is that income itself matters for the well-being of children. Income allows parents to provide their children with safer, more stimulating home environments; to live in communities with better schools, parks, and libraries and more challenging peers; to afford tuition and other expenses associated with higher education; to purchase or otherwise gain access to higher-quality health care; and in many other ways to buy the things that promote the health and development of their children.

Alternative explanations abound. Low-income families differ from their higher-income counterparts in many ways other than their level of economic resources. Families with low incomes are less likely to contain the child's two biological parents or include adults holding either college degrees or high-status occupations, and they are more likely to live in poor neighborhoods, receive income from welfare, contain adults with mental or physical problems, and so on. Perhaps it is these other, less readily quantifiable, characteristics of low-income households that matter more than income itself.

Informed public policy depends critically on sorting out which of these many possible explanations is correct. If it is literally true that money "buys" better children, then the distribution of family income and the proportion of U.S. children living in families with inadequate financial resources are the key indications of children's future well-being. And, in assessing the costs and benefits of a given policy, the likely effects of that policy on low-income families' ability to provide their children with an adequate standard of living become central considerations.

If, on the other hand, less optimal child development is caused not by a lack of income itself but by the correlated characteristics of poor families, then policy should be concerned less with reducing income-based poverty than with addressing parenting skills, neighborhood conditions, or similar causes directly.

THE STUDIES IN THIS BOOK

The chapters in this book constitute a coordinated effort to understand both correlation and causation with respect to family economic well-being and child development.

To provide a context for the analyses presented in chapters 5 through 17, the volume includes chapters by Mayer (chapter 4), McLanahan (chapter 3), and Hernandez (chapter 2). Hernandez presents a picture of poor children and families in the United States today, as well as, a historical analysis of changes in the rates and consequences of poverty over the past forty years. Mayer considers changes

in standards of living as measured by the quality of housing and the presence of various appliances in the home. She makes the argument that the relatively high rates of poverty do not reflect, in part, the relative rise in living standards. McLanahan provides detail on the demographic condition most clearly linked to poverty status—single parenthood.

Chapters 5–17 are based on analyses of data from a diverse set of child development studies, all of which contain high-quality and, if possible, longitudinal measures of family income. Regrettably, the requirement of income data eliminated a number of otherwise excellent studies of child development. The studies cover many important domains of child well-being and span all developmental stages—from early childhood through adolescence and even into middle age.

Through these studies we attempt to provide some consistency in measuring family income across studies and to fill in the gaps in our knowledge about income effects across different age periods. For example, very few studies have examined outcomes in the early childhood, late childhood, and early adolescent years, and few have examined school achievement, instead relying on measures of school completion. Emotional behavior and school-related behavior have not been examined in any detail, even though the adult literature on gradients of socioeconomic status and health includes emotional health outcomes (Adler et al. 1993). Finally, studies have not considered the same set of covariates, making it difficult to estimate effect sizes of income, family structure, and parental education upon child and youth outcomes.

The chapters in this volume address the following questions:

- Does income matter?
- When does income matter?
- For what outcomes does income matter?
- Why does income matter?

To calibrate each of the data sets against the others, the authors of chapters 5–17 were asked to perform a series of replication analyses that related children’s outcomes to the same set of measures of family income, demographic structure, and other aspects of the socioeconomic status of the parental family. These analyses provide a set of a baseline associations between family income and children’s outcomes that reveal at what points in child- and adulthood and for what developmental domains the poverty-outcome associations are the strongest. If anything, these simple descriptive associations are likely to overstate the true causal role of income. Thus, insignificant associations are of particular interest, since they suggest combinations of domain and developmental stage that are unaffected by the economic circumstances of the families in which the children are raised.

In each chapter, the authors exploit the unique strengths of their data to isolate the causal role of income in the process of children’s and adults’ development. Here the multidisciplinary nature of the authors’ backgrounds becomes apparent, as they take very different approaches to modeling causal connections between economic status and development.

A life of poverty is statistically associated with higher rates of activities detrimental to individuals and to society, such as crime, violence, underemployment, unemployment, and isolation from the larger community. The costs of poverty are borne not only by the children reared in such circumstances but by society at large. In addition to direct government expenditures, these costs include a smaller number of educated citizens, an increase in neighborhoods characterized by danger, less social cohesion, and lower rates of social and political participation.

Children depend on others for their well-being. Because of their developmental status, children enter or avoid poverty by virtue of their family's economic circumstances. They typically cannot alter their status by themselves, at least until they approach the late adolescent years. Federal policies ensure that children whose families are earning less than the poverty threshold receive some of the basic necessities of life—food, shelter, and clothing. In addition, health care is provided to many poor children, and early childhood education to a subset of poor children. Even so, one in five children lives below the poverty threshold in the 1990s, and, as this volume documents, these children do not fare as well as those living above that threshold.

We thank the National Institute of Child Health and Human Development Research Network on Child and Family Well-Being for supporting the writing of this chapter as well as for sponsoring the 1995 conference *Growing Up Poor: Consequences for Children and Youth*. Russell Sage Foundation's contribution is appreciated, as is that of the Board on Children, Youth, and Families, National Academy of Sciences, and Institute of Medicine. We are also grateful for feedback by members of the National Academy of Science's Committee on Defining Poverty, especially Connie Citro, Robert Michael, Robert Hauser, Rebecca Black, and Sheldon Danziger. We also thank Dorothy Duncan and Phyllis Gyamfi for editorial assistance and the Canadian Institute for Advanced Research.

NOTES

1. In addition, the source of the family's income has been shown to have an independent effect on children's well-being. Studies have investigated the effects on children of welfare receipt as a source of income, for example. (See Duncan, Hill, and Hoffman 1988; Furstenberg, Brooks-Gunn, and Morgan 1987; Haveman, Wolfe, and Spaulding 1991; and Zill et al. 1991; and more generally, Ellwood 1988; Wilson 1987; and Zaslow et al. 1995). Others have looked at child support payments (see Baydar and Brooks-Gunn 1994; Beller and Graham 1991; Garfinkel et al. 1994; Sonenstein and Calhoun 1990; Teachman 1992; Maccoby and Mnookin 1992; and Weiss and Willis 1993). These topics are beyond the scope of this volume.
2. Black children are also more likely than white children to live in poor neighborhoods. For example, in the same sample of children who were three years of age or younger in 1980, about two-fifths of the white children lived in neighborhoods (defined by census tracts) where 10 percent or fewer of the households had incomes of less than \$10,000, whereas only one in ten black children lived in such neighborhoods (Duncan,

Brooks-Gunn, and Klebanov 1994: 304). Just under 2 percent of the white children and over 20 percent of the black children lived in neighborhoods where 30 percent or more of the neighbors were poor (see table 1.2). These striking, and disturbing, statistics reflect that black and white children's experiences of neighborhood poverty barely overlap.

3. Since intelligence and verbal ability tests are normed to have a mean of 100 and a standard deviation of 15 or 16, a hypothetical child whose family's income was at the poverty threshold (1.0) would have an IQ score 5 to 6 points lower than a hypothetical child whose family's income was twice the poverty threshold (these hypothetical children being reared by mothers with the same marital status, education, and race and being the same sex, birth weight, and age).