

The JOBS Evaluation
Sub-group Study of Mothers with Young Children

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THE FAMILY SUPPORT ACT

The Family Support Act of 1988 made numerous changes in the AFDC program and in the Child Support Enforcement program. The intent of these changes is that public assistance should be a means for helping parents move from welfare dependency to self-sufficiency, rather than a source of long-term support for indigent families. Self-sufficiency is to be attained through the paid employment of welfare parents, including those with young children, and through the establishment and enforcement of the child support obligations of absent parents.

The law created a new program of education, training, and employment-related services for AFDC recipients: the Job Opportunities and Basic Skills Training program, or JOBS. In addition, one component of the Family Support legislation requires an evaluation of the impact of the JOBS program. This evaluation is being funded by the Family Support Administration and the Office of the Assistant Secretary for Planning and Evaluation, DHHS, and is being conducted by the Manpower Demonstration Research Corporation (MDRC) and its sub-contractor, Child Trends. MDRC has overall charge of designing and implementing the evaluation. Child Trends has the responsibility for designing the sub-group study among mothers with pre-school children that focuses on family environment and family processes that may affect either the mother or the child.

THE JOBS EVALUATION AND THE SUB-GROUP STUDY OF MOTHERS AND THEIR YOUNG CHILDREN

Overview

The JOBS evaluation will contain three main study areas: an impact analysis, an implementation and process study, and a benefit-cost analysis. Data will be collected from administrative records, by testing at the JOBS office, and from doing surveys in the homes of persons eligible for the JOBS program. A special focus of analysis in the JOBS evaluation will be the sub-group of mothers with young children.

Among women eligible for participation in JOBS, 2,570 mothers whose youngest child is aged three to five will be selected in two or three urban sites. These mother-child pairs will be the primary focus of the sub-group study.

Data will be collected for all mothers in both the experimental and the control groups and for one randomly selected three- to five-year-old child in each household. As with other participants in the evaluation, basic demographic and work/welfare history data will be provided by the JOBS intake worker in a "Standard Client Characteristics" form. In addition, all Es and Cs will take a literacy test and complete a brief "Participation Factors and Attitudes Survey," which assesses attitudes toward work, welfare, training, and child care, as well as feelings of depression and mastery.

Mothers will also be personally interviewed, and child assessments will be conducted with the children. These interviews will be conducted in the home during a baseline interview immediately after random assignment and again two years after random assignment. A five-year survey is also planned, although the scope of questions that particularly relates to these mothers and young children has not been determined. At baseline, due to budgetary constraints, it is proposed that interviews be conducted with only 600 mothers. However, the full survey sample will be tracked, and all survey sample members will be contacted for the two-year in-person follow-up and the five-year telephone follow-up. It is anticipated that data will be collected from 1,800 mother-child pairs at the time of the five-year follow-up.

Goals of the Sub-group Study

The two goals of this sub-group study are to describe the changes that occur in the lives of children and families headed by mothers who are subject to the JOBS mandate and to examine how the interaction between the mother and child affects mothers' participation in JOBS. In addition, it is anticipated that funding from the Department of Education will make it possible to collect data from the schools attended by the children on the types of educational programs they receive, on the children's achievement, and on attendance and behavior in the school setting. These data will be used to examine the impact of the JOBS program on children.

The effects of JOBS on children's school progress are important to study because the JOBS program, with its emphasis on the provision of education, training and support services to less job-ready AFDC recipients, represents a new policy, particularly for mothers of pre-school children. Given the emphasis of this program on basic education and skills training for the parents, the possibility of second-generation effects exists. For example, effects on children's school outcomes could occur because parents become more literate themselves and as a result

engage in more intellectually stimulating behavior with their children, such as using a more extensive vocabulary or reading more frequently to their child. Or positive effects could occur because the child sees the parent reading and studying and therefore places more importance on his or her own schooling.

Changes in domains of children's lives outside of the academic domain are also possible. Mothers receiving welfare have been found to be depressed and to have low self-esteem, particularly if they are long-term AFDC recipients (Zill, Moore, Nord, & Stief, 1991). Successful participation might enhance maternal well-being, which has positive consequences for mother-child interaction and thus for child development. On the other hand, if parents feel extremely stressed by the JOBS mandate, a deterioration in mother-child interaction patterns is possible. The social and emotional well-being of mothers and the functioning of families who are exposed to employment and training services are not known. Understanding the changes occurring in the families of women subject to the JOBS mandate can inform policy makers and service providers who seek to simultaneously foster economic independence for families and positive development for children.

Changes in the lives of mothers may interact with changes in the lives of their children. For example, child and family circumstances are known to have strong associations with women's labor force participation in the larger society. Therefore, it is likely that child and family variables will affect the extent and success of maternal participation in JOBS. Thus, the data collected should shed light on maternal participation in JOBS and on employment and welfare outcomes as well as child outcomes. This presumption that intergenerational influences flow in both directions underlies an expanding body of ongoing and planned research.

The child and family component of the overall study can be viewed as exploratory -- as an attempt to "get inside the black box" and begin to understand the factors that affect children's development in families that receive AFDC. It is not presumed that we will be able to detect with certainty whether the JOBS program influences the behavior or well-being of these young children. Researchers and policy makers need not only understand whether any changes occur, but also for whom they occur, whether these changes are viewed positively or negatively or both, and the factors underlying any changes that are found. This research represents an initial step in developing this body of knowledge.

The proposed design described here is under discussion, and may change as a result of review by DHHS and OMB.

In addition to the study being fielded with federal funds, an observational study is being designed that will supplement the data obtained from administrative records and surveys.

**DEVELOPING MEASURES FOR THE
SUB-GROUP STUDY OF MOTHERS WITH YOUNG CHILDREN**

Topics To Be Covered in the Baseline Questionnaire

During 1990 and early 1991, the JOBS team focused on developing a questionnaire that would provide a full picture of the life of the mother-child pair at baseline. A set of topics to be covered was established at the outset, and members of the research team began seeking existing measures of these constructs, where possible, and set about developing new measures when necessary. The topics that we are proposing to cover in the baseline questionnaire are the following:

- demographic characteristics;
- education and work history;
- mother's family background;
- mother's marriage and cohabitation history, household structure and social support;
- mother's fertility history and intentions;
- attitudes regarding employment, welfare, and parenthood;
- mother's physical health, psychological well-being and sense of personal control;
- mother's substance use;
- neighborhood characteristics;
- child's physical health;
- child's contact with biological father;
- child's siblings;
- parent-child relationships;
- child rearing practices;
- child's social development, emotional well-being and behavior problems; and
- child's cognitive ability/school readiness.

In the initial proposal and in our current proposal to DHHS, the JOBS evaluation team has defined four domains of child well-being that might be influenced by the mother's participation in the JOBS program or that might influence the mother's participation in JOBS. Baseline measures of well-being for children aged 3-5 are needed to create analytic sub-groups, to predict maternal participation in JOBS, and to increase the precision of estimates of school performance at a future time point when the children are aged 8-10. These domains of child well-being are:

- 1 - Cognitive development and academic achievement;
- 2 - Child's physical health and safety;
- 3 - Problem behavior and emotional well-being; and
- 4 - Social development.

Measures

The advice of expert advisors was sought to identify the best measures to use to assess these domains. Several measures of child cognitive achievement appropriate to the pre-school age group are available and have been administered in numerous studies by non-psychologists who receive special training. The Peabody Picture Vocabulary Test was used in both the National Survey of Children and the National Longitudinal Survey of Youth with great success.

At baseline, we are proposing to use the Peabody Picture Vocabulary Test (PPVT) (Dunn, 1965; Dunn & Dunn, 1981). We plan to use the most recent version of the test, the PPVT-R, which was normed on a broader sample than was the original (Dunn & Dunn, 1981; Naglieri & Naglieri, 1981). We also plan to use a shortened 32-item version of the Caldwell Preschool Inventory (PSI), a measure of general ability designed specifically for use with disadvantaged children aged three to six (CTB/McGraw-Hill, 1970; Abt Associates, 1990). Four sub-scales from the Early Screening Inventory (Meisels, Wiske, & Tivnan, 1984) are also being administered to capture several developmental areas not covered by the other measures. These are the block building, verbal reasoning, draw-a-person, and auditory sequential memory sub-scales.

In addition to these cognitive measures, several valid measures of health, health care, and accidents are available from surveys conducted by the National Center for Health Statistics, and we are proposing to use these measures with some adaptations in the sub-group study of mothers with young children. On the other hand, measures of social and emotional well-being and family processes among families with children aged 3-5 are generally more difficult to develop and administer than are measures of cognitive achievement and health. Very few measures appropriate to this age group exist "on the shelf" for a researcher who wants to include a validated scale in his or her survey.

Ways to address this dearth were discussed at a series of conferences and meetings that brought policy-makers together with researchers from the fields of economics, sociology, psychology, and child development to discuss the effects of changing government policies, particularly JOBS, on children and their families. The need for rich and broad measures of child well-being was highlighted at a meeting held in November 1989, at the National Academy of Sciences in Washington, D.C., and sponsored by the Foundation for Child Development. The focus of this meeting was on the Family Support Act (FSA):

"The effects of the FSA programs on children will depend upon a great variety of factors, including the actual services and supports the program provides, the employment opportunities and supports available to families following

participation in JOBS education and training, the personal characteristics and resources parents bring to the program, and the special needs of their children. In order to assess the impact of different kinds of programs on different types of families, it will be important to conduct studies that use relatively large samples across multiple program sites....

"[However,] certain important research questions will require measures that cannot be used easily with a large number of families. For example, more meaningful assessments of children's developmental status in the early years require observational measures that must be administered by highly trained persons. Similarly, measuring changes in parenting and family functioning that might be related to program participation and to child outcomes often necessitates in-depth interview assessments. The design of large-sample studies offers opportunities for nested studies with smaller subsamples and more intensive measurements of key variables. The findings from the small-sample studies will be helpful in interpreting results from the larger-scale studies from which they draw samples."
(Smith, Blank, & Bond, 1990)

The discussion continued at a series of subsequent meetings, where it was agreed that some constructs might best be addressed using "high fidelity" measures, as Professor Larry Aber has described them, which are optimally administered in observational studies.

Because JOBS is an intervention focused primarily on the mother, not the child, any changes occurring in the lives of children whose mothers are subject to the JOBS mandate will be indirect, that is, transmitted through the mother (for example, through changes in how she cares for the child). Direct effects on the child could occur through transitional Medicaid and transitional child care; but again the nature of these services, such as the quality of child care, will typically be mediated by the mother. Hence, any changes in the lives of children are expected to be mediated by variables such as the warmth of the mother-child relationship, the mother's use of harsh, punitive forms of discipline, and the mother's cognitive stimulation of the child. These mother-child variables, in turn, will be affected by the mother's level of depression, self-esteem, social support, and her sense of mastery. Therefore, sensitive measures of these mediating variables are essential. Some of these constructs are readily assessed using survey methods; others are not.

Where possible, questions used previously in national surveys, in studies of low-income populations, or more generally in other studies were culled for possible inclusion. In several instances, we concluded that valid measures were already available. These included a 14-item abbreviated version of the

CES-D Depression Scale (Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977), a 7-item mastery scale (Pearlin, Menaghan, Lieberman, & Mullan, 1981), and the abbreviated version of the HOME scale included in the NLSY-Child Supplement (Baker & Mott, 1989). Other measures were developed by the research team (for example, the scale of social support for parenting).

Our goals for the measures we included were fourfold:

- 1.) To fully measure a broad array of constructs;
- 2.) To develop measures that are appropriate to low education, low income populations;
- 3.) To the extent feasible, to obtain data using multiple methods and multiple informants; and
- 4.) To obtain data about the child-to-mother component, not just the mother-to-child perspective.

Each of these goals and our attempts to implement them are described in the following section.

Goal 1: Assessing a broad array of constructs

As we began developing the baseline questionnaire, we defined a set of constructs within the domain of the mother-child relationship:

- maternal warmth;
- maternal harshness;
- maternal stress;
- maternal cognitive stimulation;
- maternal monitoring;
- child initiations toward the mother; and
- child responses to mother's initiations.

Multiple measures were developed for each construct and pre-tested three times. Considerable re-writing was necessary to develop questions for the mothers to answer and assessment items for the interviewers to complete that are clear and measure each construct as fully as possible. Nevertheless, it was clear that maternal responses to some of the direct questions were affected by a desire to be or a perception of being extremely warm and nurturing.

Goal 2: Measures Appropriate to Low Education, Low Income Populations

Many of the measures we reviewed were designed for middle class samples. The vocabulary was often difficult. Sentence structure was sometimes quite complex, and the topics addressed were often quite complex. One example comes from the HOME scale, which we did use, since it is one of the best available measures, but which we felt we needed to augment. In this scale, mothers are asked how frequently the child is taken on trips to a museum,

how many books the child owns, and whether the child has a tape player and tapes for his/her own use. While reasonable items for middle class and even lower middle class families, these items seem unlikely to produce much variation in welfare families. We added several items about activities which do not require money or transportation, for example, the frequency that the mother tells her child stories that do not come from books.

Goal 3: Multiple Methods and Multiple Informants

It is hard for any parent to assess their child and their relationship with their child objectively. At the same time, the mother is the single best informant about the child and her relationship with the child. This quandary pushed us in the direction of obtaining as much information from the mother as possible but also using the interviewer as a source of supplementary information. We recognize that the observations of a professional interviewer are not on the level of observational data collected by a trained psychologist. What they are is an affordable second source of information that provides an alternative to complete and total reliance upon the mother as the source of information.

As will be discussed in a later section, we are also in the process of designing an observational study to be embedded within the JOBS evaluation, to provide another alternative to mother-report data; but here it is useful to describe the questions we have developed to be completed by the interviewers.

Some of the interviewer observation items were taken directly from the version of the HOME being used in the National Longitudinal Survey of Youth - Child Supplement, e.g., "Mother caressed, kissed, or hugged child at least once," and "Interior of the home is dark or perceptually monotonous." We added some questions about child-initiated interactions, e.g., "Did CHILD spontaneously make positive attempts to get (his/her) mother's attention, for example, show mother something (he/she) was doing, wave hello, or smile to her?" and "Did CHILD spontaneously seek positive physical contact with (his/her) mother, such as hugging, kissing, snuggling?" Interviewers are also given scales on which to evaluate the condition of the neighborhood and the structure in which the mother and child live, the cleanliness of the home, and the hygiene of the mother and child. The addition of this information to the data supplied by the mother should enhance our ability to understand and predict children's development.

Goal 4: Obtaining Measures from the Child-to-Mother Perspective

Child development researchers recognize that the characteristics and behaviors of the child are a critical component of the parent-child relationship and that influence goes not only from the parent to the child but also from the child to the parent. Yet most surveys focus on the mother-to-child component. This reflects, of course, the fact that the

mother rather than the pre-schooler is the survey respondent. We developed several questions to tap this construct and several interviewer assessments as well; but the bulk of the survey data will represent mother-to-child influences.

Copies of the questionnaire and a rationale for all modules can be obtained from Child Trends (\$16.00 is charged to cover the cost of xeroxing and postage).

Embedded Observational Research

We feel that the JOBS in-home Baseline instrument for a sample of mothers with young children as currently designed reflects methodological progress beyond previous research in terms of the extremely broad range of constructs concerning the family to be explored and in the development of new survey measures focusing on the mother-child relationship that are appropriate for low income samples. To move further ahead, the JOBS team, together with Bob Granger of MDRC and Denise Polit of Humanalysis¹, have developed a design for yet another methodological step. A proposal has been approved by the Foundation for Child Development and the William T. Grant Foundation (and is under consideration at several other foundations) to carry out observational research with a subsample of the JOBS sample, focusing on mother-child interaction.

Such observational research would complement the existing JOBS evaluation by providing an in-depth look at certain aspects of mother-child interaction in a subsample of families subject to the JOBS mandate. As noted above, the interview measures of the sub-group study of mothers with young children will rely heavily on maternal self-report regarding the mother-child relationship. Such self-report measures are essential in the sub-group study in order to permit an assessment of the role the mother-child relationship plays. Also, they are the best source for constructs that depend on maternal perceptions. However, maternal report data may be a somewhat biased source of information on other aspects of the mother-child relationship. Thus, our construct labeled "maternal stress and sense of aggravation in the parenting role" is inherently a reflection of maternal perception, and is best derived from maternal self-report. By contrast, for such constructs as maternal warmth and harshness of discipline, maternal self-report is likely to be affected by maternal response biases.

As one example, in our pretesting of paper-and-pencil measures designed to assess maternal warmth, we found that mothers responded almost uniformly with response options

¹It is planned to conduct the observational study jointly with a study of New Chance, a comprehensive training and service program focused on poor, young mothers being evaluated by Humanalysis and MDRC.

reflecting the greatest possible levels of warmth and responsiveness. Direct observations of mother-child interaction would permit assessment of such aspects of mother-child interaction free of mothers' tendencies to report in a desirable manner, or to perceive their relationships with their children in a systematically biased way.

Observational research would also permit fine-grained distinctions where maternal self-report measures do not. For example, our interview measures comprising the construct maternal warmth do not distinguish between lack of maternal involvement with the child (detachment), and active rejection of the child. Yet there is research indicating that such a distinction is of importance to children's development (Egeland & Sroufe, 1981). Similarly, whereas our present sub-group study instruments permit some assessment of whether the child initiates interaction with the mother, we will lack information as to how frequently the child makes such overtures. Observational research would thus provide measures of "higher fidelity" addressing the constructs that are of interest.

In addition, the present baseline questionnaire measures involve an imbalance in the assessment of the mother-child relationship: while research portrays this as a reciprocal relationship, with both mother and child contributing to its quality, as described above, our interview measures yield far more detailed information on the mother's contribution to this relationship than on the child's. Direct observations would correct for this imbalance, permitting detailed measurement of the child component of the reciprocal mother-child relationship. In addition, observational research would permit assessment of aspects of the child's behavior that are of interest to the larger study, but go beyond the confines of the mother-child relationship. For example, it would be possible to note in some detail such aspects of the child's cognitive behavior as persistence in tasks and complexity of play with objects.

Our proposal to carry out observational research is thus an attempt to complement the breadth of measures concerning the family in the baseline questionnaire, with depth in the measurement of mother-child interaction for a subsample of families whose youngest child is aged 3-5 at baseline.

Current plans call for videotaping of 300 mother-child dyads in their own homes. Observations would be carried out 4-6 months after mothers are randomly assigned to experimental and control groups, and again two years after random assignment. The first observation would occur at a time when a maximum number of experimental group mothers would actually be exposed to, and experiencing their initial reactions to, JOBS program components. At the time of the second observation, 18-20 months later, it is assumed that more ongoing adaptations to the program will have occurred. The sample would be derived from the JOBS site at

which the full, in-person, baseline interview is to be carried out (most likely Atlanta).

Plans for the study follow closely the recommendations made by a group of highly-regarded developmental psychologists who attended a foundation-funded meeting on January 24, 1991. It is planned to complete 30 minutes of videotaping with each family, divided into 10 minutes of free play, 15 minutes of mother-child problem-solving tasks, and a 5 minute segment of mother reading picture books to the child.

The research team would be glad to share further details concerning both the proposed survey and the observational components of the proposed study with other researchers who are grappling with similar issues. We would also welcome feedback and suggestions on our still-evolving design.

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