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Family Poverty, Welfare Reform, and Child Development

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Our review of research suggests that family poverty has selective effects on child development. Most important for policy are indications that deep or persistent poverty early in childhood affects adversely the ability and achievement of children. Although the 1996 welfare reforms have spurred many welfare-to-work transitions, their time limits and, especially, sanctions are likely to deepen poverty among some families. We suggest ways policies might be aimed at preventing either economic deprivation itself or its effects.

INTRODUCTION

In 1997, despite an unprecedented period of macroeconomic prosperity, some 13.4 million children in the United States (19.2% of all children) were poor (U.S. Bureau of the Census, 1999). This "official" poverty count is based on a Census Bureau comparison of total family income with a poverty threshold that varies by family size. Expressed in 1997 dollars, the respective poverty thresholds for families with three and four persons were roughly $13,000 and $16,500. Individuals living in families with total cash incomes below these thresholds were counted as poor.

This article summarizes what we have learned about the likely consequences of these high rates of poverty on the development of children and on the life chances of children when they become adults. A fortunate legacy of the war on poverty was the initiation of what has become a series of large-scale national survey studies of child development (Brooks-Gunn, Brown, Duncan, & Moore, 1995; Brooks-Gunn, Phelps, & Elder, 1991). These studies provide information on both family poverty status, measured during childhood, and outcomes for the children, measured during childhood as well as adulthood. Thus, they provide a basis for evaluating how our high rates of child poverty likely impact development.

The future extent and effects of poverty among children will depend critically on the Personal Responsibility and Work Opportunity Reconciliation Act, which was signed by President Clinton on August 22, 1996. Ending six decades of guaranteed government aid for economically deprived children, this law eliminated the open-ended federal entitlement program of Aid to Families with Dependent Children (AFDC) in favor of providing block grants to states to be used for time-limited cash assistance replacement programs (Temporary Assistance for Needy Families or TANF). This legislation has already spurred welfare-to-work transitions among a substantial number of recipients (U.S. Council of Economic Advisors, 1999). Just as certain, however, is an increase in the depth of poverty among some of the families in which mothers are unable to make successful transitions to full-time work. We include in our article an evaluation of its likely effect on poor children in the coming decade.

CONSEQUENCES OF CHILD POVERTY

Countless studies, books, and reports have demonstrated correlations between children's poverty and various measures of child achievement, health, and behavior (e.g., Brooks-Gunn & Duncan, 1997; Children's Defense Fund, 1994; Duncan & Brooks-Gunn, 1997; Mayer, 1997). As summarized in Brooks-Gunn and Duncan (Table 1), the strength and consistency of these associations is striking. For example, in terms of physical health, the risk for poor relative to nonpoor children is 1.7 times as high for a low birth-weight birth, 3.5 times as high for lead poisoning, 1.7 times as high for child mortality, and 2.0 times as high for a short-stay hospital episode.

In terms of achievement, the risk for poor relative to nonpoor children is 2.0 times as high for grade repetition and dropping out of high school, and 1.4 times as high for having a learning disability. For other conditions and outcomes, these risk ratios are: 1.3 times as high for parent-reported emotional or behavior problems, 3.1 times as high for a teenage out-of-wedlock birth, 6.8 times as high for reported cases of child abuse and neglect, and 2.2 times as high for experiencing violent crime.

Although a substantial body of literature exists on the effects of poverty on children, it has major shortcomings. Family income and child outcomes are often not well measured, and information on some topics is dated or taken from studies that are narrowly focused on local communities (Huston, 1991; Huston, Garcia-Coll, & McLoyd, 1994). Most important, family in-

come is not reported in many national data sources (such as those that give vital statistics) that contain crucial information about child outcomes. Consequently, studies based on this kind of data have often used variables such as occupation, single-parenthood, or low levels of maternal education to infer family income levels. But income and social class are far from synonymous. Because family incomes are surprisingly volatile, there are only modest correlations between economic deprivation and typical measures of socioeconomic background (Duncan, 1988).

Several national longitudinal data sources have collected the requisite information, however, making it possible to distinguish between the effects of income poverty on child development and the effects of that poverty's correlated events and conditions. The distinction is crucial both conceptually and because policy changes such as welfare reform will have a much bigger impact on family income than on correlates of poverty such as low levels of schooling or lone-parent family structure.

Research that focuses on isolating the impact of poverty per se suggests that family income has at times large but rather selective effects on children's attainments (Blau, 1999; Duncan & Brooks-Gunn, 1997). Most noteworthy in data on children in the United States is the importance of the type of outcome being considered. Verbal ability and achievement appear to be more affected by family income than are problem behavior, mental health, and physical health. Income effects are found after controlling for other family conditions such as maternal education, maternal age at child's birth, single parenthood, and employment. Effects are seen for children from age 2 through age 9 to 10 and, in some cases, in early adulthood as well.

Research also indicates that the persistence of poverty is important. For example, controlling for other family demographic conditions, being poor in all of the first four years of life is associated with about a nine-point difference in Wechsler Preschool and Primary Scale of Intelligence (WPSSI) IQ test scores at age 5, compared with not being poor in those years. In contrast, being poor for some of those years but not all of the time was associated with about a four-point difference, compared with not being poor (Duncan, Brooks-Gunn, & Klebanov, 1994). More generally, Blau (1999) finds that multi-year measures of income are much more predictive of child outcomes than single-year measures.

Depth of poverty also appears to contribute to child cognitive outcomes. Children who reside in households with incomes below the poverty threshold have test scores that are substantially lower than those of children living in families with income above the poverty threshold. The lowest scores are seen in children who are extremely poor (i.e., those who live in families with income below 50% of the poverty threshold; Smith, Brooks-Gunn, & Klebanov, 1997). In a study of completed schooling, effects of income were much greater for youth who lived in families with incomes below $20,000 than for those with incomes above $20,000 (Duncan, Yeung, Brooks-Gunn, & Smith, 1998).

Mayer (1997) argues that since income reflects (at least in part) family decisions about employment, program participation, and past saving, regression-adjusted associations between income and child outcomes may not be entirely causal. She uses various methods to gauge the extent of bias. For example, she argues that certain sources of income, such as asset income, are more independent of immediate family conditions and that the extent to which variation in asset income correlates with child outcomes is a better gauge of true income effects. Based on these and other tests, she concludes that the true causal effect of income is likely to be much smaller than less sophisticated studies have estimated it to be.

However, none of her methods allow for differential effects of income at different stages in childhood, nor are they particularly well suited for isolating the effects of income at the very bottom of the income scale. For example, asset income varies substantially across middle-class families but is uniformly near zero for most low-income families. Duncan et al. (1998) adopt a different approach to the problem of timing and bias. They allow for differential effects of income according to the childhood stage in which it is received. Thus, they estimate the effects of income in early childhood, controlling for income in middle childhood and adolescence. These kinds of controls should go a long way in producing the kinds of adjustments Mayer strives for. A second strategy adopted by Duncan et al. (1998) is to estimate sibling models, which capitalize on the fact that siblings share permanent family characteristics but, if they are more than one or two years apart, may have very different patterns of childhood-stage-specific income.

In both estimation strategies, early childhood emerges as the stage in which income appears to matter the most. For example, controlling for income later in childhood as well as for demographic characteristics of households, Duncan et al. (1998) estimate that a $10,000 increment to income averaged over the first five years of life for children in low-income families is associated with a 2.8-fold increase in the odds of finishing high school. This estimated effect was much larger than the corresponding estimated effects of increases in income measured later in childhood.

PATHWAYS THROUGH WHICH INCOME MAY AFFECT CHILDREN

How is it that low income affects children? We need to learn more about possible pathways to understand more completely the effects of poverty on children and to identify leverage points amenable to policy intervention. Research here is often far from definitive, but is useful to identify what might ultimately prove important. We highlight a number of potential pathways through which income may influence children—the home environment, quality of child care, perceived economic pressure, parental mental health, parent–child relationships, and neighborhood residence.

A first important pathway is the quality of a child's home environment. Warmth of mother–child interactions, the physical condition of the home, and especially opportunities for learning account for a substantial portion of the effects of family income on cognitive outcomes in young children. The home learning environment is typically assessed during a home visit to see what learning experiences parents provide to their children both inside and outside the home. These include access to a library card, reading to the children, availability of learning-oriented toys and experiences, and use of developmentally appropriate activities (Brooks-Gunn, Klebanov, & Liaw, 1995).

Several studies have found that differences in the home learning environments of higher- and lower-income children account for up to half of the effect of income on the cognitive development of preschool children and between one-quarter and one-third of the effect of income on the achievement scores of elementary school children (Klebanov, Brooks-Gunn, McCarton, & McCormick, 1998; Smith et al., 1997). Learning activities inside the home are more likely to mediate the link between income and child achievement than are activities outside the home (travel, museum visits, library use; Klebanov et al., 1998; Mayer, 1997).

A second pathway involves the quality of care young children receive outside the home. High-quality, developmentally appropriate child care in the toddler and preschool years is associated with enhanced social, emotional, and, in some cases, linguistic competence for low- and middle-income children alike (Howes, 1988; Hofferth & Phillips, 1991; NICHD Early Child Care Research Network, 1997, 1998; Ramey & Ramey, 1998; for an alternative view, see Scarr, 1998). In addition, randomized trials have demonstrated that intensive early-childhood education programs for poor children increase verbal ability and reasoning skills through the early elementary school years (Brooks-Gunn et al., 1994; Burchinal, Campbell, Bryant, Wasik, & Ramey, 1997; Lazar & Darlington, 1982; Ramey & Ramey, 1998).

Such programs may also reduce behavior problems and increase persistence and enthusiasm for learning, although relatively few early-childhood programs have assessed these outcomes (Yoshikawa, 1994, 1995). Early childhood programs also influence maternal outcomes, including mental health, coping skills, knowledge about childrearing, and mother–child interactions (Benasich, Brooks-Gunn, & Clewell, 1992; Brooks-Gunn, Berlin, & Fuligni, in press; see also Behrman, 1999).

A third possible pathway is through family economic pressure leading to conflict between children and parents, lower school grades, reduced emotional health, and/or impaired social relationships (Conger, Conger, & Scaramella, 1997; Conger, Ge, Elder, Lorenzy, & Simons, 1994; McLoyd, 1990, 1998). Some researchers suggest that rather than poverty or low income per se it may be income loss or economic uncertainty due to unemployment, underemployment, and unstable work conditions that is a source of conflict between parents and teens and concomitant emotional and school problems (Elder, 1974; McLoyd, 1990).

A fourth possible pathway involves parents' health and parent–child interactions. Parents who are poor are likely to be less healthy, both emotionally and physically, than those who are not poor (Adler, Boyce, Chesney, Folkman, & Syme, 1993). Parent irritability and depressive symptoms are associated with more conflictual parent interactions with adolescents, leading to less satisfactory emotional, social, and cognitive development. Some studies have established that parent mental health accounts for some of the effect of economic circumstances on child health and behavior. Additionally, poor parent mental health is associated with impaired parent–child interactions and fewer learning experiences in the home (Bornstein, 1995; Bradley, 1995).

A final possible pathway is the neighborhoods in which poor families reside (Brooks-Gunn, Duncan, & Aber, 1997). The possibility that neighborhood poverty affects child development independently of family poverty is particularly salient in large urban areas, where concentrated neighborhood poverty is most severe. Poor parents are constrained in their choice of neighborhoods and schools. Low income may lead to residence in extremely poor neighborhoods characterized by social disorganization (crime, many unemployed adults, neighbors who do not monitor the behavior of adolescents), and few resources for child development (playgrounds, child care, health-care facilities, parks, after-school programs).

Some development-oriented work has been conducted on each of these potential pathways. In general, though, home environment and child-care pathways have been studied during the early childhood years. Perceived economic pressure, parent mental health, parent–child relationships, and neighborhood residence have been the focus during the adolescent years. Little is known about the relative importance of each pathway (or the interrelations among pathways) for: (1) different child outcomes (school achievement, verbal ability, peer relationships, and problem behavior); (2) various family constellations (i.e., lone parents versus married parents); (3) parents' work status; (4) differing degrees of parental human capital (education, work skills, and literacy skills); and (5) child characteristics (gender, age, temperamental characteristics, and biological conditions such as low birth weight).

Developmental theory often suggests that the dimensions within a general pathway change as children grow older. For example, in the case of dimensions included under the rubric of home environment (and assessed via instruments such as the HOME or Home Observation of Measurement of Environment; Bradley, 1995): (1) the availability of learning activities in the home may matter in the preschool and middle childhood years but not in the adolescent years; (2) parental supervision of homework may have the greatest influence during the late elementary and middle school years (as by the end of middle school, parents may have less impact on their youths' day-to-day time-use decisions); and (3) parental monitoring of friendships may become important in middle school and remain so through high school.

Similar examples could be given for dimensions of neighborhoods: resources within the neighborhood may be more important for younger than for older children, whereas peer influence may be more salient for older than for younger children (Brooks-Gunn, Duncan, Klebanov, & Sealand, 1993; Leventhal & Brooks-Gunn, in press; Sampson & Morenoff, 1997). Or an underlying characteristic of a neighborhood, such as its collective efficacy (agreement on and enforcement of norms for child and youth behavior) may be in effect for all ages, even though the more proximal consequences of such efficacy may differ by age; that is, more efficacious neighborhoods translate into safe playgrounds and library access for younger children and are characterized by low social disorganization (loitering, witnessed violence, trash in streets, numerous bars, few churches) for older children and youth (Sampson, Raudenbush, & Earls, 1997).

Moreover, developmental trajectories have not been charted nor have changes in family circumstances or parental functioning been included in most models (with the exception of work on parent–child conflict during adolescent years; Conger et al. 1994). Modeling change is critical for assessing the likely effects of policy-driven changes in poverty status and other family conditions. Surprisingly, Sameroff, Seifer, Baldwin, and Baldwin (1993) report that the stability of environment risk scores were as high as (or even higher than) the stability of IQ scores from age 4 to age 12. With respect to poverty and its pathways, we have little evidence about whether a change in income is associated with a corresponding change in a (more proximal) environmental characteristic (such as increased monitoring, supervision, parent mental health, or parent responsivity) and in turn a change in a particular child outcome. A few longitudinal studies have shown that a change in income or welfare status (after the preschool years) alters children's trajectories in achievement from preschool to high school (e.g., Baydar, Brooks-Gunn, & Furstenberg, 1993). How much change in trajectories is possible, and for what families and children, remains to be seen. We expect that poverty research in the next century will begin to address these research gaps.

WELFARE REFORM AND CHILD POVERTY

Research on the impact of poverty on children suggests that avoiding the adverse consequences of deep or persistent poverty in early childhood is key for the healthy cognitive development of children. A crucial question is to what extent welfare reform, other child- and family-based programs, and macroeconomic conditions will facilitate the development of children.

In addition to eliminating the AFDC program, the 1996 welfare legislation has made other sweeping changes affecting child care (the Food Stamp Program, Supplemental Security Income for children, benefits for legal immigrants, and the Child Support Enforcement program), and has offered states numerous options, such as to cap benefits so that payments do not increase if recipients have additional children, or to deny assistance to unmarried teen parents and their children.

The 1996 legislation introduced two provisions linked to the length of welfare receipt. First, after 24 months of receipt, recipients are required to participate in "allowable work activities" or else face sanctions or penalties. Second, recipients are limited to 60 months of total receipt (whether or not consecutive), regardless of work effort. This limit applies to the entire household and to all forms of assistance funded by the Federal grant. States are allowed to impose shorter time limits on total receipt than the 60-month

period specified in the legislation; nearly half of states have opted to do so. For families currently receiving assistance, the time-limit clocks started on the date when the state of residence began implementation of the block grant. States are permitted to exempt up to 20% of their caseloads from the lifetime limits because of hardship.

Early returns on the new state-designed welfare reforms appear to be stunningly positive. Caseloads fell by nearly half between 1993 and 1999 (U.S. Council of Economic Advisors, 1999). Although considerable optimism is warranted, it is wrong to view falling caseloads as evidence that permanent reform of our welfare system will be easy. Caseloads started to fall well before welfare reform legislation was signed in 1996, and much of the early decrease could be attributed to the exceptionally strong labor market (U.S. Council of Economic Advisors, 1999). Since the labor market is almost certain to sour again before time limits hit, and since welfare reform has already pushed many of the work-ready recipients into work, it is ill-advised to presume that the decline in the number of welfare recipients will continue into the next decade.

Families least likely to be able to support themselves and most likely to reach the welfare time limit have always been an important part of the caseload (Bane and Ellwood, 1994). Projections of the characteristics of recipients most likely to hit the five-year time limit are very similar to characteristics found in previous studies of long-term recipients: two thirds lack high-school diplomas; a majority lack work experience; two thirds were age 21 or younger when they first started receiving benefits; and most have low levels of cognitive skills (Bane & Ellwood, 1994; Duncan, Harris, & Boisjoly, in press).

Many provisions of the welfare reform legislation will affect the amount of income available to low-income children. For example, many states have adopted "family caps," which prevent an increase in benefits paid to women who have additional children while receiving public assistance. This will lower the per capita incomes of recipient families, but not dramatically.

More worrisome are time limits, sanctions for noncompliant behavior, and categorical restrictions on eligibility that drop cash assistance to zero. Some families hitting the limits or losing benefits when sanctioned for not following program rules will replace the lost welfare payments with income from work and other sources; others, perhaps as many as half, will see their incomes fall well below the poverty line. State-specific provisions that deny cash assistance to children born to underage, unmarried women also will lower dramatically the incomes of a subset of affected families.

Another major provision of the 1996 bill also has implications for the well-being of children and youth: parents are required to be engaged in work or work-related activities in order to receive TANF. Parents not meeting their states' work requirements are to be sanctioned with a reduction or termination of benefits.

What is likely to happen to sanctioned families? Beginning in 1993, welfare recipients in Iowa were required to help formulate and then follow a "Family Investment Agreement." Failure to comply led to a series of sanctions, including a six-month cutoff from all cash benefits. A follow-up study of sanctioned families found an almost equal split between those working immediately after the cash benefits were terminated and those not working (Fraker et al., 1997). Nearly half of those sanctioned enjoyed monthly incomes increases averaging $500, but fully half suffered drops in their families' monthly incomes that averaged nearly $400. As with welfare recipients in general, the heterogeneity of these Iowa families is key to understanding the consequences of sanctions and time limits. Roughly half of recipients may indeed respond quite successfully to sanctions, but the other half likely will not.

Challenges to implementation of reform laws, and, from our perspective, challenges for research on the well-being of children, include the following. First, parents who are sanctioned may not know the reasons for benefit cuts, which makes it difficult to imagine that their work-related behavior (or compliance) would increase as a function of TANF sanctions (Smith & Brooks-Gunn, 1999). Second, in order to meet the work requirements, some mothers may have to forgo earnings from "off the books" activities (Edin & Lein, 1997).

Third, preliminary results from a study of TANF recipients in Michigan report that whether or not a woman was working (as required) was highly associated with the woman's number of barriers to employment, including depression, anxiety, posttraumatic stress disorder, substance and alcohol dependence, and more traditionally measured factors such as education, work skills, and age of child. Only 15% of the women in the study had none of the 14 barriers, whereas 27% had at least four. Some 80% of the former group were working as compared with 40% of the latter group (Danziger et al., 1999). From a psychological perspective, it is noteworthy that depressive disorder, drug dependence, and maternal health were strong predictors of working less than 20 hours per week. Thus, those mothers who are likely to have difficulty meeting the work requirements of TANF are the same mothers whose children are often not doing well.

POLICY IMPLICATIONS

Research on the effects of poverty on child development suggests that policy attention should focus primarily on situations involving deep and persistent poverty that occurs early in childhood. In terms of indicators, it is crucial to track rates of poverty among children, especially deep poverty occurring early in childhood, to inform policy discussions regarding children's well-being.

In the case of welfare reform, time limits may prove to be less worrisome than sanctions and categorical restrictions, especially in states that opt for the full five-year time limits. Unless additional children are born during the period of receipt, mothers accumulating five years of welfare receipt are not likely to have young children present in their households. In contrast, sanctions and many of the categorical provisions are much more likely to lead to denial of benefits to families with very young children. Not only do young children appear to be most vulnerable to the consequences of deep poverty, but mothers with very young children are also least able to support themselves through work in the labor market.

An obvious recommendation is that states consider exempting families with young children from the adverse effects of time limits, sanctions, and categorical restrictions. A minority of states currently exempt mothers of very young children from various provisions of their welfare reform, but in almost no case does the exemption extend beyond the child's first birthday, and in some cases it holds only until the child is 3 months old. All states should consider granting exemptions not only for the first year but for the second as well. It is also useful to consider more universal programs, such as a child allowance or refundable tax credits based on children's ages. Some fear that such provisions may create incentives for mothers to bear additional children, but evidence suggests at most weak links between fertility and the generosity of welfare benefits (Moffitt, 1995).

Interestingly, several European countries gear time-limited benefits to the age of children in their assistance programs. In Germany, a modest parent allowance is available to a mother working fewer than 20 hours per week until her child is 18 months old. France guarantees a modest minimum income to most of its citizens, including families with children of all ages. Supplementing this basic support is the Allocation de Parent Isolé (API) program for lone parents. Eligibility for generous income-tested API payments to families with children is limited to the period between the child's birth and third birthday, even if low-income status persists beyond that point. In effect, the API program acknowledges a special need for income support during this period, especially if a parent wishes to care for very young children and forgo income from work. The elaborate state-funded system in France for providing child care beginning at age 3 lessens the problems associated with the parent's transition into the labor force.

Yet another strategy is to liberate long-term recipients from welfare through a combination of cost-effective job-training and other skill-building programs, redoubling efforts to make work pay by increasing the after-tax family incomes of women who take low-wage jobs, and funding work-for-welfare jobs of last resort for those who are unable, despite their efforts, to find an employer to hire them.

If the goal is to promote the healthy development of children, it is important to go beyond cash transfers and consider service-delivery programs such as those providing nutrition supplements and education (e.g., Women, Infants and Children); medical care (e.g., Medicaid); early childhood education (e.g., Head Start) and housing (e.g., Section 8 vouchers). The case for giving preference to such programs over income transfers is strongest for programs targeting health and behavior because there appears to be little evidence that outcomes in these domains are responsive to improvements in family living standards and considerably more evidence that these programs themselves are efficacious (Currie, 1997; Devaney, Ellwood, & Love, 1997).

The pathways through which low income influences children also suggest some recommendations. Since about one half of the effect of family income on tests of cognitive ability is mediated by the home environment, including learning experiences in the home, interventions might profitably focus on parenting. Although research is mixed as to the efficacy of programs that work directly with parents to improve their parenting behavior and that provide literacy and learning experiences (Gomby, Culross, & Behrman, 1999; Olds, Henderson, & Kitzman, 1994; Olds et al., 1999; Ramey & Ramey, 1998; St. Pierre, Layzer, & Barnes, 1995; Yoshikawa, 1995), examples of well-designed programs (and evaluations) do exist. We believe that efforts should be made to implement and test, on a large scale, programs that focus on enhancing parenting behavior and/or integrating promising approaches into current federally -funded programs such as Even Start, Head Start, and Early Head Start.

More generally, economic logic requires a comparison of the costs and benefits of the various programs directed at enhancing the development of disadvantaged children. In this context, expenditures on income-transfer and service-delivery programs should

be placed side by side and judged by the benefits they produce relative to their costs.

It will be years before we have a definitive accounting of the long-run effects of the 1996 welfare reforms. We have argued that increases in poverty are likely to leave developmental scars on children. And the welfare reforms will almost certainly increase both the number of successful transitions from welfare to work *and* the number of severely economically disadvantaged children. Recent research suggests that economic deprivation is most harmful to a child's chances for achievement when it occurs early in the child's life. Economic logic suggests that policies aimed at preventing either economic deprivation itself or its effects are likely to constitute profitable social investments in the twenty-first century.

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