Although it has been assumed that increasing maternal education or family income will improve children's well-being, considering the impact on child care arrangements and home environment raises the possibility of negative effects. This paper reviews experimental evaluations of seven programs designed to enhance welfare families' self-sufficiency, and develops a model describing the mechanisms through which these programs affect children. Variables included in the model are maternal education, family economic status, maternal subjective well-being, child care arrangements, and home environment. For each pathway variable, the review identifies specific markers that have been examined, whether program impacts have been detected, and whether differences emerge in the short- or long-term. The review finds that changes were most universally examined in type of child care used and less consistently examined in maternal well-being, movement out of poverty, and quality of child care used. Conclusions differed depending on how variables were measured and how long data were collected. Program impact was reported on earnings and AFDC receipt. In evaluations measuring both educational attainment and achievement, none showed impact on achievement. There were significant program impacts on participation in mental health services or counseling but no reported effects on depression, locus of control, or stress. Programs clearly affected children's participation in formal nonmaternal care, but one evaluation found that program participation was tentatively related to reduced quality of care. Four of the studies found that program mothers were more warm and less harsh with their children. (Contains 10 references.) (KB)
Potential Pathways of Influence on Children

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Programs to Enhance the Self-Sufficiency of Welfare Families: Working Towards a Model of Effects on Young Children

Potential Pathways of Influence on Children

The focus of our talk today is the range of pathways or mechanisms by which programs to enhance the self-sufficiency of welfare families may affect children. Two fundamental approaches have emerged in such programs for welfare families: those that focus solely or primarily on increasing families' economic self-sufficiency, and those that add to this goal an explicit focus on enhancing the development of children. The first strategy is a single-generational approach, focusing on education, training, and job search services designed to enhance the employability of the parent. The second is a two-generational approach, with components addressing the needs of both parents and children.

It is important to note that even the programs focusing solely on parents may have the potential to affect children's development. Family economic status and maternal education are among the strongest predictors of children's developmental outcomes. Thus, if welfare-to-work programs succeeded in increasing maternal employment and family economic security, the children in these families would benefit, even if these programs did not have a direct focus on children.

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education and/or family income, the potential exists for children’s development to be affected.

Formulators of programs for welfare families have assumed that these variables have potential importance for children. For example, the Congressional debate preceding enactment of the Family Support Act of 1988 noted that bringing about change in maternal employability and actual employment was fundamental to improving the circumstances and development of poor children.

Yet, as we have argued elsewhere (Zaslow, Moore, Morrison & Coiro, in press), there are further potential pathways of influence of programs for welfare families on children. Specifically, we have argued that such programs have the potential of affecting children’s child care arrangements and altering maternal subjective state, and thereby the home environment. Again, the accumulated child development research supports the view that these variables (children’s experiences in child care, maternal subjective states, and the home environment) are important to children’s development. As a result, changes on these variables brought about by programs for welfare families could potentially influence the development of children in these families.

When only the pathway variables of maternal education and family economic status have been considered, the assumption has been that effects on children will be positive. That is, increasing maternal education or family income is assumed to improve children’s wellbeing. However the inclusion of further pathway variables raises the possibility of

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2 Maynard (personal communication, November 30, 1994) notes that increased maternal employment also involves decreased maternal time with children and that this has possible negative implications for children. Thus, it will be important to take into account the offsetting influences of increased maternal employment but decreased maternal time inputs to children.
negative as well as positive effects on children. While it is plausible that participation in educational or job training activities might increase maternal self-esteem or sense of efficacy, mandatory participation could also plausibly increase maternal stress (Wilson & Ellwood, 1989). Previous research suggests that increased maternal psychological wellbeing would predict positive child development while a deterioration in maternal subjective wellbeing would be associated with negative effects on children. Similarly, participation in a welfare-to-work program could be associated with children’s participation in child care of varying quality. Previous research suggests that poor quality child care (or care of worse quality than would be provided by the mother) would be detrimental to children’s development. Thus, expanding our consideration to further mechanisms of influence on children requires of us consideration of the potential of negative as well as positive implications for children. Further, it raises the possibility of offsetting effects.

**Towards A Base Model for the Influences of Welfare Programs on Children**

We have begun to articulate how these differing mechanisms or pathways of influence on children in programs for welfare families might be organized, in the hopes of working towards a model that would sharpen how we view the implications of such programs for children. Figure 1 provides an initial categorization of the pathway variables we have identified. This schema is lacking arrows to indicate causal connections (and therefore doesn’t yet look like a traffic circle at rush hour). We will be discussing the direction and location of the causal connections. Further, we note that this is work towards a "base model" in that it identifies the pathways of influence on children that could be
present in all programs to enhance the self-sufficiency of welfare families. The fully two-
generational programs will each have their own distinctive elaborations of this base model. For example, they will include in their descriptions of program components entries for parenting classes, pediatric care, developmental screening, or personal and group counseling.

As per our discussion above, we assume that while the base-model (that is single generational) programs for welfare families explicitly target maternal education and family income, these programs can influence children through other mechanisms as well. The five pathways variables include changes in maternal education and family economic status, but also changes in maternal subjective wellbeing, changes in children’s experiences of child care, and changes in the home environment.

The columns distinguish between the program or intervention, changes the program brings about in the mother, changes the program brings about in the immediate environments of children, and changes in children’s development. These distinctions map closely onto Bronfenbrenner’s view (1986) of the nested contexts relevant to children’s development: contexts that children experience directly; the family variables that shape children’s immediate environments; and the larger societal and policy variables that can influence what happens within the family. We make several assumptions:

• We assume that programs for welfare families can affect children’s immediate environments directly, for example by altering the amount of time a child spends at home and in substitute care, and indirectly, for example, changing interactions in the home by altering maternal subjective state. The fully elaborated version of this model would
therefore include arrows directly from the program to children’s immediate environments, and arrows reaching children’s immediate environments indirectly, through changes in the family variables.

- We also assume that the pathway variables have reciprocal influences. That is, the arrows on this schemata would have to be going in more than one direction. For example, we know from the work of Marsha Meyers (1993) in studying child care among participants in the California GAIN program that child care variables influenced mothers’ odds of dropping out of the program. Thus, we would need arrows back from child care to the program variables as well forward from these to child care. There is also evidence that mothers sometimes imitate the interactions they observe in child care centers. Again we need arrows not only progressing forwards from child care towards the child outcome variables, but also vertically between the two child environment variables. What happens in child care and at home may be mutually influential.

- Finally, we assume that children’s development is linked directly to their experiences in their immediate environments; arrows go directly from the immediate environment variables to the child outcome variables. However, we assume that the program and family variables are linked indirectly to child outcomes, through their impacts on children’s immediate environments.

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3 For example the odds of a mother dropping out of the GAIN program were higher when “staffing ratios did not meet those recommended by child care experts”; when “parents...travelled further from child care to GAIN and missed more time in activities due to child care difficulties”; when parents “changed care more often due to schedule changes”; when specialized child care needs (e.g. sick child care) were not met, and when the child care provider “was unreliable or not sufficiently flexible” (Meyers, 1993, p. 780).
Problems in Generalizing From Existing Correlational Data

Existing evidence suffices to put each of the boxes into the model. That is, the literature provides sufficient basis to say on the one hand, that each of these "pathway variables" may change in the context of programs for welfare families, and on the other hand that each variable is potentially of importance to children’s development (Zaslow et al., in press). But there are some serious problems with making the leap from existing evidence to hypothesizing how children may be affected within programs for welfare families.

In particular, the child development literature yields mostly correlational data linking each of the pathway variables with child outcomes. For example, children of less educated mothers, children from less economically advantaged families, children of mothers who are depressed or socially isolated, children participating in low quality child care, and children from less stimulating home environments, all, on average, show less optimal development.

But these correlational data consider the full range of variation on each pathway variable, while the variation that will be of importance within programs for welfare families is on a small segment of this range. For example, differences have been documented in children’s development when mother’s education varies from no high school diploma to completion of graduate work. Programs for welfare families are likely to bring about changes across only a small portion of this broad range. For example, mothers may move from no diploma to completion of the GED; family economic wellbeing may change only from receipt of welfare to working poor status. We know very little about the implications for children of changes within these far more restricted ranges. We need evidence directly
examining whether changes within the more restricted ranges likely to be brought about by programs for welfare families are of importance to children's development.

In addition, the available correlational data considers what happens to children when families, through choices of their own, experience changes in economic or educational status, mother's subjective well-being, the quality of the home environment or day care experiences. For example, these data tell us what happens when mothers themselves seek and complete certain levels of education. But the relationship between the pathway variables and child outcomes may be quite different when mothers are mandated to participate in welfare programs, and when changes on such variables as educational attainment do not occur at the mother's own initiation. It may be that an important share of the link between educational attainment and child wellbeing documented to date is attributable to the factors that select mothers into participation in educational activities, such as motivation and internal locus of control.

Finally, the existing correlational evidence does not assume a net of mutually influential pathway variables. Rather, it tends to single out and consider individual strands. We would argue that an adequate understanding of how welfare programs affect children will require an understanding of the simultaneous functioning of the pathway variables, and an understanding of their reciprocal and possibly offsetting influences. It may well be, for example, that programs for welfare mothers expose children to better child care environments, but increased maternal stress, and thereby less supportive interactions at home. Such offsetting influences might yield a negligible net influence on children. But
understanding this pattern of simultaneous influence could prove essential to modifying programs in the future so as to tip the balance towards programs that benefit children.

Because of these issues, it is crucial that we look beyond the existing correlational data at the limited set of studies that consider children’s development specifically in the context of programs for welfare or low-income families. In particular, we need to ask:

1. Are these programs in fact bringing about changes in the variables we have identified as potential pathways of influence on children?

2. Do changes on these pathway variables mediate any program impacts on children, and if so, how?

The limited set of studies that considers the implications for children of programs for welfare or low-income families is very much "in progress." However, for seven programs we can now look at findings pertaining to the first of the two questions listed above. Specifically, there is now evidence addressing the question of whether a variety of programs for welfare families or low income families bring about changes on each of the pathway variables we have identified for the base model. We can also begin to ask whether changes appear to be occurring in a direction that would predict positive or negative outcomes for children. Because results from these studies are often published in project reports rather than more widely available books or journals, providing a summary of findings to this point may also serve to call wider attention to this work.

What we would like to do today is look carefully at the evidence to date for each of the five pathway variables within this set of studies. For each pathway variable we will ask what specific markers have been examined, whether program impacts on the pathway
variable have been detected, and whether differences appear to surface soon after enrollment in the program or only over time. We will also identify gaps in data collected by the current set of studies.

To anticipate our broad conclusions: (1) Of the pathway variables, changes have been most universally reported across differing programs in families' use of child care. Changes in maternal subjective wellbeing have been reported the least consistently. (2) The findings to date underscore the importance of fairly long follow-up periods. Conclusions differ depending on how long after program enrollment data were collected. (3) For each of the pathway variables, conclusions differ depending on how each pathway variable is measured. For example, impacts on educational attainment do not parallel impacts on educational achievement. It will be important to specify which aspects of each pathway variable appear to be important to children's development. This will be central to the design of future evaluations, and to assessing the success of particular programs from the point of view of their impacts on children.

**Brief Overview of the Seven Evaluations**

Table 1 provides a brief description of each of seven programs encompassed in our review of the evidence to date: JOBS, GAIN, Even Start, New Chance, the Comprehensive Child Development Program (CCDP), Teenage Parent Demonstration, and Project Redirection. These programs share in common a number of characteristics. Each serves either families on welfare or predominantly low-income families; each provides some self-sufficiency services to the parents; and each evaluation involves comparison of an
experimental group with either a randomly assigned control group or (in the case of Project Redirection) a matched comparison group. As we have noted, beyond this common set of characteristics, the programs divide into those that are single generational, aiming primarily at the economic self-sufficiency of the family, and those that are two generational, with program components aimed at enhancing the development of the children. As can be seen in the table, while the JOBS and GAIN Evaluations focus on programs that can be characterized as single generational, the remainder are two generational. Thus, for example, while the only provisions for children in JOBS are the vouchers to pay for child care, Medicaid, and enhanced child support enforcement, New Chance as a program provides pediatric care and parenting classes, and aims to provide high quality center-based child care.

It is important to note that the programs differ not only on the basic distinction of single- vs. two-generational programming, but also in terms of whether they are mandatory or voluntary in nature, use sanctioning for nonparticipation, the segment of the low-income population they target, how they obtained the study sample, the breadth of program components, how long the intervention continued, the length of the follow-up period in the evaluation, and whether the program is a reflection of national policy or a demonstration project. With programs varying on so many dimensions simultaneously, it will be difficult to trace any differences in child impacts across studies to particular program features.

Tables 2 through 6 summarize the data available from each of the evaluations as to whether changes have been documented on each of the pathway variables. These tables note multiple markers for each of the pathway variables. For each separate marker, the
table summarizes the evidence by noting a + for a positive or beneficial program impact, and a - for a negative program impact. 0 indicates that the program did not affect this marker of the pathway variable, whereas a shaded box indicates that the available reports for this program have not examined impacts for this marker.

In some cases there were multiple discrete variables for a single marker of a pathway variable. For example, regarding the pathway of parenting and the home environment, a study might have examined program impacts on a dozen different discrete measures of cognitive stimulation. We include a + or - in a table if any discrete variable pertaining to that marker was affected (in the example above, any one of the dozen variables that a study might have considered regarding the cognitive stimulation marker of parenting). The tables provide footnotes to indicate those rare instances in which very few significant differences were detected out of a fairly large set of variables considered, thus raising the possibility that findings might be attributable to chance. Our goal in these tables is to report on the most recent follow-up data from each evaluation. The timing of the most recent follow-up within each evaluation is indicated in the line labeled "follow-up period."

We turn now to an examination of the question of whether and how changes are being reported on the five base model pathway variables.

**Family Economic Status**

Table 2 focuses on change in family economic status as a potential pathway of influence on children. This table illustrates our point about the identification of discrete
components or markers within pathway variables: the seven evaluations have included five quite different markers of change in family economic status: increased earnings, decreased AFDC receipt, increased total family income, movement out of poverty, and maternal (or parental) employment.

Programs of both the single and two generational type have reported impacts on earnings and AFDC receipt. GAIN, the Teenage Parent Demonstration, and Project Redirection all reported significant positive impacts on earnings. For example, across the three years of the GAIN evaluation, single parents in the GAIN experimental group earned 22 percent more than their counterparts in the control group. These earnings effects increased over time. The same three programs were associated with declines in AFDC receipt. However, because of the offsetting effects of these two changes, both Project Redirection and the Teenage Parent Demonstration report no impacts on total family income. (GAIN does not measure impacts on overall income).

The findings in Table 2 also underscore the importance of long term follow up. New Chance was associated with negative impacts on earnings in the first year of its evaluation (though not the following six months), perhaps due to the opportunity cost of educational activities. Further, CCDP was associated with an increase in the proportion of families receiving AFDC, presumably because of families’ increased access to service delivery systems. Yet New Chance, CCDP and Even Start have not yet gone beyond two years in their evaluations. With evidence from GAIN and New Chance suggesting that impacts on earnings change over time, it is of great importance that longer term follow-ups are planned for a number of ongoing evaluations (e.g., New Chance, CCDP, and JOBS).
Considering the implications of change in family economic status for children, we note that a marker that might be considered particularly important for children has been the least examined: movement out of poverty. Shaded areas on the table indicate that studies have not always considered this variable. Yet as Moore and colleagues have reported at this conference, movement off of welfare but not out of poverty does not appear to suffice as a basis for improvement in child outcomes. It is important for future studies to document this aspect of change in family economic status.

**Maternal Education**

In Table 3 we again see multiple components being documented for a single pathway variable: education. We also see divergent conclusions about program impacts depending on which particular marker is examined.

Almost all of the programs reviewed report impacts on participation in educational activities. Several programs (GAIN, Even Start, New Chance and CCDP) also report impacts on educational attainment as well, that is on completion of higher levels of education. For example in New Chance a higher proportion of the experimental than control group mothers completed the GED and had college credits; in GAIN and Even Start the difference was specific to completion of the GED.

It is quite striking, however, that of the four evaluations that measured both educational attainment (completion of higher levels of education) and achievement (progress on tests of basic skills and literacy), none reports a program impact on achievement. The

4 In 3 out of these 4 programs, there was an impact on attainment but not achievement; Teenage Parent Demonstration found impacts on neither.
most obvious and troubling implication of this pattern is that the GED test does not indicate
greater mastery of basic skills or improvement in literacy, and may not actually signify
increased job readiness on the part of the mother (see Quint et al. (1994) for an excellent
discussion of the reasons for the disjunction between GED attainment and educational
achievement).

Again we must ask which of the markers of maternal education may be important to
children's development. Interestingly, the Southport Institute for Policy Analysis (1992)
has summarized qualitative data indicating that the fact of welfare mothers' participation in
educational activities may suffice to affect children's development. They note frequent
reports by mothers that just by bringing home their books and homework, their children
observed that these were valued objects and activities, and increased their school
motivation. It will be very important to discern whether changes in maternal literacy and
basic skills are required to bring about improvements in children's cognitive development,
or whether mothers' participation in educational programs and changes in educational
attainment suffice to bring about such improvements.

**Maternal Subjective Wellbeing**

We know from a number of studies that low income mothers with young children
are at risk in terms of their subjective wellbeing. For example, high proportions of low
income mothers (approaching half of study samples) have been reported to show clinically
significant levels of depression (Hall et al., 1991; Hall et al., 1985; Quint et al., 1994).
Further, many welfare mothers are coping with serious life stressors, such as inadequate housing or having a friend or relative in jail.

Table 4 shows significant program impacts on participation in mental health services or counseling in all of the two-generational programs that evaluated participation in such services. However, beyond participation in services, the evaluations to date are discouraging as to program impacts on maternal subjective wellbeing. None of the evaluations has reported effects on such markers of internal subjective state as depression, locus of control, or reported stress level.

Turning to more external markers of wellbeing, that is markers that have to do with social support and social relationships, both New Chance and CCDP report some positive effects in this area. Experimental group mothers in New Chance report greater availability of social support and greater satisfaction with social support. Further, experimental group mothers were more likely to be living with a partner or husband at the 18 month follow-up, and control group mothers were more likely to be living with a parent or grandparent. In CCDP, experimental group children were more likely than control group children to have their biological fathers or other father figure living in the household.

Particularly given the evidence that maternal depression, stress and social support are predictive of the quality of mother-child interactions and of child outcomes, the results to date are cause for concern. We must ask, on the one hand, whether programs are addressing the fairly serious problems of subjective wellbeing in these populations appropriately. Perhaps, for example, longer-term and more clinically-oriented interventions are needed to address the widespread depression among welfare mothers. Alternately, perhaps longer-
term follow-up would indicate that the increasing economic changes occurring over time in these interventions will eventually be associated with improvements in markers of subjective wellbeing.

**Child Care**

For child care, by contrast with the other pathway variables, it is not immediately evident what should be seen as a beneficial program impact; a "+" in the table. Should an increase in extent of child care used by families in a treatment group be interpreted as beneficial in the absence of information on the quality of care used? Child care quality, the single marker that could be readily interpreted in terms of beneficial or detrimental program impacts, has rarely been studied. Because of this concern, Table 5 uses a different notation system for all markers of child care except child care quality, recording an "i" rather than a "+" for increases in use of differing child care arrangements and use of child care overall.

In Table 5 we see clear and consistent evidence that both single and two generational programs affect children's participation in nonmaternal care. These impacts are apparent both for programs that provide such care on-site (New Chance in most sites, CCDP, Even Start), and for those programs that instead provide payments and/or referrals for child care (JOBS, Teenage Parent Demonstration). In addition, such impacts are

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5 Teenage Parent Demonstration provided payments for child care from licensed day care centers and approved family day care providers. In addition, two sites provided on-site child care during program activities, and one used program staff for this purpose.
noticable both early in the evaluation period (JOBS) and up to two years after random assignment to the program (e.g. CCDP).

In all cases in which a program resulted in increased use of child care, the results indicate increased use of formal arrangements. In addition, three studies (JOBS, New Chance, Teenage Parent Demonstration) report an increase in the use of some or all forms of informal care. It is noteworthy that even when choice of type of care was left to maternal discretion (e.g. JOBS), the increase in use of formal care was greater.

Table 5 reveals a gap in the available evidence. Only one study -- Teenage Parent Demonstration -- has documented whether program participation is associated with an impact in terms of the quality of care the child is exposed to. Teenage Parent Demonstration found some evidence that program mothers were pushed toward care of lesser quality, although most indices of quality showed no group differences. Unfortunately we do not have data from other programs to support or challenge this tentative conclusion.

Programs such as CCDP and Even Start provided access to early childhood educational programs that were either carefully developed as part of the intervention, or available in local communities. Particularly when care was available in the community, quality has not been documented. Thus it is important to document experimental-control group differences in the quality of care received, and particularly so for programs where type of care is left open to mothers’ choice.
Home Environment

As can be seen in Table 6, programs that include a parenting component have produced significant increases in participation in such activities. However, evidence regarding the extent to which programs are associated with changes in reported or observed parenting behavior is somewhat mixed, and because different evaluations have included various measures of parenting or the home environment, cross-program comparisons are difficult. We have attempted to group measures of the home environment into those measuring the socioemotional domain and those measuring cognitive aspects.

Project Redirection is notable for showing impacts on parenting at the five-year follow-up, including subscales of language stimulation in the home, maternal warmth and affection, and maternal acceptance. Other programs report effects on either the socioemotional or cognitive domain. Looking at the socioemotional measures, four studies (New Chance, CCDP, Teenage Parent Demonstration in its observational sub-study, and Redirection) have reported that mothers in the experimental group are more warm and less harsh in their beliefs or behaviors with their children. Two programs (Even Start and Redirection) report impacts on aspects of the home environment related to cognitive development. However, while Even Start was associated with an increase in reading materials in the home, there were no program impacts on several other measures of cognitive stimulation, such as how often the parent talks with the child or engages in certain activities.

Group contrasts of parenting in the JOBS Study are planned for later waves of the evaluation and for an observational substudy. Findings from JOBS will be important in
determining whether effects on parenting occur only when there are program components aimed specifically at mother-child relations. We have speculated that even though there is no component in the JOBS program focused on parenting behavior, effects on mother-child relations may occur if mothers are stressed by this mandatory program, if employment goes against their beliefs about appropriate roles for mothers with preschoolers, or alternately if mothers experience an increase in self-esteem or sense of mastery as a result of program participation.

**Summary and Conclusions**

From the evidence available to date, there appear to be marked differences in the extent to which the different pathway variables are affected by the different interventions. At the extremes, child care use was reported to increase in each of the studies that evaluated it, while changes in measures of maternal subjective wellbeing were rarely reported across the seven evaluations. In anticipating patterns of influence on children, the findings to date suggest that child care will be a particularly important pathway to consider.

A high priority should be placed in future work on documenting changes not only in the quantity but also in the quality of child care experienced by children in association with mothers’ program participation.

The set of studies moving forward at present will provide a unique opportunity to examine with greater specificity the particular changes in family circumstances that are important to the development of children in welfare programs. For example, the evidence to date suggests that programs increase educational attainment but not cognitive
achievement. Will higher educational attainment in the absence of changes in achievement suffice to affect children’s development? If so, then we will have new and important information to enter into the debate on the relative importance of these two variables. We will also have a new perspective from which to evaluate the success of the programs.

Findings to date also caution us against confusing an initial pattern of findings for a long-term pattern of results. We have seen that program impacts on earnings can grow over time. Are there similar but undocumented patterns for other pathway variables? For example, would a careful examination of changes in parenting behavior over time show a pattern soon after mothers’ program enrollment quite different from what would be documented years later, when longer term adaptations and economic effects have come to be felt?

We have identified a number of gaps in the existing research. Future studies should, if possible, go beyond documenting earnings and AFDC receipt, to documenting movement out of poverty. Too few studies have included measures of literacy and basic skills. Studies need to document group differences in quality as well as type of child care. Work is needed evaluating more clinically-oriented interventions with welfare mothers, to ask whether such interventions improve markers of internal subjective state.

Our review has been constrained by the status of ongoing evaluations. Having provided a more differentiated view of the pathway variables in the present review, it will be important for these evaluations to continue to identify which particular component or components of each pathway variable are important to particular child outcomes. It will also be crucial for studies to consider how the effects on different pathway variables
summate. Perhaps small but positive differences occurring on multiple pathway variables summate to create strong positive effects on children. Alternatively, offsetting effects on differing pathway variables (for example positive impacts on family earnings but negative impacts on child care quality) could summate to yield little or no net effect on children's development. Detailed information on the simultaneous operation of multiple pathway variables will be central to the understanding of program impacts on children.

Looking beyond this important cohort of ongoing studies, a planful research agenda needs to be set in place, in which a complementary set of rigorous studies is implemented to address the gaps in our current understanding (Smith, 1993). With such a plan in place, we can increase our understanding of the role of particular pathways and of their interactions.
References


Job Opportunities and Basic Skills Training Program

The Job Opportunities and Basic Skills (JOBS) Training Program was enacted under the federal Family Support Act of 1988. JOBS provides education, training and employment services to families receiving AFDC in order to encourage self-sufficiency and reduce welfare dependency. JOBS is mandatory for welfare recipients with children age 3 and above (or age one, at state option) and failure to participate can result in sanctions. The JOBS evaluation, being conducted by Manpower Demonstration Research Corporation (MDRC), includes the random assignment of over 55,000 JOBS eligibles to experimental or control groups in seven sites around the country. The JOBS evaluation also includes a substudy of the effects of JOBS on children -- the JOBS Child Outcomes Study (COS) -- which is being conducted by Child Trends, Inc. under subcontract to MDRC. The COS involves data collection in three sites over a four- to five-year follow-up period, from approximately 3,000 families with a youngest child aged 3 to 5 at the time of random assignment. Results for the current paper are based on data collected in one site, Fulton County, GA, an average of 3 months following random assignment to the JOBS program.


Greater Avenues for Independence Program

California’s Greater Avenues for Independence (GAIN) Program was established in 1985 and was the first of its kind to emphasize large-scale, mandatory participation in basic education, in addition to job search, training and unpaid work experience, for welfare recipients who were considered to need it. GAIN’s emphasis on basic education was subsequently embodied in the Family Support Act of 1988 and its centerpiece, the JOBS Program. The multi-year evaluation of GAIN was conducted by MDRC and included over 33,000 individuals who were assigned to either an experimental group or control group. MDRC has produced a series of reports from the GAIN evaluation, including most recently a three-year impacts report.


The Even Start Family Literacy Program

Administered by the U.S. Department of Education, Even Start awarded grants for 240 program sites between 1989 and 1991. Even Start targets low-income families in which the parent is in need of adult basic education and has a child under age 8. Even Start integrates three types of core services: adult basic education, parenting education, and early childhood education. In addition, support services such as child care, health care, and transportation are provided by Even Start sites or cooperating programs. Although most Even Start programs are center-based, some deliver services through home visits. Families may remain active in Even Start as long as they meet initial eligibility criteria. The Even Start evaluation is being conducted by Abt Associates. This paper relies on program impacts from the Even Start In-Depth
Study, in which participants in 5 projects were randomly assigned to either a treatment or control group, collected approximately nine months after random assignment. A final report is forthcoming.


New Chance

New Chance is a national demonstration program that was operated in 16 sites between 1989 and 1992. New Chance programs were directed toward mothers aged 16 to 22 who became parents before age 20 and who were high school dropouts and welfare recipients. New Chance provided a comprehensive, structured set of supports and services for parents and children, including: case-management; preparation for the high school equivalency (GED) test; vocational training; classes in career planning, health, nutrition, family planning, and parenting; pediatric services for the children; and child care (on-site at 10 of the programs). New Chance programs primarily served volunteers, who were randomly assigned to either an experimental or control group. The New Chance evaluation is being conducted by MDRC, and data from the 18 month follow-up are used for the current paper.


Comprehensive Child Development Program

Created through Federal legislation in 1989, the Comprehensive Child Development Program (CCDP) is a larger-scale demonstration designed to make comprehensive, continuous supports available to families and children from birth through the child's entry into school. Core child services include health care; child care, early childhood education, and early intervention for developmental problems; and nutrition services. Parents and other adult members of the family receive prenatal care, parenting education, health care, job readiness services, and other needed supports such as mental health and substance abuse treatment. The demonstration currently operates in 34 sites and serves approximately 5000 families. The impact evaluation of CCDP is conducted by Abt Associates Inc. and relies on random assignment of families to an experimental or control group in 29 of the 34 CCDP sites. This paper utilizes findings from a preliminary, two year follow-up of CCDP.


Teenage Parent Demonstration

The Teenage Parent Demonstration was a major, large-scale demonstration initiative sponsored by the Department of Health and Human Services. Begun in 1986, the demonstration was designed to reduce long-term welfare dependency by promoting self-sufficiency among teenage parents, the group most vulnerable to long-term welfare dependency. Over a two-and-a-half year enrollment period, all first-time teenage parent welfare recipients within the demonstration sites were enrolled in the study sample. Half were randomly selected to participate in mandatory JOBS-type programs offering "enhanced services" to support participation in school, work, and job training. The other half of the study sample received only regular AFDC benefits, with no school or work requirements. The demonstration programs operated under a case management model, and programs also offer supportive services for child care and transportation. Three demonstration programs were in operation from late 1987 to mid-1991: two in New Jersey and one in
Chicago. Mathematic Policy Research (MPR) is conducting the ongoing evaluation of the demonstration programs. Findings in the current report rest primarily on the 30-month follow-up of the study sample, although effects on parenting are also drawn from a presentation of findings from the observational substudy of demonstration participants.


**Project Redirection**

Project Redirection was a demonstration program operated in the early 1980s whose impacts were evaluated in four sites. Redirection was directed toward teenagers who were 17 or younger, lacked a high school diploma or equivalency degree, and were either receiving or eligible to receive AFDC. The program provided comprehensive services aimed at educational, job-related, parenting, and life management skills, and also encouraged participants to delay further childbearing. Redirection was a voluntary program. The impact evaluation consisted of comparisons of program teens with "comparison" teens who met the Redirection eligibility requirements but lived in cities not offering the program. The demonstration was sponsored by the Manpower Demonstration Research Corporation (MDRC). The impact evaluation was conducted by Humanalysis and the American Institutes for Research under contract to MDRC, and included one, two, and five year follow-ups.

Table 2: Summary of Program Impacts on Family Economic Status From Most Recently Available Follow-Ups of Seven Programs

<table>
<thead>
<tr>
<th>Follow-Up Period</th>
<th>JOBS</th>
<th>GAIN</th>
<th>Even Start</th>
<th>New Chance</th>
<th>CCDP</th>
<th>Teenage Parent Demonstration</th>
<th>Redirection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 Mos</td>
<td>3 Yrs</td>
<td>9 Mos</td>
<td>18 Mos</td>
<td>2 Yrs</td>
<td>28 mos</td>
<td>5 Yrs</td>
</tr>
<tr>
<td>1. Increased Earnings</td>
<td>+</td>
<td></td>
<td></td>
<td>0</td>
<td>- ^</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>2. Decreased AFDC receipt</td>
<td>+</td>
<td></td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Increased Total family income</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Moving Out of Poverty</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Employed</td>
<td>+</td>
<td></td>
<td>0</td>
<td>0^</td>
<td>0</td>
<td>+</td>
<td>0</td>
</tr>
</tbody>
</table>

NOTE: + positive impact; - negative impact; 0 no impact. Shaded indicates this outcome not examined.

---

6 These numbers represent the average length of follow-up period for each study.

7 Looking across the entire 18 month follow-up period, there was a negative impact on earnings. However it is important to note that by the sixth (final) quarter of the 18 month follow-up period, there was no longer an impact on earnings.

8 Impact on employment was evident for first year but not overall follow-up period.
<table>
<thead>
<tr>
<th>Follow-Up Period</th>
<th>Programs Focused on Adult Self-Sufficiency</th>
<th>Two-Generational Comprehensive Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JOBS</td>
<td>GAIN</td>
</tr>
<tr>
<td>1. Participation</td>
<td>3 Mos</td>
<td>2 Yrs</td>
</tr>
<tr>
<td>2. Attainment</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Achievement</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

NOTE: + positive impact; - negative impact; 0 no impact. Shaded indicates this outcome not examined.

9 Assumed because 85% of families participated in adult education.
Table 4
Summary of Program Impacts on Maternal Subjective Well-Being and Social Relations From Most Recently Available Follow-Ups of Seven Programs

<table>
<thead>
<tr>
<th>Programs Focused on Adult Self-Sufficiency</th>
<th>Two-Generational Comprehensive Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Even Start</td>
</tr>
<tr>
<td></td>
<td>3 Mos</td>
</tr>
<tr>
<td>1. Participation in mental health services, life skills training, or counseling</td>
<td>NA</td>
</tr>
<tr>
<td>2. Internal subjective state</td>
<td>0</td>
</tr>
<tr>
<td>3. Relationships/Social Support</td>
<td>0</td>
</tr>
</tbody>
</table>

NOTE: + positive impact; - negative impact; 0 no impact; NA = program did not offer this component. Shaded indicates this outcome not examined.

---

10 Personal communication, Maynard, November 30, 1994.

11 Reported at 1 and 2 year follows ups, not 5 year.

12 Brooks-Gunn, Aber, & Berlin (1993) report no impact on depression or daily hassles for the observational study subsample.
### Table 5
Summary of Program Impacts on Child Care Use and Quality From Most Recently Available Follow-Ups of Seven Programs

<table>
<thead>
<tr>
<th>Follow-Up Period</th>
<th>Programs Focused on Adult Self-Sufficiency</th>
<th>Two-Generational Comprehensive Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JOBS</td>
<td>GAIN</td>
</tr>
<tr>
<td>3 Mos</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>2-3 Yrs</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>9 Mos</td>
<td></td>
<td>i</td>
</tr>
<tr>
<td>18 Mos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 mos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Yrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** "i" indicates a significant increase in use of child care. In the absence of information on child care quality, we chose not to interpret these changes in terms of beneficial or detrimental program impacts. Shaded indicates this outcome not examined.

---

13 Assumed because 97% of participants had child(ren) who received early childhood education.

14 Increased use of Head Start; other types of care not measured.

15 Impact on use of family day care or unrelated babysitter, but not on use of relative care.

16 Two out of three sites report impacts on use of relative and family day care.

17 Based on a survey of family day care providers, providers of experimental group children had slightly less education than providers of control group children. However, other indices of quality (group size, ratio, providers' years of experience, percent licensed, percent with child care training) did not differ.
Table 6
Summary of Program Impacts on Parenting
And the Home Environment
From Most Recently Available Follow-Ups of Seven Programs

<table>
<thead>
<tr>
<th>Follow-Up Period</th>
<th>Programs Focused on Adult Self-Sufficiency</th>
<th>Two-Generational Comprehensive Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JOBS</td>
<td>GAIN</td>
</tr>
<tr>
<td>1. Participation in Parenting classes</td>
<td>3 Mos</td>
<td>2-3 Yrs</td>
</tr>
<tr>
<td>2. Sociocmotional Measures</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>3. Cognitive Measures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: + positive impact; - negative impact; 0 no impact; NA = program did not offer this component. Shaded indicates this outcome not examined.

---

19 Program impacts on parenting are based on findings for a small subsample of Teenage Parent Demonstration participants (less than 10% of full sample), presented by Brooks-Gunn, Aber & Berlin at the 1993 national Head Start research conference. A more detailed report on the Teenage Parent Demonstration observational study is forthcoming.

20 Assumed because 94% of participants participated in parenting education.

21 Personal communication by Maynard, November 30, 1994.

22 Impact reported at 1 year; not reported for 5 year follow-up.

23 However, given the number of variables considered, and the number on which significant differences occurred, the few significant differences may be attributable to chance.

24 Even Start reports positive impact on amount of reading materials in the home, but no impact on 7 other measures of cognitive stimulation.
Figure 1
Towards a Base Model For Potential Pathways of Influence on Children

<table>
<thead>
<tr>
<th>Program/Policy</th>
<th>Maternal/Family Variables</th>
<th>Child's Immediate Environment</th>
<th>Child Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Components</td>
<td>Maternal Education</td>
<td>Child Care</td>
<td>Cognitive</td>
</tr>
<tr>
<td></td>
<td>Family Economic Status</td>
<td>Home Environment</td>
<td>Adjustment</td>
</tr>
<tr>
<td></td>
<td>Maternal Subjective State</td>
<td></td>
<td>Social Relations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Health</td>
</tr>
</tbody>
</table>
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Potential Pathways of Influence on Children

December 5-6, 1994
National Academy of Sciences
Paper Presented at the Workshop on Welfare and Child Development

Child Trends, Inc.
Mary Jo Corker, and Donna Ruane Morrison
Martha Zaslow, Kristin Moore

Programs to Enhance the Self-Sufficiency of Welfare Families: Working Towards a Model of Effects on Young Children

It is important to note that even the programs focusing solely or primarily on the parental generation have the potential to affect children's development. Family economic status and maternal education are among the strongest predictors of children's developmental gains. Therefore, programs designed to enhance the employability of the parent, the second is a two-generation approach, with components addressing the needs of both parents and children.

The focus of our talk today is the range of pathways or mechanisms by which programs to enhance the self-sufficiency of welfare families may affect children.