



## Money Matters

### *Parent Income and Child Development*

#### Overview

Parent income is a key predictor of child outcomes. Although the relationship between income and child development is well documented, few studies have empirically documented the ways in which money affects child development.

This infobrief summarizes a recent study that attempts to answer *how* and *why* income affects child outcomes. The researchers conclude that programs for economically disadvantaged children need to use multiple strategies to achieve positive and balanced results. The authors point to the New Hope project in Milwaukee as an example of how a multipronged approach can positively affect the well-being of children and families. Understanding the relationship between income and child achievement can help educational and social policy makers determine appropriate directions for resource allocation.

#### Money Matters

In "How Money Matters for Young Children's Development: Parental Investment and Family Processes," authors Yeung, Linver, and Brooks-Gunn (2002) simultaneously test two widely accepted theories detailing the causal links between income and child development.

The **Parental Investment** perspective suggests that all "goods and services" provided by parents, whether purchased with time or money, represent investments in a child's human capital. The effects of these investments directly contribute to the development of a child and may be evident in the child's outcomes. Parents with limited financial resources often have less to invest in childhood necessities and amenities, resulting in developmental gaps along class lines (Becker, 1981; Becker & Thomes, 1986; Haveman & Wolfe, 1994; Mayer, 1997; Smith et al., 1997).

The **Family Stress** perspective posits that income affects parental stress and behavior, which in turn

influences family processes. Parents faced with financial stress or economic hardships tend to be more punitive and less warm in their parenting techniques, resulting in children who are more likely to act out and perform poorly in school (K.J. Conger et al., 2000; R.D. Conger et al., 1992; R.D. Conger & Elder, 1994; R.D. Conger, Patterson, & Ge, 1995; Elder & Caspi, 1988; Jackson, Brooks-Gunn, Huang, & Glassman, 2000; McLoyd, 1989; McLoyd, 1990).

The two theories are not incompatible, but may influence developmental outcomes in different ways. To understand the complex relationship between income and child development, Yeung et al. examine the effects of parental investments and family stress on two distinct aspects of child development – cognitive development, as measured by standardized achievement test scores, and behavioral development, as exhibited by children "acting out" in problematic ways.

#### DATA AND METHODS

Using 2000 data from the Panel Study of Income Dynamics and the 1997 Child Development Supplement, parental investments were measured by variables rating the physical home environment, monthly child care costs, and the prevalence of stimulating materials in the home. Non-monetary investments included the frequency with which parents engaged children in learning activities such as museum visits, playing sports, etc.

To model the family stress perspective, economic stress was gauged by the adequacy of monthly income for the family's needs and by actions taken in response to budgetary constraints (e.g., borrowing money or moving to a cheaper home). To capture parents' emotional distress, the analysis included measures of mothers' depression and stress, such as frequency of feeling worthless or tired. Parenting practices were measured by observed and self-reported data on the frequency of "warm" and "punitive" parenting.

## DIFFERENT MEDIATORS AFFECT DIFFERENT OUTCOMES

After accounting for the multitude of parental investment, family stress, and control factors, Yeung et al. conclude that the parental investment and the family stress models are both valid, but that each affects different aspects of a child's development. Specific findings of the study are summarized below:

- Parental investments explained much of the relationship between income and cognitive development (i.e., standardized achievement test scores increase as parental investments increase).
- Family stress (e.g., maternal depression and punitive parenting practices) exerted a direct negative effect on children's behavior.

The relationship between income and child development is mediated by a complex web of interacting factors, each of which is associated with different aspects of a child's growth. The researchers note that policies and interventions aimed at promoting children's development need to be multipronged in order to achieve positive, balanced effects.

For example, job placement programs cannot unilaterally improve the lives and prospects of children, particularly if such programs require that parents work long hours or obtain second or third jobs to make ends meet. An effective program must simultaneously address a family's income needs, the accessibility of resources such as child care and medical care, and the limits of parents' time, some of which must be reserved for warm parenting and stimulating activities. Do such programs exist? Yeung et al. point to the New Hope project in Milwaukee as a model program.

## New Hope: A New Kind of Program

New Hope provides low-income persons in Milwaukee with comprehensive services and benefits. The program is comprised of four basic components to be used alone or in combination, based on participant preferences:

1. **Earnings supplement:** This supplement bridges the gap between minimum wage earnings and the poverty level. Raising a family's income to the poverty level can help parents avoid working excessively long hours or second and third jobs, which may result in greater quality time to spend with children and less financial stress for parents.

2. **Job placement:** This component was developed for participants who want to work full-time but are unable to find jobs. The program places participants in short-term, hourly-wage jobs at local nonprofit organizations. The job placement option and earnings supplement form a two-pronged effort to raise participant incomes without infringing on family life.
3. **Affordable health insurance:** Program participants who are not covered through employer or government-provided plans receive low-cost insurance, with copayments that increase on a sliding scale. Nearly half of all New Hope participants used this option, reflecting widespread concern about health insurance among working people.
4. **Child care subsidies:** Program participants with children under the age of 13 are eligible for child care subsidies, with copayments that increase on a sliding scale. By alleviating the cost of child care, these subsidies enable families in all income ranges to invest in quality care arrangements for their children. Nearly 40 percent of eligible participants used this option.

The four components of the New Hope project form a safety net of financial and family security, filling in the gaps and holes associated with each individual option. Whereas job placement requires that parents spend time away from home, the child care subsidies option makes this arrangement feasible. Similarly, where earned income may disqualify a person from publicly funded insurance programs such as Medicaid, the affordable health insurance component ensures ongoing access to medical care.

Results suggest that this multipronged approach works. In a comprehensive evaluation of New Hope that compared randomly assigned treatment and control groups, the Manpower Demonstration Research Corporation (MDRC) found that the program had substantial positive effects, not only on the employment rates and earnings of adult participants, but also on children's outcomes (Bos et al., 1999). MDRC used data from two separate surveys – one completed by parents, the other by children's teachers – and drew the following conclusions:

## PARENT OUTCOMES

- **Higher income.** New Hope increased participants' incomes through earnings supplements and job placements. During the first year of the program's implementation, the average participant income was \$1,016 more than the average income among control group members ( $p < 0.01$ ).
- **Reduced stress.** New Hope reduced parental stress by stabilizing household finances and helping parents maintain reasonable work hours. Program participants report being significantly less stressed and working significantly fewer hours than control group members. The reduced stress and reduced hours at work allows parents to spend more time with their children and to interact with them in a more positive way. Importantly, program participants also scored significantly higher on the Hope Scale, a test that measures people's belief that they can achieve their goals.
- **Improved access to care.** New Hope increased investments in children's human capital by expanding access to both health care and child care. During the two-year program evaluation period, just 49 percent of program participants who were not employed full-time at random assignment reported periods without health insurance, compared to 61 percent of control group members ( $p < 0.01$ ). Similarly, program participants were significantly more likely to place their child in center-based or school-based care arrangements.

As Yeung et al. would predict, the reduction in parental stress and increase in human capital investments achieved by the New Hope project resulted in significant improvements in children's outcomes. Program evaluators concluded that New Hope children are significantly better off than their control group counterparts, as summarized below.

## CHILDREN'S OUTCOMES

- **Better academic performance.** New Hope children perform better in school than do control group children. Among boys, in particular, teacher ratings of academic performance and classroom skills were higher for program participants than for control group children ( $p < 0.05$ ). Differences were smaller and not statistically significant for girls.
- **Better behavior.** New Hope boys exhibit greater positive behaviors and fewer problematic behaviors than boys in the control group ( $p <$

0.01). Behavioral differences among the two groups of girls were statistically insignificant.

- **Higher expectations.** New Hope boys have higher educational and occupational expectations than do boys in the control group. Boys from New Hope more often expected to both attend and complete college ( $p < 0.05$ ), and were more likely to have career aspirations of a professional and managerial nature ( $p < 0.10$ ). Again, this effect was limited to boys rather than girls.
- **Gender differences.** Girls generally scored much higher than boys in academics and behavior. The gender differences in program outcomes for boys and girls suggest that female children may not be as developmentally vulnerable to the influences of income.

## Conclusions

The study on income and child development and the extensive evaluation of the New Hope project offer valuable insights into the mechanisms driving child development. These are summarized below.

- Reduced income affects children's cognitive development primarily by limiting their access to essential resources and stimulating materials and activities (i.e., parental investments).
- Economic stress or hardship is related to emotional distress among parents and more punitive parenting, both of which have a negative effect on children's behavior.
- Programs can more effectively promote child development by using a combination of approaches to increase family income and minimize family stress.
- The New Hope project demonstrates that a multipronged approach can succeed in improving the achievement of both parents and children, especially boys who are more likely to "act out" at school and home.

These studies also serve as prototypical models of well-designed research and evaluation. Yeung et al.'s research in particular is innovatively structured to accommodate the complexity of children's development. The researchers' use of multi-dimensional models, quantified family inputs, and a full articulation of developmental outcomes provide a rich framework against which to model further research in child development.

## Policy Implications

The new knowledge generated by these studies points to several new policy options for disadvantaged children.

Traditionally, efforts to address the special needs of low-income students in educational settings have adopted a “damage control” mentality. Because a family’s household income remains largely outside the control of school officials, the effects of a disadvantaged background are often perceived to be beyond reach. Efforts to help these children are often reactive attempts to “fix” children with problems, rather than proactive strategies to avert those problems. Furthermore, programs tend to be largely one-dimensional, focusing on either academic achievement or behavioral problems; rarely do programs address both aspects of child development. Given the growing social and academic disparities between students from high- and low-income backgrounds, most interventions have had limited success.

However, these recent research efforts suggest new points of intervention for affecting child development. By identifying the links in the causal chain between income and children’s outcomes, and by disaggregating the “home environment” into different components – physical environment, materials, activities, types of parental interactions – Yeung et al. highlight programmatic strategies for mitigating the negative effects of poverty on children’s development. Specifically, programs may assist economically disadvantaged children in the following ways:

- Increase children’s access to resources that build human capital. This includes both basic necessities such as food, child care, and medical care, as well as stimulating materials and activities such as books, computers, sports, and museum visits.
- Ease financial hardships and associated family stress. New trends in public assistance suggest that families need to be self-sufficient. But in a low-wage job market, that self-sufficiency may come at the cost of a child’s development, as parents with multiple jobs and multiple financial worries increasingly curtail and harden their interactions with children. Parents who are less stressed tend to be warmer in their parenting, resulting in children with fewer behavioral problems.
- Increase parents’ time with children. Whereas assistance programs have traditionally burdened parents with more activities and responsibilities

outside the home – additional wage-paying jobs, job-training classes, adult education, work requirements – children may benefit most from parents who are less stressed and who have more quality time to engage in stimulating activities.

In addition, the research sheds new light on programmatic strategies that do not work. In particular, “tough love” policies that limit public assistance or that impose stringent requirements on parents may negatively affect children’s development.

## IMPLICATIONS FOR KAMEHAMEHA SCHOOLS

Central to Kamehameha Schools’ mission is increasing opportunities for high quality education for our keiki. A key implication of the findings presented here is that economic investments in education should be accompanied, where possible, by efforts to reduce family stress and to encourage quality interactions between parents and children. One kind of intervention without the other may fall short of desired outcomes.

As Kamehameha Schools considers various strategies to increase family involvement in education, it is important to note that resources devoted to parent training or education may not automatically translate into gains in child development. The research presented in this paper suggests that a more comprehensive framework may yield greater success in improving child well-being in low-income families. This approach may be especially pertinent to KS programs that aim to deliver services to children and families (e.g., the Nānākuli Community Learning Center, the Health and Wellness Program, etc.).

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