Can Basic Research on Children and Families Be Useful for the Policy Process?

Based on the assumption that basic science is the crucial building block for technological and biomedical progress, this paper examines the relevance for public policy of basic demographic and behavioral sciences research on children and families. The characteristics of basic research as they apply to policy making are explored. First, basic research draws the attention of policy makers to problems, such as the relationship of teen motherhood to AFDC entry, the negative outcomes associated with teen childbearing, poverty, and divorce. Second, basic research can push policy makers away from issues that are not problems, such as expected but unsubstantiated problems for children of employed mothers. Third, basic research can help policy makers distinguish causal from correlated factors, such as determining that some negative outcomes of teen motherhood are due to the timing of the birth, but most of the negative outcomes are due to antecedent disadvantages, such as poverty. Fourth, basic research can contribute to program and policy evaluation by helping analysts develop models of behavior and providing measures and methods needed to conduct rigorous studies. The paper finds that with few exceptions, policy evaluation studies are not built on basic research; interventions are not designed with theoretical or model references, and evaluations are poorly designed. The paper also describes an evaluation study of the impact on children of the 1988 Family Support Act, which required that mothers of preschool children participate in education, job training, or work. The paper suggests that an examination of basic research guided this study’s hypotheses and choice of methods and measures, and thereby will result in a much more informative study. (KB)
Can Basic Research on Children and Families be Useful for the Policy Process?

by

Dr. Kristin A. Moore

Paper presented at the ninety-fifth meeting of the National Advisory Child Health and Human Development Council sponsored by the Department of Health and Human Services National Institutes of Health

January 30-31, 1995

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Carol A. Emig

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Child Trends, Inc.
4301 Connecticut Avenue N.W., #100
Washington, DC 20008

BEST COPY AVAILABLE
Recently, a meeting was held between the new chair of the House Committee on Science and the heads of several government science agencies. At that meeting, Jack Gibbons, the director of the Office of Science and Technology Policy, compared science and technology to seed corn, noting that "we have to resist the tendency to eat that seed corn rather than nourish it."

I couldn’t agree more. Basic science is the crucial building block for technological and biomedical progress. Less understood is the relevance for public policy of basic demographic and behavioral sciences research -- that is, research designed to increase scientific understanding -- on children and families. Although scientists who study children don’t necessarily set out to inform public policy, and policy makers don’t very often seek out advice from academic researchers, the results of basic science studies are, in fact, being called upon in policy discussions regularly. The utility of basic science on children and families is less obvious than is true for rocket science and biomedical sciences. However, the role of basic research is substantial.

Several types of possible influences exist. First, basic research can draw the attention of policy makers to problems. Second, basic research can push policy makers away from focussing on issues that aren’t really problems. Third, basic research can help policy makers identify whether factors are just correlated or causally related to problems. In addition, the processes underlying development can be identified in basic research studies. This knowledge can help to develop laws, programs, and interventions. Fourth, basic research can contribute to the evaluation of programs and policies by helping policy analysts develop models of behavior and by providing the measures and methods needed to conduct rigorous
evaluation studies.

The first use of policy research is to help policy makers identify problems. Take teenage childbearing and welfare, for example. The program, Aid to Families with Dependent Children, was designed in the 1930s to help widows stay home and care for their children. As society changed, the population served by AFDC changed as well. Policy makers recognized that families were increasingly entering AFDC because of marital disruption rather than widowhood; but the common thread of early childbearing was not recognized.

It is now generally known, for example, that about half of welfare households are headed by a woman who was a teenage mother. However, this fact was not known in the late 1970s. That piece of information was the direct result of several studies funded by NICHD. That bit of knowledge is a significant factor underlying several decades of interest in adolescent childbearing among policy makers.

A related body of studies shows very clearly that teenage childbearing is associated with a host of negative outcomes, including lower education, more frequent single parent families, a greater risk of poverty, and poor child outcomes. For example, less than 1% of the women who had their first birth when they were teenagers completed college, compared with a third of the women who delayed their first birth to their mid-twenties. Similarly, at age 27, more than half of the women who became mothers at age 15 or younger lived in poverty, as did 41 percent of the women who were 16 or 17 at childbirth, but only 20 percent of the women who had a first birth at ages 24-25.

The effects of poverty and divorce on children are two other issues where basic
research has drawn public policy attention. Consider divorce. The recently popular conception that divorce is irrelevant for children has been challenged by a body of research that clearly establishes the risks for children associated with marital disruption. Numerous studies have now documented that children raised by both of their biological parents attain more education, have fewer behavior problems, and are less likely to have experienced a delay in growth or development, or an emotional problem.

Poverty has also been clearly associated with negative outcomes for children in every domain considered. Numerous studies show that children from families in poverty, particularly children from families who spent long durations in poverty, are disadvantaged relative to children whose families are not in poverty. Their health is undermined, their cognitive test scores are lower, their school progress is diminished, their educational attainment is lower, and their odds of having behavior problems are elevated.

The usefulness of the correlational data that have been assembled on these issues corresponds directly to the quality of the information. Advocates regularly disseminate information intended to aggrandize this or that issue that is of importance to them. That's the job of the child advocate. The job of the scientific community is to develop and disseminate accurate, reliable, representative, and unbiased information about these issues. With the goal of improving the stock of social indicators that describe children and their families, a conference was held in November on the NIH campus to assess current indicators and suggest new and better measures of child and family wellbeing. Co-hosted by the NICHD Family and Child Wellbeing Research Network, the ASPE, and several other organizations, this meeting has produced a set of excellent papers and a data compendium,
and a new indicators book is currently being developed.

Rigorous data are particularly important when expected problems are not found. For example, research has not found maternal employment per se to be problematic for children. As mothers have increased their labor force participation during recent years, concerns grew that employment per se might compromise the development of children, particularly young children. The findings of basic research have been reassuring to working parents, as economic pressures and personal preferences have drawn more and more mothers into the labor market when their children are very young. The finding that there isn't a simple, universal negative effect of maternal employment has also had a major effect on recent debates about welfare, freeing policy makers to insist that mothers on welfare also seek job training and employment.

Research that identifies problems is readily understood by policy makers. Next comes the hard part. Basic research is rarely limited to correlations and associations. The factors that affect the development of children, as all of you understand, are extremely complex, ranging from biological factors, to family influences, to friends and the peer group, to characteristics of the neighborhood and school, to messages provided by the media, to job opportunities, and state and federal policy.

Issues of selectivity, causation, and the pathways by which effects on children unfold are the greatest part of what basic research has to offer to policy makers. Understanding causality is of course the most difficult aspect of research on families and children. It is also the hardest part to share with policy makers.

I would like to share as an example my own experience as a researcher studying
teenage childbearing. As I mentioned, early childbearing is associated with numerous negative consequences for education, income, family wellbeing, and child development. However, the adolescents who become parents tend to be disadvantaged even before they become parents, and research shows that most of the negative outcomes associated with early childbearing can be explained by the characteristics of the adolescents prior to becoming parents.

In other words, some of the negative outcomes are due to the timing of the birth. Most of the negative outcomes are due to antecedent disadvantages, such as poverty, school failure, single parent families, and neighborhoods that provide few opportunities for legitimate upward mobility.

The importance of this complexity to the current political debate cannot be overemphasized. Policy makers have come to understand that fertility timing has important implications for human capital attainment, for poverty, and for public sector expenditures. Now we have the attention of policy makers, and we need to expand their understanding of what the research shows.

The process of education is ongoing. In fact, the Assistant Secretary for Planning and Evaluation recently commissioned Child Trends to conduct a review of the basic scientific research on teenage childbearing. This is something of a breakthrough, since mostly I am asked the two-word question: What works? That's all, just "what works?" We were delighted to be asked to review the scientific literature.

We have completed a draft report, which relies heavily on basic research supported
by NICHD. It bears mentioning that not only many of the studies but much of the data used in this body of research has been supported by NICHD.

This body of literature identifies several constellations of factors that contribute to early sexual initiation, ineffective contraceptive use, and adolescent parenthood, including:

- poverty and socioeconomic disadvantage
- school failure
- behavior problems and risk-taking
- a set of family characteristics including parent-child communication, emotional support, and monitoring.

These factors appear to be the critical forces that determine whether adolescents initiate sex and experience pregnancy and set quite a different or expanded direction to current policy efforts than approaches that are simply based on admonishments to teenagers to abstain from sex, lectures to encourage teens to be users of birth control, or threats to cut off all welfare payments at some magical age after which early parenthood is not problematic. In other words, the research literature pushes us to step back and consider the factors that motivate teenagers to want to delay having sex or to use a method of contraception correctly and consistently.

Another topic on which substantial research is being conducted is poverty. In fact, the NICHD Family and Child Well-being Research Network is hosting a conference later this week which will examine the factors underlying the association between poverty and child health and development.

In addition, last December, the NICHD Network collaborated with the National
Research Council Board on Children and Families to host a conference on welfare and children. Among the findings of importance to the current policy debate is evidence that long-term welfare receipt is associated with poor child development, compared with children whose families are not poor and not on welfare (and net of numerous control variables). However, for children, it was also found that leaving welfare but not leaving poverty is no better than staying on welfare. Only if children’s families left welfare and also left poverty were children’s outcomes more positive.

The goal of the coming conference is to help sort out why poverty is associated with negative child outcomes. Is it selectivity into who is poor, is it the lack of money per se, or is it some identifiable process or input associated with poverty which explains the bivariate association between poverty and child wellbeing? More than a dozen papers are examining this question in synchrony using different data bases with different methods on different child outcomes, in the hope of really leap-frogging ahead on this important scientific, and policy-relevant, question.

Similar light is being shed on the issue of family structure. Researchers have documented that an important component in the negative effects of family structure is family conflict. Even prior to, or apart from, family break-up, family conflict seems to undermine the development and wellbeing of children. Also, research on single parent families has pushed policy makers to steadily strengthen child support enforcement, as research has clearly shown the magnitude and importance of income loss to children in single parent families.

Similarly, research on maternal employment has led some policy makers to shift their
focus from work to deal with childcare, in response to research on maternal employment has led some policy makers to shift their focus from work to deal with childcare, in response to research which shows that the quality and consistency of child care affects children's development.

The fourth way that basic research is useful to public policy is in providing theory, measures, and methods for evaluation studies, and in providing a body of literature to inform the development of intervention strategies.

I have to say that most policy evaluation studies are not built on basic research. The research being conducted by the NICHD Cooperative Agreement on STD, Violence and Pregnancy Prevention represents an important exception, and there are other examples of rigorous, theory-driven intervention evaluations. However, we have just completed a review of programs designed to prevent adolescent pregnancy, also for the Assistant Secretary for Planning and Evaluation, and it is truly distressing just inadequate or non-existent most policy evaluation studies are. Interventions are not designed with reference to a theory or even a model. Interventions do not take account of prior research. Evaluations do not include experimental control groups or even quasi-experimental comparison groups. Measures of background characteristics are limited, and measures of outcomes are often rudimentary. Expectations are often unrealistic or off-target, such that policy makers are led to believe that small inputs will somehow translate into huge impacts. But, as Dr. Jamett's talk shows, policy evaluations need not be poorly designed or poorly evaluated.

I want to provide just one more example from my own research on welfare issues to illustrate how basic research about children is essential in designing policy evaluations. In
1989, Child Trends was awarded a sub-contract to examine the impact on children of the 1988 version of welfare reform -- the Family Support Act, which required or mandated that mothers of preschool children participate in education, job training, or work. This is the first experimental study to specifically set out to examine the effects of welfare policies on the development and wellbeing of children. I know the program is called "Aid to Families with Dependent Children," but the implications of the program for children have been the focus of remarkably little attention.

There being no direct precedent for what we were doing, we turned to basic research studies to inform our hypotheses and to guide our choice of methods and measures. This literature quite literally told us where to look.

The Family Support Act mandated maternal participation in job training and education for women with children as young as age 3. The program has no direct focus on children at all. Nevertheless, the scientific literature clearly identifies the wellbeing of the mother and the family as critical predictors of the wellbeing of the child. Moreover, the literature provided evidence regarding the pathways by which effects might be expected, including:

- changes in family income,
- changes in maternal education or cognitive attainment;
- changes in maternal psychological wellbeing;
- changes in the child’s child care arrangements; and
- changes in parenting practices.

Because of this literature, we are measuring not just maternal income and education (which the evaluation would have done anyway) but changes in parenting, child care, and
maternal psychological wellbeing, topics that are not normally covered in welfare evaluations. We describe these as the "pathway" variables, the indirect routes by which a government mandate for adults can affect kids.

Building on a rich body of basic research, we are, I believe, in the process of conducting a much more informative study. When we're done, we will have detailed data on adult outcomes, on child outcomes, and on the pathway variables, the indirect effects by which changes in the mother's life might be expected to change the child's development. Our hope, of course, is that understanding both impacts on children and the pathways by which they occur will inform the policy debate at the federal and the state level.

This is my aspiration for evaluation studies on the issue of adolescent fertility. In the past year, I have fielded dozens, perhaps hundreds, of calls from people wanting to know what programs work to prevent adolescent pregnancy. In the short run, there have been only a handful of studies that I could point to as providing reliable information to policy makers. This lack of direction was one of the factors that slowed enactment of welfare reform last year. With a new generation of evaluation studies that builds on the findings, measures, and methods of basic research, I am confident that better policies can be developed.
NOTICE

REPRODUCTION BASIS

This document is covered by a signed “Reproduction Release (Blanket)” form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a “Specific Document” Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either “Specific Document” or “Blanket”).