Contract No.: HHS 100-86-0045
MPR Reference No.: 7700-270

MOVING INTO ADULTHOOD: WERE THE IMPACTS OF MANDATORY PROGRAMS FOR WELFARE-DEPENDENT TEENAGE PARENTS SUSTAINED AFTER THE PROGRAMS ENDED?

February 1998

Authors:

Ellen Eliason Kisker
Anu Rangarajan
Kimberly Boller

Submitted to:

U.S. Department of Health and Human Services, OS
Assistant Secretary for Planning and Evaluation
Room 404E, HHH Building
200 Independence Avenue, S. W.
Washington, DC 20201

Project Officer:
Reuben Snipper

Submitted by:

Mathematica Policy Research, inc.
P.O. Box 2393
Princeton, NJ 08543-2393
(609) 799-3535

Project Director:
Ellen Eliason Kisker

This report was prepared for the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, under contract HHS-100-86-0045. Since researchers conducting projects under government sponsorship are encouraged to express their own judgments freely, this report does not necessarily represent the official opinion or policy of the Department of Health and Human Services. The results of this study and the views expressed are solely those of the authors.

ACKNOWLEDGMENTS

Many people contributed in significant ways to the second phase of the evaluation and preparation of this report. Much of the information on the demonstration programs that is summarized in this report was provided by Melba McCarty, Yvonne Johnson, and Frank Ambrose, who oversaw the demonstration programs--Project Advance in Chicago, Teen Progress in Newark, and Teen Progress in Camden, respectively. Bonnie Mecanko and David Heinz of the New Jersey Department of Human Services, John Bock of the New Jersey Department of Labor, and Denise Simon, David Gruenenfelder, and Susan Fitzpatrick of the Illinois Department of Public Aid were very helpful during the data collection process.

Reuben Snipper, Project Officer for the evaluation, and Nancye Campbell, Project Officer for the demonstration programs, provided helpful guidance throughout the design and implementation of the evaluation. Rebecca Maynard, Project Director and co-investigator for the first phase of the evaluation, provided critical guidance as we designed the second phase of the evaluation, and she offered valuable insights as we prepared this report.

Many other staff members at Mathematica Policy Research, Inc., contributed to the project and the development of this report. John Love and Christine Ross designed the child assessment instruments and provided valuable guidance to us in analyzing the data and preparing the report. Todd Ensor directed the second follow-up survey data collection, with important help from Susan Sprachman, Barbara Rogers, Jim Cashion, Cindy Steenstra, Janet Buffer, and Wendy Offery. Mike Watts and Linda Bandeh did the programming for the computer-assisted telephone interviewing. Catherine Brown, Anne Bloomenthal, Lara Hulsey, and Tim Novak constructed the data files and prepared the tabulations and graphs for the report. Jennifer Baskwell, Cindy Castro, Jill Miller, and Marjorie Mitchell produced the report. Patricia Ciaccio and Roy Grisham edited the report.

Finally, the mothers in the sample and their children patiently answered our many questions.

We gratefully acknowledge these contributions and accept sole responsibility for any remaining errors or omissions in the report.

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THE TEENAGE PARENT DEMONSTRATION

Because teenage childbearing often has negative consequences for the parents, their children, and society, policymakers have been searching for effective strategies not only for reducing teenage pregnancies but also for improving the life chances of teenagers who have children. In 1986, the U.S. Department of Health and Human Services (DHHS) launched the Teenage Parent Demonstration (TPD) to test the effectiveness of innovative programs for improving the economic self-sufficiency of teenage parents dependent on welfare. The public welfare agencies in Illinois and New Jersey were awarded grants to design and implement the TPD programs. The Illinois program, Project Advance, operated in the south side of Chicago, and the New Jersey program, Teen Progress, operated in Newark and Camden. The programs began serving young mothers in mid-l 987 and continued operations through mid- 199 1.

Anticipating the mandatory participation requirements of the 1988 Family Support Act, the demonstration programs ***required*** teenage mothers on welfare for the first time with their child to participate in education, job training, or employment-related activities. To help them meet this requirement, the programs offered support services--mainly case management, child care assistance, and transportation assistance. Unlike previous programs, the TPD programs required mothers to participate in activities regardless of the age of their child, to receive the maximum welfare grant.

THE TARGET POPULATION

The target population for the demonstration included all teenagers in the demonstration sites who, for the first time, were parents ***and*** were receiving Aid to Families with Dependent Children (AFDC) (either as the head of their own cases or as "minor" mothers) or (in Illinois only) had no children but were in the third trimester of a pregnancy and were receiving AFDC. During the demonstration period, almost 6,000 teenage mothers joined the welfare rolls in the three demonstration sites, and nearly 90 percent attended intake and enrolled in the demonstration. Half of those who enrolled in the demonstration were assigned at random to participate in the programs (the enhanced-services group); the rest became part of a control group and received regular AFDC services (the regular-services group).

Most of the young mothers who enrolled in the demonstration were between 17 and 19 years old, belonged to a minority racial or ethnic group (African American or Hispanic), and had never been married. Most of the teenagers who enrolled in the

demonstration were parents of an infant under one year old. Most had educational deficits and weak basic skills that posed obstacles to eventual self-sufficiency. Only one-third had a high school diploma or GED, and more than half had reading scores below the eight-grade level. Just over half-had some work experience prior to enrolling in the program; however, the majority reported facing one or more barriers that constrained their ability to work, including health problems, limited English proficiency, child care problems, and transportation needs.

THE EVALUATION

DHHS contracted with Mathematica Policy Research, Inc. to evaluate the demonstration programs. The first phase of the evaluation focused on documenting the implementation and costs of the programs, assessing the service needs and use of participants (including special studies of child care needs and use) and examining the impacts of the programs on mothers' prospects for economic self-sufficiency over the period that the demonstration programs were still operating. The second phase of the evaluation (the focus of this report) measured the endurance of program impacts on mothers' prospects approximately three to four years after the programs ended and participants returned to their state's regular welfare policies and programs. It also assessed program impacts on the well-being of the mothers' first-born children.

Data for the evaluation were gathered from multiple sources, including program intake forms, two follow-up surveys, administrative records data, and child assessments. The second follow-up survey, which is the main source of data for this report, targeted the full samples of mothers in Camden and Newark and a random subsample of mothers in Chicago approximately six and a half years after program intake. Interviews were completed by telephone or in person with more than 85 percent of the target sample. As soon as possible after the second follow-up interviews were completed, in-person child assessment sessions were scheduled with mothers who still lived in the demonstration areas and had custody of their first-born child and whose first-born child was between the ages of five and eight. Child assessments, which included self-administered questionnaires completed by the mothers while interviewers conducted tests and interviews with their children, were completed with 78 percent of eligible mothers and children.

EARLY FINDINGS

The **first phase of the evaluation showed that states can operate large-scale, mandatory work-oriented programs for teenage parents (Maynard 1993). The** demonstration programs were generally well implemented and achieved high rates of initial participation and moderate rates of ongoing participation. Nearly 90 percent of the young mothers who were identified as eligible for the programs enrolled, and, of those who enrolled, 92 percent participated in program activities

beyond the initial intake and assessment. Participants were required to engage in a full-time schedule (30 hours per week) of education, training, or employment (or some combination of these and other activities). Case managers were held accountable for helping the young mothers address their barriers to participation; the young mothers had to comply or face financial penalties. Both program staff and the young mothers who were required to participate in these programs felt that the programs were helpful and that the participation requirements were fair. Throughout the demonstration period, the programs kept between 30 and 50 percent of the young mothers actively involved in school, job training, or a job, while others were enrolled in workshops and other activities preparatory to entering one of these major self-sufficiency-oriented activities.

The demonstration programs increased rates of school attendance, job training, and employment but produced few significant differences in marriage, living arrangements, fertility, or child support during the first two years following intake. The first phase of the evaluation showed that overall levels of participation in school, job training, or employment over the two years following program intake were substantially higher than they would have been in the absence of the demonstration programs' supportive services and participation mandates (Maynard, Nicholson, and Rangarajan 1993). The programs were most effective in increasing school enrollment levels. The program-induced increases in employment were accompanied by earnings gains that, combined with program sanctions, resulted in lower rates of dependence on public assistance. However, except for those who became employed, the economic welfare of participants did not change.

LONGER-TERM SELF-SUFFICIENCY

For most of the young mothers, the cycle of welfare dependency has not yet been broken. Approximately 70 percent of the mothers in both the regular- and enhanced-services groups were still receiving welfare at the time of the second follow-up survey. At the time of the survey, six to seven years after program intake, approximately one-fourth of the mothers in Camden, one-third of those in Newark, and about 40 percent of those in Chicago were employed. Although marriage or a stable relationship with a partner offers an alternative route to economic self-sufficiency, most (90 percent) of the young women in the sample had not taken this route by the time of the second follow-up survey. Employment was not always sufficient to lift mothers out of poverty; at the time of the second follow-up survey, more than three-fourths of the mothers lived in households with incomes below the poverty level.

The promising early impacts of the programs on employment-related activities and welfare dependence faded once the demonstration programs ended and participants returned to regular AFDC and Job Opportunities and Basic Skills Training (JOBS) programs. The demonstration programs' early impacts on participation in employment-related activities '(work, training, or

education) faded three to four years after the programs ended. Similarly, the modest short-term impacts of the demonstration programs on welfare receipt faded once participants returned to regular AFDC.

The early impacts of the programs on employment-related activities and welfare started to erode at about the time sanctions and support services ended for the enhanced-services group. After the demonstration programs ended in mid-1991 and mothers in the enhanced-services group no longer faced activity requirements or received any special services, mothers in the regular-services group caught up to their counterparts in the enhanced-services group, and program impacts on employment, earnings, and educational attainment faded. Moreover, as the earnings impacts eroded and the program sanctions for noncompliance with program requirements ended, impacts on welfare receipt and benefit amounts largely disappeared.

Mothers in both the regular- and the enhanced-services groups reported receiving very little financial child support. Fewer than 20 percent reported receiving any child support income six to seven years after enrolling in the demonstration; only about 10 percent reported receiving regular financial support from the noncustodial father of their first-born child. Noncustodial fathers were more likely to provide in-kind support. For instance, nearly one-fourth of the mothers reported that they currently received any clothing or toys from the father of their first-born child. Fewer than one-quarter of the mothers in either group reported that their first-born child had regular contact with his or her father.[1]

SUBSEQUENT FERTILITY

On average, during the six- to seven-year follow-up period, the young mothers in both the regular- and the enhanced-services group became pregnant twice and gave birth to between one and two additional children. Many of the young mothers became pregnant again and had their second child shortly after going onto welfare. Because they continued having children after enrolling in the demonstration, more than half the sample members had children age three and under at the time of the second follow-up survey. Thus, to participate in employment-related activities, many still needed child care for very young children.

Exposure to the demonstration welfare policies and programs did not substantially reduce subsequent pregnancies and births. The programs in

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[1] The evaluation did not collect information to determine whether the relatively low levels of support from and contact with fathers resulted from mothers' desires to avoid contact with their former partners, the noncustodial fathers' desires to distance themselves from their former partner or their lack of interest in or ability to maintain a relationship with their child, or other factors.

Newark and Chicago had no significant impacts on pregnancies and births. In Camden, where pregnancy rates were highest, the program did not reduce the likelihood that mothers in the enhanced-services group ever became pregnant or the likelihood that they gave birth to a second child during the follow-up period. Mothers in the enhanced-services group, however, had slightly fewer pregnancies and births.

CHILD DEVELOPMENT

When they were in elementary school, the first-born children of the teenage mothers performed poorly, compared with children nationally, on several measures of development and well-being. Because early development sets children on a developmental trajectory that affects their later cognitive and social-emotional well-being, it is important to note that the children in the sample received substantially lower scores than children nationally on the PPVT-R receptive vocabulary test. Analyses of national data suggest that the PPVT-R is biased against minority children; however, because research suggests that the PPVT-R is a good predictor of scholastic aptitude for both African American and white children, the PPVT-R remains a useful measure of cognitive well-being when comparisons are made within racial groups or between groups whose racial and ethnic composition is the same. The PPVT-R scores received by children in the TPD sample, who were mostly African American and Hispanic, are somewhat lower than the scores of African American and Hispanic children nationally. The children in the sample received higher scores than children nationally on a measure of behavior problems.

The programs produced no impacts on mothers' parenting or on the quality of the home environments they provided for their first-born children. In Camden and Chicago, there were no significant differences in the key measures of parenting and the quality of the home environments of children of mothers in the regular- and enhanced-services groups. For Newark, the analysis suggests that the children of mothers in the enhanced-services group lived in slightly lower-quality home environments than did the children of mothers in the regular-services group and that the children had mothers who were slightly less responsive and accepting. These differences are small, however, and not very meaningful in terms of their likely implications for children's development.

Requiring teenage mothers to participate in activities, and increasing their use of child care when their children were very young, had neither harmful nor beneficial effects on their children's development. The programs increased the extent and intensity of child care, especially center-based care, during the first two years after intake. When children were in child care during that period, most were in care for at least 30 hours per week (Schochet and Risker 1992). We found no significant differences between the regular- and enhanced-services groups in children's cognitive and social-emotional well-being and physical health when these children were five to eight years old, except in Newark, where some small

differences in children's outcomes were significant. On two out of four achievement tests, children of mothers in the enhanced-services group in Newark scored significantly lower than did children of mothers in the regular-services group. Mothers in the enhanced-services group in Newark also rated their children significantly lower on a measure of prosocial behavior. These differences are small, however, and in developmental terms, not very meaningful.

IMPLICATIONS

Since the TPD was conducted, welfare policies have changed. The Personal Responsibility and Work Opportunity Act of 1996 sets forth clear expectations for families receiving welfare through education and residency requirements for minor, unmarried teenage parents and through work requirements, tune limits on lifetime welfare receipt, and requirements for cooperation with establishing child support for all welfare recipients. Programs and policymakers may find the following lessons from the experiences of the TPD programs useful, however, since they implemented clear expectations for participation in self-sufficiency-oriented activities and provided case management and support services to help young mothers meet those expectations:

Teenage mothers respond positively to clear expectations when financial consequences and support services accompany those expectations. As long as the programs were operating, participation requirements were in effect, and support services were available, mothers in the enhanced-services group were significantly more likely to continue their education, attend job training, or work. However, after the programs ended and the clear expectations for participation in self-sufficiency-oriented activities no longer existed, such impacts were no longer obtained.

Most teenage parents are capable of employment but need encouragement and some support services. Most of the young mothers were employed at some time during the six-and-a-half-year follow-up period. Few of the jobs obtained by the young mothers paid good wages, however, and many did not offer benefits such as health insurance. Many of the mothers in school, training, and employment needed help finding child care and dealing with breakdowns in child care arrangements. A significant proportion also needed help paying for child care.

Ensuring access to child care was an important part of the intervention, but fewer participants used program-provided child care subsidies than had been anticipated. All three demonstration programs encouraged participants to rely on child care arrangements that they could obtain without additional financial assistance from the program, to the extent feasible. With this encouragement, about one-third of those active participants needing child care obtained free child care, most often from relatives. One-third of the mothers in school, training, or work needed help paying for child care. The proportion needing child care assistance may be different under the new welfare policies, if the type or amount of child care assistance

offered is different or if relatives who would otherwise provide child care must seek employment themselves.

The evaluation results suggest that requiring teenage mothers of young children to participate in full-time (30 hours per week) out-of-home activities is not harmful to children, as some worried that it might be. Requiring teenage mothers to participate in education or employment-related activities for an average of two and a half years when their children were very young, and providing child care assistance when necessary, did not adversely affect children's well-being when they were in early elementary school. It also, however, did not help them over this period. If an important goal is to help children overcome the disadvantage of being born to a teenage mother, then programs may need to adopt a two-generation approach and offer high-quality developmental child care or other child-focused services such as intensive parenting education (or help mothers gain access to such services).

It is important to help teenagers reduce their fertility, but different strategies than those tried in this demonstration are needed. The information about contraception and sources of birth control provided by the programs during the workshops was not enough to enable the teenage mothers to reduce their fertility. Other studies of teenage pregnancy prevention interventions suggest that more intensive, focused strategies, such as providing information, counseling, referrals, and followup during home visits by nurses, might work better.

The demonstration underscores the difficulty of changing the life courses of poor teenage parents by intervening after they become parents. The consequences of teenage parenthood for both mothers and children are serious, and many of the teenage mothers who enrolled in the demonstration programs were still living in difficult circumstances as young adults. The programs did not substantially alter the life courses of the disadvantaged young mothers they served. The difficulty of improving the lives of mothers who give birth as teenagers highlights the importance of developing strategies for preventing teenage pregnancies in the first place. For welfare-dependent teenage parents, strategies that build on the demonstration programs' promising early experiences and follow through by continuing to hold expectations for participation in employment-related activities and to provide needed support services over a longer period may be more successful in improving the life courses of teenage parents.

The noncustodial fathers of children born to poor teenage parents provide little social or economic support. A small proportion of the noncustodial fathers of the mothers' first-born children provided financial or in-kind child support when their children were still very young, and even fewer provided support when the children were in early elementary school. Most did not have regular contact with their child. The programs attempted to promote fathers' financial and social support by counseling mothers, providing services to fathers (in Chicago), and arranging for staff from the state child support enforcement agency to spend time at the program

site conducting workshops and interviews necessary for establishing paternity and child support orders (in Newark and Chicago). The experiences of the demonstration programs suggest that stronger measures, such as mandating mothers' cooperation with child support enforcement procedures, providing more extensive counseling to convince mothers of the importance of fathers in their children's lives, and/or designing more comprehensive program services for fathers, may be needed to increase the support teenage mothers receive from the fathers of their children.

I. INTRODUCTION AND SUMMARY

Because they are more likely to become dependent on welfare, teenage parents were a special focus of the 1988 Family Support Act and are a special focus of the most recent welfare reform legislation, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. In 1988, Congress changed the welfare rules to allow states to require teenage mothers aged 16 to 19 who were not enrolled in school and who lacked a high school diploma or its equivalent to participate in the Job Opportunities and Basic Skills Training (JOBS) program, regardless of the age of their child. In 1996, Congress imposed work requirements and time limits on nearly all welfare recipients and changed welfare rules to require unmarried minor teenage parents to live in an adult-supervised setting and teenage parents who have not completed high school or equivalent to participate in education as a condition for receiving welfare benefits paid from federal funds.

Anticipating the mandatory participation requirements of the 1988 Family Support Act, the U.S. Department of Health and Human Services (DHHS), in 1986, launched the Teenage Parent Demonstration (TPD) to test the feasibility and effects of requiring teenage parents on welfare to participate in activities aimed at achieving economic self-sufficiency in order to receive maximum welfare benefits. Public welfare agencies in Illinois and New Jersey were awarded grants to design and implement the TPD programs. The Illinois program, Project Advance, operated in the south side of Chicago; the New Jersey program, Teen Progress, operated in Newark and Camden. The programs began serving young mothers in mid- 1987 and continued through mid-l 99 1.

DHHS contracted with Mathematica Policy Research, Inc. to evaluate the demonstration programs. The first phase of the evaluation focused on documenting the implementation and costs of the programs, assessing the service needs and use of participants (including special studies of

child care needs and use), and examining the short-term impacts of the programs on mothers' prospects for attaining economic self-sufficiency. The second phase of the evaluation focused on measuring the endurance of the short-term impacts of the programs on mothers' prospects and assessing program impacts on the well-being of each mother's first-born child during the first few years after the program requirements and special services ended.

This report presents the findings from the second phase of the evaluation. The remaining sections of this chapter provide an overview of the demonstration rationale, the intervention design, the demonstration evaluation, and a summary of the key findings. The following chapters present the evaluation findings in detail.

A. RATIONALE FOR THE DEMONSTRATION

DHHS initiated the TPD in response to high rates of teenage pregnancies and births, the high likelihood that teenage mothers will go on welfare and receive it for long periods of time, and early evidence that the age of the child was not a barrier to participation. More than 1 million teenage women-- 12 percent of all women aged 15 to 19--become pregnant every year, and slightly more than half a million teenage women have a baby (Alan Guttmacher Institute 1994). In 1994, 78 percent of these births to teenagers were first births (Moore, Romano, and Oakes 1996). Most of these early childbearers are single parents with sole responsibility for their children; fewer than 30 percent live with adult relatives, and fewer than one-third receive financial assistance from the noncustodial fathers of their children (Maynard 1995). Nearly half of all teenage-mothers go on welfare within five years after becoming a parent. The initial welfare spells of more than half of the young mothers last two years or more, and 40 percent of the spells last at least four years (Gleason, Rangarajan, and Schochet 1998, forthcoming). Moreover, most teenage parents experience multiple episodes of

welfare dependence, and they spend an average of 8 to 10 years on welfare (Maxfield and Rucci 1986; Ellwood 1988; and U.S. House Ways and Means Committee 1993).

The estimated cost to taxpayers for teenage childbearing is high. Even after controlling for other differences between earlier and later childbearers, scholars estimate that taxpayers spend an average of $3,042 per year over the 13 years following a teenager's first birth, an amount that could be saved if childbearing were delayed until she was 20 or 21 (Maynard 1996). For all teenage childbearers, this totals $6.9 billion per year spent on public assistance, health care costs for the children, foster care costs, prison costs, and lost tax revenues. Of this total, $2.2 billion is the result of higher public assistance (welfare and food stamps), and $1.5 billion is the result of higher medical costs for the children (Maynard 1996).

Reducing this high public cost of teenage childbearing has become a high priority. Policymakers are searching for effective strategies both for preventing teenage pregnancies and for improving the life chances of teenagers who have children. The TPD was designed to test the effectiveness of innovative programs for improving the economic self-sufficiency of welfare-dependent teenage parents. The programs *required* all teenage mothers who were on welfare for the first time with their child to participate in education, job training, or employment-related activities, while also offering support services (mainly case management, child care assistance, and transportation assistance) to help them meet this requirement. Unlike earlier programs, the TPD programs required mothers to participate in activities regardless of the age of their child. In fact, program designers believed that engaging teenage mothers as soon as possible after their child's birth in activities designed to make them self-sufficient was important for fostering motivation and favorable attitudes toward education and employment. The program requirements and special services were in effect for four years (approximately the period covered by the first follow-up

survey). After that time, all three sites reverted to their regular welfare policies and JOBS services for teenage parents.

B. OVERVIEW OF THE DEMONSTRATION INTERVENTION'

The primary objective of the TPD was to find ways to increase the prospects for economic self-sufficiency among teenage mothers. The demonstration was based on the principle that, while the government has an obligation to help welfare-dependent teenage mothers overcome barriers to self-sufficiency, the young mothers must take primary responsibility for their welfare. The demonstration also maintained that the intervention should be as early as possible, before dependency patterns are established.

1. Target Population

The demonstration challenged the widespread view, prevalent at the time, that work incentives and program participation requirements should be restricted to women who do not have preschool-age children. The target population for the demonstration included all teenagers in the demonstration sites who, for the first time, were parents *and* who were receiving Aid to Families with Dependent Children (AFDC) (either as the head of their own cases or as "minor" mothers) or (in Illinois only) who had no children but were in the third trimester of a pregnancy and were receiving AFDC. The demonstration population included all teenage parents regardless of their age or the age of their child. However, the demonstration excluded teenage parents who had more than one child when they began receiving assistance or who had previously received AFDC with their child.

The demonstration programs focused on a population that was more narrowly defined in some ways and more broadly defined in others than the population subject to mandatory participation

'See Gleason et al. (1993) for a more comprehensive description of the TPD programs.

requirements in the JOBS program. The demonstration target population included teenage parents regardless of their age, whereas those younger than 16 were exempt from JOBS requirements. It also included teenage parents who were attending school or were high school graduates at the time of referral, whereas students and high school graduates with children under age 3 were exempt from JOBS requirements. On the other hand, the demonstration target population excluded teenage parents who had more than one child when they began receiving assistance or who had previously received AFDC with their child; these teenagers were required to participate in JOBS if they were between 16 and 19 years old and were high school dropouts.

During the demonstration period, almost 6,000 teenage mothers joined the welfare rolls in the three demonstration'sites, and nearly 90 percent attended intake and enrolled in the demonstration. Half of those who enrolled in the demonstration were assigned at random to participate in the programs (the enhanced-services group); the rest became part of a control group and received regular AFDC services (the regular-services group).

Most of the teenage mothers who enrolled in the demonstration were between 17 and 19 years old, but approximately 5 percent were age 15 or younger. The vast majority of the mothers were members of minority racial and ethnic groups (76 percent were African American and 17 percent were Hispanic). More than 80 percent had a child under one year of age, and more than 60 percent had an infant less than six months old.

The teenage parents who enrolled in the demonstration came from very disadvantaged backgrounds. The majority were raised in female-headed families for all or part of their childhood, and nearly half reported that their family had received welfare at least half of the time while they were growing up. The parents of many of the young mothers had also been teenage parents (70 percent).

At the time of enrollment, only about half of the teenage mothers were living in households with other adults who potentially could provide economic and social support. Very few were married, and most had never been married (92 percent). Only 17 percent of the teenage mothers received regular child support from a noncustodial father. About half of the teenage mothers lived with one or both of their parents, typically their mother. Many had a parent who was employed, but the parents tended to work at low-paying jobs and had limited ability to provide financial support or guidance to help the teenage mothers pursue employment.

The teenage mothers who enrolled in the demonstration had substantial educational deficits that posed obstacles to eventual economic self-sufficiency. Approximately one-third had a high school diploma or General Educational Development (GED) certificate. About one-third of the young mothers had dropped out before completing high school, and one-third were in school at intake. Many of those who were in school were behind in- grade level for their age. The young mothers, including many of those who had completed high school, had weak basic skills. Between 55 and 60 percent of the young mothers and more than one-third of those who had completed twelfth grade had reading scores below the eighth-grade level-the minimum level often required for participation in JTPA job-training courses.

More than half of the young mothers had some work experience prior to program enrollment, but most of the employment was at low wages and had been short-term. The majority reported facing one or more barriers that constrained their ability to work, including health problems, limited English proficiency, child care problems, and transportation needs.

Almost one-third of the demonstration sample would have been required to participate under JOBS rules when they enrolled in the demonstration. Another third--those who were younger than 16 or who reported attending school at enrollment but who did not yet have a high school diploma--

were at high risk of becoming subject to JOBS participation requirements, given the high dropout rates among this population.

2. **Program Intervention**

Participation in the demonstration was mandatory, underscoring both the obligation of the young mothers to work toward economic self-sufficiency and the responsibility of the programs to help them overcome obstacles to achieving this goal.* Those selected to participate in the programs were required to develop and comply with approved plans for activities designed to promote eventual economic self-sufficiency. If the teenage parents persistently failed to participate in planned activities, the programs initiated sanctions consisting of reductions in monthly AFDC grants by the amount normally allocated to cover the needs of the mother (generally, $160 in New Jersey and $166 in Chicago). The sanctions remained in effect until the young mothers complied with participation requirements.

The cornerstone of the demonstration programs was case management services. Case managers assessed participants' needs and goals and helped the teenage mothers develop individualized self-sufficiency plans, which focused on education, training, and employment-related services. They also helped young mothers enroll in program-sponsored and other approved services and monitored their participation in activities. The case managers provided encouragement and sympathy but also conveyed the clear and consistent expectations that were necessary to motivate the young mothers.

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[2]All teenage mothers enrolled in the enhanced-services group were subject to the policies and received special services through mid- 199 1; after that, they became subject to the welfare policies and JOBS services available at that time.

Caseload sizes ranged from an average of about 50 teenage mothers in the New Jersey programs to more than 100 in Chicago.[3]

To assist the young mothers in fulfilling their obligations, the programs provided an array of services. The service intervention in all three sites consisted of three main components: (1) program workshops; (2) education, training, and employment services; and (3) support services. In addition, the sponsoring agencies increased the emphasis on the child support process for demonstration participants beyond normal practices, including implementing policies to expedite the establishment of paternity and obligations.

a. Workshops

While participants were working with their case managers on initial assessment and planning activities, all three programs required participants to attend a series of initial workshops designed to enhance young mothers' personal skills, convey information to help them cope with their new responsibilities as parents, and prepare them for later education, training, and employment-related activities. Participants in Camden were required to participate in five initial workshops, totaling 78 hours of classroom activity over a period of about five weeks. These workshops covered motivation and employment preparation, life skills, parenting, family planning, personal grooming, and nutrition. Approximately 58 percent of participants completed at least one workshop, and one-fourth completed all required workshops.

[3]These caseload figures include participants who had left AFDC or had been sanctioned for long periods and, thus, had effectively left the program.

The Newark program held four mandatory workshops that extended over a period of as long as three months and included 97 hours of scheduled sessions.[4] The sessions covered motivation and employment preparation, life skills, nutrition, and family planning. In addition, a parenting workshop and an HIV/drug abuse workshop were offered for selected high-risk parents. Approximately 39 percent of participants in Newark completed at least one workshop, and 10 percent completed all required workshops.

The Chicago program required a much briefer series of initial workshops and achieved much higher completion rates. Staff conducted six mandatory workshops in nine hours over three consecutive days. These workshops covered parenting, child support enforcement, health and nutrition, the world of work, family planning, and motivation and self-esteem. Approximately 90 percent of participants in Chicago completed at least one workshop, and 79 percent completed all required workshops.

b. Education, Training, and Employment-Related Services

All three programs required full-time (30 hours per week) participation in education, training, and/or employment. They relied heavily on existing education, training, and employment services in their communities; however, they also developed some in-house services, using both their own staff and staff from other agencies.

The programs offered classroom GED courses for participants who had left public high schools but wished to further their education in alternative settings. Camden originally offered on-site GED and ABE classes, but enrollment in the classes was low and attendance was poor, so the program was

[4]Because of the length of their workshops, the Camden and Newark programs had to defer workshops for new participants who were in school at the time of enrollment until the next school vacation.

restructured to offer a work-study option. Beginning in fall 1988, participants could enroll in the local Youth Corps GED program, which offered morning GED classes and afternoon paid work experience.

Throughout most of the demonstration period, Newark offered on-site remedial education/GED classes. However, in February 1989, Newark divided its on-site education course into two courses--a GED class for those with stronger skills and a basic skills class for those whose reading skills were below the seventh-grade level.

The Chicago program referred students to community-based GED programs. It also offered in-house education preparation workshops for students having difficulty in school. The in-house workshops offered students guidance on organizing their time, improving their study and test-taking skills, and becoming better listeners and consumers of educational resources.

Job readiness was promoted primarily through on-site workshops and counseling; job skills training was provided exclusively through referrals to other community agencies. Camden promoted employment through a preemployment workshop and biweekly on-site mini job fairs. A half-time job developer worked with participants to find suitable job openings and on-the-job training slots. Through 1988, Newark case managers and GED instructors were responsible for identifying training providers and job openings suitable for employment-ready participants. After that time, a full-time job counselor was stationed in the program office. The Chicago program offered in-house employment-readiness preparation, as well as job training and work experience placements through community providers. In addition, it offered job-ready participants a job club and an independent job search program. All three programs attempted to place qualified participants in JTPA-funded job training courses.

c. Support Services

All three programs offered child care assistance to participants who needed it in order to participate in required activities. The programs were not designed with the goal of improving the development of participants' children, and they did not try to influence the quality of child care used by participants. They did, however, take steps to ensure that child care paid for with program resources met state licensing standards or was safe and adequate.

All three programs encouraged participants to rely on child care sources that were accessible to them without additional financial assistance, to the extent feasible. When necessary, however, child care payments were available for licensed child care centers and licensed or approved family child care providers caring for children of mothers participating in workshops, attending school or training programs, or working.[5] In addition, the Chicago and Newark programs had specially equipped child care rooms for use by participants while engaged in on-site activities or in emergencies, and the Camden program used general staff to care for children as needed when participants were on site. The programs also provided substantial assistance to help the young mothers find acceptable child care and to deal with breakdowns in child care arrangements.

The programs also provided financial assistance for transportation, as well as payments for miscellaneous training and education expenses, such as uniforms, registration fees, and tools. The Camden and Newark programs paid standard daily stipends of between $5 and $7 to cover the cost

[5]In Camden and Newark, before authorizing subsidies, a child care worker visited each center and family child care home to determine that it met state standards. In addition, in Newark all family child care providers receiving payment from the program were required to attend a three-hour class designed to enhance the quality of care they provided. In Chicago, the program relied on the licensing agency to ensure that licensed providers met state standards. Before authorizing payments for unlicensed child care providers, case managers visited the providers to determine whether their facilities were adequate and they were capable of providing adequate care (Hershey and Nagatoshi 1989).

of transportation and lunches. They also provided some van service to and from scheduled activities. In Chicago, staff issued transit authority tokens and passes in advance for short-term activities and, for longer-term activities, authorized advance payments on the basis of actual trip costs (generally about $2.50 per day).

3. Program Costs

Program costs were modest. For the steady-state demonstration operating period, average program spending per participant (not counting the AFDC grant) was about $1,400 per year (Hershey and Silverberg 1993).[6] These direct program expenditures were supplemented by an average of about $800 per participant in community-provided services (including alternative educational services, but not regular high school). This brought the average annual resources to $2,200 per participant per year, with the average ranging from $1,800 in Chicago to $3,200 in Camden. These total costs are well within the range of average costs for previous adult work-welfare demonstrations, which generally offered an average of six months of job training (Maynard, Maxfield et al. 1986; and Maxfield 1990).

In all sites, the major share of resource costs (40 to 50 percent) was associated with case management and support services. Job training was the next largest component, accounting for up to a third of project-related resources at the Chicago site and 12 to 14 percent at the others. Many of the differences in cross-site expenditures can be attributed to economies of scale. For example, the Chicago program had lower average central management costs and much lower average case management costs because of its much higher average caseload during the period (about 80, versus 40 in the New Jersey sites). The Chicago program also spent minimal resources on workshops (since

[6]During this time, participants received AFDC for an average of eight to ‘nine months.

it primarily offered brief introductory workshops), and it spent much less on support services (particularly child care).

4. Program Participation

The demonstration program staff took the mandatory participation requirements and their obligations to work with the young mothers to overcome barriers seriously. Through the efforts of committed staff, the programs succeeded in achieving participation rates that compare favorably with those achieved in most work-oriented welfare programs.' Nearly 90 percent of all eligible teenagers complied with the initial program requirement to report for intake, which consisted of completing a self-administered questionnaire and a Test of Adult Basic Education (TABE) assessment. Of the teenage mothers who completed intake and were assigned to the enhanced-services group, 92 percent participated in a subsequent program activity. More than 80 percent of participants completed an extensive assessment and developed a self-sufficiency plan that established long-term goals and specified intermediate steps to move toward these goals. Seventy percent engaged in at least one of three major activities--school, job training, or employment (47 percent, 29 percent, and 33 percent, respectively). These results were achieved because program staff transmitted clear messages to young mothers about participation requirements and the consequences of noncompliance and actively worked with them to address barriers to participation.

Participation rates varied by site because of differences in program emphasis, local opportunities, and the characteristics of the population being served. More than 90 percent of the teenagers in Chicago completed at least some of a series of mandatory workshops held in quick succession over three days, while around 45 percent in the New Jersey programs completed at least

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'See for example, Gueron and Pauly (199 1), Riccio et al. (1992a), and Bloom et al. (199 1).

one of a much more extensive set of required workshops. About three-fourths of the teenagers in Chicago participated in education, training, and/or employment, compared with about two-thirds in Camden and 58 percent in Newark.

Maintaining ongoing participation was especially challenging. Through case managers' persistent monitoring and assistance, the programs were able to keep between 30 and 50 percent of the young mothers who were subject to program participation requirements active in demonstration-approved activities each month. For example, six months after intake, about 45 percent of potential participants in Chicago and about 35 percent of potential participants in Camden and Newark were active in education, training, and employment activities.

The mix of activities changed over the period of young mothers' participation. Most notably, the proportion of those employed increased over time, from 12 percent of those who were in a program-approved activity in the first month after intake to 38 percent of those who were in a program-approved activity in the twenty-fourth month after intake (Gleason et al. 1993). The mix of program-approved activities also shifted over the demonstration period, with proportionately higher rates of participation in job training and employment among later cohorts relative to earlier ones. This shift reflects the programs' increased emphasis on employment over time and their growing experience in establishing links with community services.

Participation in program activities was highest among those who had relatively high basic skills, were enrolled in school at intake, did not have any health problems, were African American or lived at home with nonworking mothers. The relationship between educational attainment and activity rates varied across the three sites, partially reflecting differences in the education and training options available and the eligibility requirements for training programs in particular. In each site,

those with a high school degree were significantly less likely than those without one to participate in education and more likely to participate in training and employment.

Activity rates were consistently lowest among TPD participants who would have been required to participate in JOBS--those who were 16 to 19 years old and high school dropouts when they enrolled in the TPD programs (30 to 35 percent in any month, compared with 40 to 50 percent for high school graduates and those who were in school or younger than 16 at the time they enrolled in the program). This pattern is consistent with the younger age of the dropouts and their somewhat lower basic skills. Like the in-school youths, the most common activity of those who were dropouts when they enrolled in the program was education.

The mandatory participation requirement was important in getting many teenage parents involved in the program. Forty to 50 percent of the New Jersey participants and 30 percent of those in Chicago failed to meet program requirements (either by not enrolling in the program or by not complying with ongoing participation requirements) and had their welfare benefits reduced until they complied with program requirements. Between seven and eight percent of the participant group members were sanctioned for failing to complete the required intake session.* Overall, 62 percent of those who completed intake were warned at some time of possible sanction because they failed to fulfill requirements for ongoing program participation. More than one-third had their grants reduced one or more times for failure to comply with ongoing requirements (Gleason et al. 1993).

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[8]Nearly two-thirds of those not completing intake left welfare within three months after being identified as eligible for the program. More than 80 percent had left within a year, and 92 percent had left AFDC during the four years after referral to the program. Sanctions and sanction warnings were very important in promoting the high enrollment rates. However, they played a minor role in moving the no-shows off welfare altogether. Only about half of the no-shows received a sanction (30 percent) or warning of a sanction (20 percent), and the other half were identified as temporarily ineligible at intake.

C. OVERVIEW OF THE DEMONSTRATION EVALUATION

DHHS contracted with Mathematica Policy Research, Inc., to evaluate the demonstration programs. The first phase of the evaluation included seven components and produced several key reports':

1. **An analysis of the short-term impacts of the programs,** based on comparisons of outcomes of eligible mothers randomly assigned to enhanced-services or control regular-services groups. Outcomes were measured using data from the first follow-up survey conducted an average of 28 months after intake and administrative wage and welfare records data. The results of this analysis are reported in *Breaking the Cycle: The Effectiveness of Mandatory Services for Welfare-Dependent Teenage Parents* (Maynard, Nicholson, and Rangarajan **1993).**

2. **A cost analysis,** which focuses on the cost of services to participants from July 1988 through June 1989, a year of steady-state operations in the middle-of the demonstration period. All services provided by or arranged by the programs, regardless of how they were paid for, are included in the calculation of program costs. Cost data were collected from state demonstration financial reports, interviews with other agencies, and activity data from program management information systems. The results of the cost analysis are reported in *Costs of Mandatory Education and Training Programs for Teenage Parents on Welfare: Lessons from the Teenage Parent Demonstration* (Hershey and Silverberg 1993).

. 3. **A process and implementation evaluation** to document the demonstration programs and provide guidelines for their replication. Information on program implementation and operations was gathered in numerous visits to the programs, in group meetings with program staff, and from program management information systems. The results of the process and implementation analysis are presented in *Implementing Services for Welfare Dependent Teenage Parents: Experiences in the DHHS/OFA Teenage Parent Demonstration* (Hershey and Nagatoshi 1989) and a series of brief topical reports prepared for program operators and policymakers (Hershey 1991 a, 1991 b, 1991 c; Hershey and Rangarajan 1993; and Maynard 1992).

4. **An analysis of the service needs and use of demonstration participants** based on information from program intake forms and program management information systems. The characteristics and needs of sample members and the patterns of participation in program activities are described in *Service Needs and Use of Welfare-Dependent Teenage Parents* (Gleason, Maynard, Nicholson, Polit, and Rangarajan 1993).

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[9] A full list of project-related reports is presented at the end of this document.

5. **A study of child care supply and demand in the demonstration sites** based on special surveys of parents and child care providers conducted in 1988 to learn about the supply and demand for child care in each of three demonstration sites. The results of this study are presented in *The Child Care Challenge: What Parents Need and What Is Available in Three Metropolitan Areas* (Kisker, Maynard, Gordon, and Strain 1989)

6. **A study of program impacts on child care needs and use** based on a special survey of a subset of 'demonstration sample members and their family child care providers conducted to learn about their child care needs and use during the first few months after enrolling in the demonstration. The early impacts of the programs on child care needs and use are reported in *Early Impacts of the Teenage Parent Demonstration on Child Care Needs and Utilization* (Maynard, Silverberg, and Kisker 1990). The impacts of the programs on child care needs and use during the first two years after program intake were assessed using data from the first follow-up survey for sample members who completed the survey by December 1991. These impacts are presented in *Meeting the Child Care Needs of Disadvantaged Teenage Mothers: Lessons from the Teenage Parent Demonstration* (Schochet and Kisker 1992).

7. **An in-depth study of the experiences, motivations, and circumstances of program participants** based on intensive qualitative information about the experiences, characteristics, and problems of young mothers in the demonstration collected in focus group interviews, personal in-depth interviews, and case reviews with case managers and other program staff. The young mothers' barriers to self-sufficiency and personal strengths, as well as their implications for designing effective programs, are described in *Barriers to Self-Sufficiency and Avenues to Success Among Teenage Mothers* (Polit 1992).

The second phase of the evaluation (the subject of this report) includes an analysis of the longer-term effects of the programs on the young mothers and their first-born children approximately six-and-a-half years after program enrollment.

The evaluation design involved random assignment of eligible teenage mothers, to either the enhanced-services group (and were required to participate in the demonstration programs) or the regular-services group (and could receive the usual AFDC services). With random assignment, simple comparisons of the means for the participant and control groups provide reliable estimates of program impacts. However, we use multivariate models to provide statistical control for residual differences between the enhanced- and regular-services groups and to control for within-group

variation in characteristics, which increases the accuracy of the impact estimates. Multivariate models also provide an efficient way of examining impacts for sample subgroups.

Data for the evaluation have been gathered from multiple sources, including program intake forms, two follow-up surveys, administrative records data, and child assessments. The second follow-up survey (which is the main source of data for this report) targeted the full samples of mothers in Camden and Newark and a random subsample of mothers in Chicago approximately six and a half years after program intake. Interviews were completed by telephone or in person with more than85 percent of the target sample. As soon as possible after the second follow-up interviews were completed, in-person child assessment sessions were scheduled with mothers who still lived in the demonstration areas and had custody of their first-born child and whose first-born child was between the ages of five and eight (approximately three-fourths of the mothers). Child assessments, which included self-administered questionnaires completed by the mothers while interviewers conducted tests and interviews with their children, were completed with 78 percent of the eligible mothers and children.

D. KEY FINDINGS

The first phase of the evaluation showed that states can operate large-scale, mandatory work-oriented programs for teenage parents. All three programs succeeded in identifying almost all eligible teenage parents when they first applied for AFDC for themselves and their child and enrolled most of these young mothers. In the short-term, the programs had positive, although modest, impacts on economic self-sufficient-oriented activities. In the longer-term, after program requirements and special services ended, the regular-services group caught up to those in the enhanced-services group, and program impacts faded.

1. Feasibility of Mandatory Programs for Teenage Parents

The demonstration showed that it is feasible to implement mandatory participation requirements for teenage parents on a wide scale without appearing to be punitive, especially if mandates are backed up by services to help teenage parents overcome obstacles to participation. Modest demonstration resources, strong case management, and mandatory participation requirements enabled programs to reach out effectively to first-time welfare-dependent teenage mothers. Throughout the period of program operations, nearly 40 percent of the young mothers who remained on AFDC were engaged in some program-approved activity (significantly higher than activity rates observed among those in the regular-services group). This rate of participation in major activities substantially exceeds the participation rate target set by the JOBS program (20 percent by 1995).

The demonstration programs turned the participation requirements and sanction policies into constructive case management tools. Case managers, who initially did not endorse the mandatory nature of the programs, soon felt strongly that their ability to reach the teenage parents and help them work through their problems was greatly facilitated by the fact that there were real consequences for the teenage mother if she did not accept responsibility for accepting help. However, administering participation requirements and their consequences requires adequate staffing so that case managers can follow up when a participant persistently fails to attend. In addition, an adequate range of education and training resources must be available to clients to back up the demand for participation. With the number of problems teenage mothers on welfare face, intervention strategies need, to include a wide range of support services and have effective procedures in place to identify needs and ensure that they are met.

The TPD showed that high rates of participation are attainable but identifying and monitoring participation requirements needs sustained effort. Achieving these high rates of participation

requires persistent program staff and staff who are trained to work creatively with the teenage mothers to address their problems. For example, case managers were required to initiate sanction actions for participants who persistently failed to meet program requirements. To avoid sanctioning noncompliant clients, the case managers worked hard to find effective ways of engaging the clients in approved program activities. They coaxed or cajoled, and then pressured, the teenage mothers to stick to their plans, and counseled them when crises arose in their lives. If the young mothers persistently failed to participate in planned activities, the case managers initiated sanction warnings and then sanction actions until the mothers resumed participation.

2. Short-Term Impacts on Mothers

The demonstration programs increased rates of school attendance, job training, and employment during the period when mothers in the enhanced-services group were subject to sanctions and received support services (Maynard, Nicholson, and Rangarajan 1993). The first phase of the evaluation showed that overall levels of participation in school, job training, and employment over the two years following program intake were substantially higher than they would have been in the absence of the programs and the supportive services offered. The programs were most effective in increasing school enrollment levels, but they also increased employment significantly. Program-induced increases in employment were accompanied by earnings gains that, combined with program sanctions, resulted in lower rates of dependence on public assistance. Except for those who became employed, however, the economic welfare of participants did not change.

The demonstration programs produced few significant differences in social and demographic outcomes during the first two years following intake, and the few estimated changes observed were not consistent across the three sites (Maynard, Nicholson, and Rangarajan 1993). In Camden, young mothers in the enhanced-services group were more likely to live with a potentially supportive adult--

parent, spouse, or male partner--and they were significantly more likely to receive financial support from their children's fathers and to have regular contact with them. In Newark and Chicago, the rates of paternity establishment were significantly higher for enhanced-services group members, but these higher rates were not accompanied by significantly higher levels of child **support.** The demonstration programs did not significantly affect pregnancy rates, but young mothers in the enhanced-services group were somewhat more likely than their regular-services counterparts to report subsequent births--an increase that was concentrated in Chicago and among older participants. In all three sites, the program tended to reduce pregnancy and birth rates among younger participants and Hispanics--groups that were most prevalent in Camden.

Because the primary goal of the demonstration programs was to reduce long-term welfare dependency, an important question remaining at the end of the first phase of the evaluation was: Do the early impacts on education, job training, and employment translate into longer-term increases in economic self-sufficiency, especially in light of the fact that the demonstration policies and services ended in mid-l 99 1 ? The second phase of the evaluation, summarized Mow, addresses this question. In addition, the second phase of the evaluation explores the question of whether the demonstration programs influenced child outcomes, which were not measured in the first phase of the evaluation.

3. Longer-Term Impacts on Mothers

The demonstration programs' early impacts on participation in employment-related activities (work, training, or education) did not translate into longer-term increases in educational attainment, employment, or earnings. After the demonstration programs ended and mothers in the enhanced-services group no longer faced activity requirements or received any special services, mothers in the regular-services group caught up to their counterparts in the enhanced-services group, and program

impacts on employment, earnings, and degree attainment faded. Longer-term activity requirements and support services may be necessary to sustain improved outcomes; just setting teenage mothers on the path toward economic self-sufficiency while their first child was very young was not sufficient for achieving longer-term improvements in employment and earnings.

At the time of the second follow-up survey, approximately six and a half years after intake, slightly more than one-third of the regular- and enhanced-services group members in Camden and Newark and nearly one-half of those in Chicago were engaged in self-sufficiency-oriented activities, primarily employment. During the year prior to the second follow-up survey, two-thirds to three-fourths of mothers in both groups had participated at some point in some self-sufficiency-oriented activity, and about half had been employed.

The modest short-term impacts of the demonstration programs on welfare receipt also faded in the longer term. The programs' sanction policies appear to have produced the short-term reductions in welfare receipt and benefit amounts. When the programs ended and sanctions for noncompliance with program requirements, as well as special services, were discontinued, impacts on welfare receipt and benefits largely disappeared. In Chicago, the pattern of consistently positive earnings impacts throughout most of the follow-up period appear to have contributed to a pattern of consistently negative impacts on welfare receipt and benefit amounts; however, the impacts are small and not significant later in the follow-up period.

Approximately seven years after the birth of their first child and enrollment in the demonstration, about 70 percent of mothers in both the regular- and enhanced-services groups were still living in poverty and relying on AFDC for at least some of their income. In Camden, during the month before the second follow-up survey, mothers in the enhanced-services group received

significantly higher average earnings than mothers in the regular-services group, but the increased earnings were not enough to lift them out of poverty.

The demonstration programs did not have any longer-term impacts on mothers' receipt of child support. Mothers in both the regular- and enhanced-services groups reported receiving very little financial support from the fathers of their children (9 to 18 percent reported receiving child support income, and about 10 percent reported receiving regular financial support from the father of their first-born child). Fathers were more likely to provide in-kind support--nearly one-quarter of the mothers reported that they were currently receiving in-kind child support (such as clothing or toys) from the father of their first-born child. Fewer than one-quarter of the mothers in both groups reported that their first-born child had regular contact with his or her father.

Although marriage or a stable relationship with a partner offers one route to economic self-sufficiency, most of the young women in the sample had not taken this route by the time of the second follow-up survey. Fewer than one-fifth of the mothers were living with a husband or partner at the time of the second follow-up survey. The demonstration programs did not alter marriage and cohabitation patterns significantly, except in Newark, where enhanced-services group members were significantly less likely to be married and significantly less likely to be living with a husband or partner (12, compared with 18 percent).

As they made the transition to adulthood, many of the young mothers in both the regular- and enhanced-services groups moved out of their parents' or grandparents' household. By the time of the second follow-up survey, when sample members were 24 to 25 years old, on average, only about 25 percent lived with their parents or grandparents, compared with about 40 percent at the time of the first follow-up survey and more than 50 percent at intake. The demonstration programs had no significant impacts on these living arrangements.

More than 85 percent of the young mothers in both the regular- and enhanced-services groups became pregnant again at least once during the six-and-a-half-year period following intake, and the majority gave birth to at least one additional child. Many of these mothers had become pregnant and had their second child early in the follow-up period. In Camden, where pregnancy rates were the highest, the program did not reduce the likelihood that mothers in the enhanced-services group ever became pregnant or the likelihood that they gave birth to a second child during the follow-up period. However, mothers in the enhanced-services group had slightly fewer subsequent pregnancies and births. The programs in Newark and Chicago did not have any significant impacts on pregnancies and births. The modest program efforts to delay subsequent pregnancies were largely ineffective, and greater emphasis on motivating and enabling young mothers to delay additional births is necessary to help sustain improvements in self-sufficiency-oriented activities.

Because they continued having children after enrolling in the demonstration, more than half of sample members still had young preschool-age children at the time of the second follow-up survey. Thus, even though most of the mothers' first-born children had reached school age, they still had preschool children for whom they needed child care in order to participate in employment-related activities. Mothers who worked or attended school or training during the year prior to the second follow-up survey were most likely to rely on school and/or relatives to care for their children. More than one-third of mothers who were active relied on multiple types of care. The demonstration programs generally did not have an impact on the patterns or levels of child care use in the longer term.

4. **Longer-Term Impacts on Children**

Early experiences set children on a developmental path that, to a large extent, will determine both their later academic abilities and their social and emotional well-being. Recent research shows

that, during the first few years of life, stimulating experiences are critical for brain development. Thus, the time during which mothers participated in the TPD programs was a critical one in the development of their first-born children, most of whom were infants and toddlers at the time of enrollment.

The demonstration programs focused primarily on improving the life chances of welfare-dependent teenagers. They provided parenting workshops for teenage mothers but did not intervene directly to improve the development of the teenage mothers' children or emphasize developmental child care.[10] Because the demonstration programs increased mothers' participation in out-of-home activities while their children were very young, however, they thus influenced their early child care choices. The programs increased both the extent and intensity of child care, especially center-based care, during the first two years after intake. When children were in child care during that period, most were in care for at least 30 hours per week (Schochet and Kisker 1992). Therefore, the programs may have indirectly affected the developmental progress of the children, either positively or negatively.

Impact analysis results suggest that, in the longer term, mothers' program participation and use of child care neither harmed their children nor enhanced their development and well-being while the children were in early elementary school. We found no significant differences between the regular- and enhanced-services groups in children's cognitive and social-emotional well-being and physical health except in Newark, where there were some small, but not very meaningful, differences in children's outcomes. On two out of four achievement tests, children of mothers in the enhanced-services group in Newark scored significantly lower than did children of mothers in the regular-

[10] "Participants in Chicago spent an average of 1.5 hours in a parenting workshop. Participants in Newark spent an average of 20 hours in parenting workshops. In Camden, the parenting workshops were offered on an as-needed basis and lasted 21 hours (Gleason et al. 1993).

services group. Mothers in the enhanced-services group in Newark also rated their children significantly lower on a measure of prosocial behavior.

In addition, we found no consistent evidence that the demonstration programs significantly influenced the quality of parenting or of children's home environments. In Camden and Chicago, there were no significant differences in key measures of parenting and the quality of the home environments of children of mothers in the regular- and enhanced-services groups. The analysis suggests that, in Newark, the children in the enhanced-services group had mothers who were slightly less responsive and accepting. These differences are so small, however, that they are unlikely to have had important implications for children's development.

Although the demonstration programs did not intervene directly with children, these findings are consistent with a growing early-intervention literature that suggests that programs that do not provide intensive, purposeful, child-oriented interventions are unlikely to influence child development significantly. Family support programs, for example, now appear to be less effective in promoting significant changes in children's cognitive, social, and emotional growth (Layzer and St. Pierre 1997) than intensive child-focused interventions such as the Infant Health and Development Program (Brooks-Gunn et al. 1994). Furthermore, even intervention programs with strong immediate impacts on child development have difficulty demonstrating effects that last as long as first or second grade (Barnett 1995; and Devaney, Ellwood, and Love 1997).

E. ORGANIZATION OF THE REPORT

This report presents the results of an analysis of the longer-term effectiveness of the programs in promoting economic self-sufficiency among welfare-dependent teenage parents. It examines whether the programs indirectly influenced the well-being of participants' first-born children. Chapter II describes the sample for the analyses, presents our analytic approach to addressing the

main research questions, and addresses potential analytic and data-related concerns. Chapters III through V present estimates of the demonstration programs' effects on mothers' out-of-home activities (education, training, and employment), welfare dependence and economic well-being, and other social, demographic, and health outcomes. Chapter VI presents estimates of the programs' effects on the development and well-being of the mothers' first-born children. Chapter VII draws lessons from the experiences of the TPD programs. Appendixes A through D provide supplementary data related to Chapters II through V, respectively. Appendix E describes the child assessment measures used in the study, and Appendix F provides supplementary data related to Chapter VI.

II. SAMPLE AND ANALYTIC APPROACH

The sample and analytic approach for the study were designed to support a rigorous assessment of the demonstration programs' effectiveness in promoting self-sufficiency-oriented activities and in reducing welfare dependency. Specifically, the evaluation strategy was designed to permit an accurate assessment of such questions as:

- Did the programs increase the likelihood of the young mothers' participation in self-sufficiency-oriented activities such as education, training, or employment?
- Did the programs reduce the young mothers' reliance on welfare?
- Did the programs affect future pregnancies and births or the support the young mothers received from the fathers of their children?
- Did the programs affect the cognitive development or social well-being of the children born to these young mothers?

To address the questions about program effectiveness, the Teenage Parent Demonstration (TPD) evaluation was implemented using an experimental design. During a two-and-a-half-year period, July 1987 to April 1990, ***all*** teenage mothers who, for the first time, were parents ***and*** who began receiving AFDC for themselves and their child in the three sites were identified and enrolled in the demonstration. Of the nearly 6,000 eligible individuals identified in the three sites, 5,297 completed intake.' About half were then selected at random to participate in the demonstration program and receive enhanced services. The others served as a control group and received regular services.

Random assignment ensured the creation of two groups of individuals who were identical, except that those assigned to the program group were subject to participation mandates and had

'The majority of those who failed to complete intake left AFDC relatively soon after they were initially called in by the program (Gleason et al. 1993).

access to the enhanced services offered by the program, while those assigned to the control group were not subject to participation mandates and did not have access to special services. Consequently, we can attribute any resulting differences between the two groups at a later time to the program's effects.

With random assignment, estimates of program impacts can be obtained from a simple comparison of the outcomes for those in the enhanced-services group with the outcomes for those in the regular-services group. The efficiency of these estimates, however, can be improved by using analytic models to estimate impacts. In this chapter, we describe the sample and data used to answer the questions related to the longer-term impacts of the program on mother' self-sufficiency and their children's well-being, including potential concerns about the integrity of the random assignment. We then outline the analytic approach used to answer the various research questions. Finally, we consider potential analytic and data-related concerns, including the representativeness of the samples for the follow-up surveys, data quality considerations, and the varying duration of followup, and describe our strategy for dealing with them.

A. SAMPLE AND DATA

Analysis of the demonstration programs' impacts is based on the sample of 5,297 eligible teenage mothers who were referred to the programs and completed intake (Table II. 1). For all of these young mothers, we collected background data through self-administered intake forms and the Test of Adult Basic Education (TABE) basic skills test. Follow-up data on outcomes were obtained through administrative records sources, as well as through follow-up surveys. This analysis of the longer-term impacts of the demonstration programs draws on three main data sources: (1) follow-up surveys conducted with a random subset of mothers approximately six-and-a-half years following program intake, (2) administrative records data collected for all sample members enrolled in the

TABLE 11.1

THE STUDY SAMPLE

	Site			
	Camden	Newark	Chicago	Total
Sample Size				
Eligible Teenage Mothers	1,256	1,346	3,360	5,962
Completed Intake	1,218	1,190	2,889	5,297[a]
Enhanced-Services Group	633	595	1,439	2,647
Regular-Services Group	585	615	1,450	2,650
Attempted Six-Year Follow-Up Survey	1,212	1,189	1,704[b]	4,105
Enhanced-Services Group	630	574	844	2,048
Regular-Services Group	582	615	860	2,057
Completed Six-Year Follow-Up Survey	1,052	1,005	1,442	3,499
Enhanced-Services Group	561	504	704	1,769
Regular-Services Group	491	501	738	1,730
Attempted Child Assessmenf	802	783	1,095	2,680
Enhanced-Services Group	439	390	532	1,361
Regular-Services Group	363	393	563	1,319
Completed Child Assessment	612	656	829	2,097
Enhanced-Services Group	33s	33s	39s	1,065
Regular-Services Group	277	321	434	1,032
Response Rates (Percentage)				
Six-Year Follow-Up Survey[a]	86.8	84.5	84.6	85.2
Enhanced-Services Group	89.0	87.8	83.4	86.4
Regular-Services Group	84.0	81.5	85.8	84.1
Six-Year Child Assessment[d]	76.3	83.8	75.7	78.2
Enhanced-Services Group	76.3	85.9	74.2	78.3
Regular-Services Group	76.3	81.7	77.1	78.2

[a]The majority of those who failed to complete intake left AFDC relatively soon after they were initially called in by the program (Gleason et al. 1993).

[b]Six-year follow-up interviews were attempted with a random subsample in Chicago.

[c]Child assessments were attempted with mothers who completed the six-year follow-up survey and their oldest children if they still lived together in the program areas and if the oldest children were between the ages of five and eight.

[d]Interview response rates by period of enrollment are presented in Appendix Table A.l.

demonstration, and (3) assessments conducted with the mothers' first-born children approximately seven years after intake.

1. Follow-Up Surveys

We conducted two follow-up surveys: one approximately two years after intake, the other approximately six years after intake.[2] The second follow-up survey was conducted using computer-assisted telephone interviewing (CATI) with a random subset of sample members.[3] This report focuses on outcomes measured using data collected as part of the second follow-up survey!

The six-year follow-up surveys were attempted with nearly the full sample in Camden and Newark and 60 percent of the sample members who completed intake in Chicago.' We completed interviews with over 85 percent (3,499 out of 4,105) of the young mothers we attempted to survey

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*Most of the sample for the second follow-up survey was scheduled for interviewing approximately six years following intake. For cost reasons, however, the survey period was compressed, and sample members who enrolled in the demonstration late in the intake period were interviewed as early as five years after intake. Some sample members were difficult to locate and were interviewed more than six years after intake. On average, the second follow-up interviews were completed six-and-a-half years following intake.

[3]The second follow-up survey data used in this report were produced using computer programs made available through the Computer-Assisted Survey Methods Program (CSM), University of California, Berkeley. Neither the CSM staff nor the University of California bear any responsibility for the results or conclusions presented here.

[4]Program impacts based on the two-year follow-up data are described in Maynard, Nicholson, and Rangarajan (1993).

[5]For cost reasons, we targeted a smaller number of sample members in Chicago for the six-year follow-up surveys. We focused on reducing the sample size in Chicago, since the sample size in this site was initially larger than in the two New Jersey sites, and site-specific analyses could still be conducted with smaller samples without much loss of power.

(Table II. 1). The average length of time between intake completion and the second follow-up survey was approximately 78 months.[6]

The survey data include detailed information on a variety of outcomes, including sample members' participation in education, employment or training activities during the year prior to the follow-up survey, sources of income at the time of followup, fertility and marital history, child care arrangements, support received from the fathers of the children, and other social outcomes.'

2. Administrative Records

Data on welfare and earnings over the period since intake were obtained from administrative records for all 5,297 sample members for whom we completed a baseline interview. The wage records data include information on quarterly employment and earnings collected by the Unemployment Insurance (UI) office in each state for an average of 78 months after intake (Appendix Table A.2). The administrative welfare data include information on monthly AFDC and food stamp eligibility and benefit amounts for all sample members for an average of 83 months after intake. In analyses using administrative records data, we focus on the first 60 months, because that is the maximum number of months for which we have administrative records data for most sample members.

3. Child Assessments

Child assessments were attempted with the children of nearly 76 percent of the mothers who completed the second follow-up survey. The "target" child for the child assessments was typically

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[6]Appendix Table A.'2 presents the distribution of the length of time between intake and the end of the follow-up period covered by the data collected from each data source.

'The two follow-up survey instruments were similar to each other with respect to information on key outcome variables obtained from the respondents.

the first-born child of the sample member (and the child that led the sample member to be enrolled in the demonstration). If a sample member still lived in the program area and had custody of the target child, and if the target child was between the ages of five and eight, the child was eligible for assessment and an in-person child assessment was scheduled. Field interviewers administered assessments, such as the PPVT-R and reading and math achievement tests, to the child.[8] At the same time, the mothers filled out a self-administered questionnaire with questions about their children and their home environment.

We completed 2,097 child assessments out of a targeted sample of 2,680 children to obtain a 78 percent response rate (Table II. 1). These assessments were conducted an average of 8 1 months following intake (Appendix Table A.2).

4. Integrity of Random Assignment

Underlying the evaluation design is the premise that we will have two statistically comparable groups of individuals in the enhanced- and regular-services groups. If correctly implemented, random assignment yields two groups of individuals with similar characteristics. As shown in Appendix Table A.3, the baseline characteristics of members of the enhanced-services group and members of the regular-services group in each of the sites are similar. Only a few differences in the characteristics of the two groups are statistically significant, and none of them is large. In the Camden sample, the enhanced-services group members had slightly more siblings, were more likely to have contact with the noncustodial fathers of their children, and were more likely to have higher math skills. In Newark, a smaller proportion of the enhanced-services-group members had ever

[8] Concerns about racial biases in the PPVT-R are less relevant in this evaluation; because any biases would affect the scores of children in the regular- and enhanced-services groups equally. See Chapter VI for a discussion of the use of the PPVT-R in the evaluation.

dropped out of school. In Chicago, slightly more of the enhanced-services-group members were living with a parent at intake, and a higher proportion had some employment experience.

B. ANALYTIC APPROACH

Our primary method of estimating the net impacts of the program intervention was to compare both overall and period-specific mean outcomes for the enhanced- and regular-services group members in each site. Although random assignment of sample members to program and control status ensured that a simple comparison of overall means of the two groups would provide an unbiased estimate of the average impact on the outcome of interest, we can obtain more precise estimates by estimating multivariate models. Moreover, multivariate models provide statistical control for any remaining differences that may exist between the groups despite random assignment. Analytic models also greatly facilitate estimation of net impacts by subgroups, where the gains in precision are relatively greater because the chance for random differences in average characteristics is higher, due to smaller sample sizes. Consequently, we estimated ordinary least squares (OLS) regression models to obtain unbiased estimates of program impacts.

In our multivariate models, we included a standard set of control variables measuring demographic and background characteristics expected to affect one or more outcomes of interest. Several types of variables were included: variables that may differ between the randomly selected program and control groups, variables that may explain behavioral differences, variables that may be related to enrollment cohort or period of followup, and variables that can be used for subsequent targeting of program services. Means and standard deviations of these variables for each of the three samples (the full sample, the second follow-up survey sample, and the child assessment sample) are presented in Appendix Tables A.4 and AS.

The appropriate method for estimating these types of models depends on the form of the dependent variable. If the dependent variable is binary (for example, employment or welfare receipt during a particular time period), the model should be estimated using probit or logit estimation methods. If the dependent variable is continuous (for example, average earnings), ordinary least squares (OLS) or tobit estimation techniques are the most appropriate. We examined the sensitivity of the impact estimates to the choice of estimation method and found that the estimates are largely insensitive to the choice of the estimation method (Appendix Table A.6). Consequently, for simplicity, we present the impacts from OLS regressions.

We conducted t-tests to determine whether the estimated impacts are statistically significant using conventional 5 and 10 percent confidence levels.[9] At these confidence levels, however, approximately 5 or 10 percent of independent tests will yield a statistically significant impact when there is no true program effect (known as Type I error). Thus, in interpreting whether a statistically significant difference between the enhanced- and regular-services groups should be interpreted as a true program impact, we considered whether the sign and magnitude of the estimated impact was consistent with those for related outcomes. When there are occasional significant impacts that are not consistent for related outcomes or that are in a direction opposite to expectations, we do not place much emphasis on those findings.

In addition to the basic impact analyses, we conducted analyses of subgroup impacts. Examining whether the demonstration programs are more effective for certain subgroups of sample members than for others is useful, for two reasons. First, it is useful to know which groups of individuals within the target population were helped most by a particular program, and which groups

[9]The null hypothesis for these tests was that there is no difference between the regression-adjusted means for the regular- and enhanced-services groups (in other words, no program impact).

were helped least. This information can help tailor program services to the needs of particular subgroups. In addition, if resources are scarce, policymakers may seek to target program services toward those likely to derive the greatest benefit. Second, analyses of whether impacts differ for key subgroups may enable us to determine why average program effects differ by site or why the impacts of this intervention differ from the impacts of similar types of programs.

To examine subgroup impacts, we stratified our sample according to a number of key characteristics (see Appendix Table A.7). The subgroup stratifiers were picked on the basis of two criteria: First, they should be policy relevant and useful for program targeting purposes (for example, age and education levels at intake). Second, they should reflect cultural and background factors that help us understand 'the basic net impacts and interpret differences in impacts across the sites (for example, race/ethnicity or child gender for the child outcomes).

The subgroup models were estimated using data pooled across the sites. To estimate subgroup impacts, we included interaction variables between program status and the subgroups of interest in the model. To estimate the impact of the program for a given subgroup, we evaluated the model at the mean characteristics of the subgroup in two ways: (1) by assuming that subgroup members were in the enhanced-services group, and (2) by assuming that the subgroup members were in the regular-services group. The difference in predicted values of the outcomes for the two groups from these simulations is our estimate of the impact of the program for the subgroup.[10] Then, for each subgroup, we conducted F-tests of the significance of differences between the mean predicted values for the subgroup if participation requirements were imposed and special services were offered and

[10]When evaluating the model at the mean values of the outcomes for subgroups, we evaluated the model using the mean characteristics of the control variables for the full sample. This approach is the appropriate one for examining whether impacts differ by subgroups and for helping interpret differences in impacts across sites.

if no participation were required and no special services were offered. Because subgroup impacts were estimated for a wide range of outcomes, it is likely that some of the estimated impacts are significant by chance. As in the basic impact analyses, we do not place much emphasis on occasional, significant subgroup impacts when they are not consistent for related outcomes or are not in the expected direction.

C. OTHER ANALYTIC ISSUES

Several analytic and data-related issues affected our final decisions regarding the analysis and choice of outcome measures, including (1) the representativeness of the survey sample, (2) data quality considerations, (3) differences in individual characteristics or the programmatic environment over time, (4) the varying duration of followup, and (5) similarities in the underlying behavioral patterns across the different sites. In the following subsections, we discuss the origin of our concerns and the results of our consideration of each issue and their analytic implications.

1. Representativeness of the Baseline and Follow-Up Samples

The sample used in the study is highly representative of the population of first-time welfare-dependent teenage parents in the demonstration sites. A high degree of representativeness was achieved because the projects identified virtually all newly eligible teenage parents during the demonstration period. Nearly 90 percent of these young mothers completed intake and were included in our sample frame. Because we have administrative data for all sample members, the record-based outcomes are representative of the full sample.

We achieved high response rates (over 80 percent) in both of the follow-up surveys. Furthermore, response rates were equally high for those in the regular- and enhanced-services groups. Although we attained high response rates among those targeted, we were concerned about

the representativeness of the sample, since we targeted only a random 60 percent of the Chicago sample for the second follow-up survey, and since we targeted only 65 percent of the children of the sample members for the child assessment. A comparison of the targeted and full samples shows that the two groups were similar (see Appendix Tables A.3 and A.8).[11]

There were some differences, however, between the sample targeted for the child assessment and the full baseline sample in all three sites. Consistent with the eligibility rules, sample members targeted for the child assessment survey had younger children, on average, than the full sample (Tables A.3 and A.9). Also, the sample members targeted for the child assessment in Camden and Newark were less likely to have limited English proficiency compared with the full sample, and they were more likely to be living with a parent at intake. In addition, fewer Hispanics and more non-Hispanic blacks were targeted for the child assessment in Camden, compared with the full sample in that site. In Chicago, there were fewer dropouts in the sample targeted for the child assessment compared with the full sample. We took these differences into account by including these variables in our regression models to estimate impacts and also by examining impacts separately for some of these key subgroups.

Nonresponse to the follow-up survey can bias the impact estimates if program effectiveness varies systematically between respondents and nonrespondents. Given the high response rates achieved, attrition bias was not a significant problem. We compared the baseline characteristics of respondents to the second follow-up survey and child assessment (Tables A. 10 and A. 11) with those of the samples targeted for the second follow-up survey and the child assessments (Tables A.8 and A.9). We found that respondents in both samples had characteristics very similar to those who were

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"Maynard Nicholson, and Rangarajan (1993) show that the characteristics of those targeted for the first follow-up survey were also similar to those of the full baseline sample.

targeted for the follow-up survey. In Camden, we found that those who completed the second follow-up survey were less likely to have limited English proficiency compared to the targeted sample.[12]

2. Data Quality

Data for the analyses came from two sources: (1) administrative records, and (2) follow-up interviews and child assessments. As an information source for the evaluation, each data source has strengths and weaknesses. The greatest strength of the administrative data is that they are available for the entire sample. The greatest strength of the survey data is their richness in terms of providing supporting contextual information on employment and earnings, as well as other types of outcomes such as income and its sources.

Both survey and administrative data are subject to reporting errors, although the nature and source of errors differ. Survey data are subject to response error associated with faulty recall, especially for relatively long recall periods. Administrative data often are not comprehensive in coverage. For example, certain types of employment are not subject to state reporting requirements and are not reflected in administrative data. Similarly, out-of-state earnings and welfare receipt are not reflected in administrative data.

Employment and Earnings. Because the period since the first follow-up survey was relatively long (about four years), and survey respondents were likely to have difficulty reporting employment and earnings for the full period accurately, we asked for detailed information on employment and

[12]In addition, using administrative records data, which we have for the full sample, we compared impacts on wages and welfare for the respondents to the survey and respondents to the child assessments with the impacts obtained from the respective targeted samples. We found that the estimated impacts across the two groups were very similar in magnitude and significance (Tables A.12 and A.13).

earnings only for the year preceding the second follow-up survey. Since the interviews were conducted approximately six-and-a-half years following intake, for most sample members, these data cover employment between six and seven years after intake. For most sample members, the administrative records data on employment and earnings cover the five-year period since intake. Consequently, in our analysis, we chose to focus on employment and wages and other detailed job characteristics from the follow-up interviews for the period around the time of the survey (and the year prior to the survey for some outcomes), and used administrative records data to describe the pattern of employment and earnings during the five-year period following intake.[13]

Welfare Receipt. For the analyses of welfare dependence, we have chosen to use the administrative data because they more accurately reflect the AFDC checks issued and are available for the full sample. As in the case of the wage records data, for most sample members, these data are available for the five-year period following enrollment (and longer periods only for the early enrollees). The follow-up survey includes information on the amount of AFDC benefits received during the month prior to the follow-up period (and information on receipt during the year prior to the interview). As in the case of employment and earnings, we have relied on the administrative records for data on the patterns of AFDC and food stamp receipt and benefit amounts during the five-year period following intake. We used information from the survey to construct measures of the sources of income at the time of the follow-up survey, since the survey data provide a consistent

[13]Levels of employment and earnings from surveys and from administrative sources do not always match, although the misreporting should not differ for the groups. Maynard, Nicholson, and Rangarajan (1993) provide a comparison of estimated impacts on the same sample members, using data from the two sources. They find that, although the point estimates of employment and earnings impacts based on administrative data were generally larger than those based on the survey data, the differences in the earnings impact estimates were not statistically significant. We cannot perform a similar comparison here because there is little overlap in the time periods across the two data sources.

source of information for the survey month on income from a wide range of sources, including sources that are included in records data.[14]

3. Cohort Differences

Since individuals enrolled in the demonstration at different points in time, we may observe differences in program impacts either because the characteristics of young mothers enrolling at different points in time differed or because there was some change in the environment over this period. We examined this issue in our first follow-up analysis and found no large differences in the characteristics of people who enrolled at different points in time (Maynard, Nicholson, and Rangarajan 1993). Thus, we make no special effort to control for cohort differences beyond controlling for individual characteristics and time period of enrollment in our analysis.

We subsampled later enrollees in the Chicago site for the follow-up interviews. Our earlier analysis showed that the differences between the early enrollees and the later enrollees subsampled for the follow-up survey were modest (Maynard, Nicholson, and Rangarajan 1993). Thus, we did not weight the Chicago sample to reflect the probability of inclusion in the resurvey subsample.

4. Varying Duration of Followup

Varying duration of followup potentially can affect estimated impacts in at least three situations. First, if the length of the follow-up period varies by cohort and impacts also vary by cohort, it is possible that period-specific impacts over certain time periods may simply reflect cohort effects.

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[14]Maynard, Nicholson, and Rangarajan (1993) also compare the consistency of AFDC measures reported in the survey and those obtained from the records data. They find that administrative data on AFDC and food stamp receipt revealed higher rates of receipt and benefit amounts, as well as larger estimated program impacts, than the survey responses. Moreover, consistent with the fact that more comprehensive reporting of information tends to lower the variance of the estimates, more of the estimated impacts based on administrative data were statistically significant.

Second, with varying durations of followup, outcomes measured at follow up do not pertain to a consistent follow-up period for all sample members, making it difficult to interpret the measures. For example, we have between five and eight years of follow-up data for the sample members in our study; an outcome defined at followup may reflect only five years of followup for some individuals but up to eight years of followup for others. To the extent that program impacts may change over time, varying lengths of followup make it difficult to interpret impacts, because they may reflect different period-specific impacts. Third, if the length of the followup period varies among those in the regular- and enhanced-services groups, we may be measuring outcomes at different periods for the two groups.

Since we are measuring most of our impacts over a relatively long follow-up period--five to eight years following intake--we do not expect large changes to occur during a period this far out in the future. Nevertheless, to get around the problem of varying duration for outcomes based on administrative records data, for most sample members, we define program impacts consistently over a five-year follow-up period. A similar strategy is not possible for defining a common period following intake based on the follow-up survey data, because sample members were asked only to provide detailed information on outcomes at the time of the interview or during the year prior to the interview.

The length of time between intake and the follow-up survey is correlated with the time of program entry. That is, early program enrollees are more likely to have longer follow-up periods, and later enrollees have shorter follow-up periods. The length of the follow-up period, however, does not differ between sample members in the regular- and enhanced-services groups.

To examine how sensitive the impacts are to the length of the follow-up period, we examine the characteristics of sample members based on the length of their follow-up period. In all three sites,

there are several differences in the distribution of characteristics of sample members according to the length of their follow-up period; these differences are often driven by differences between those with follow-up periods of more than seven years and those with shorter follow-up periods. The pattern of differences generally suggests that sample members with more than seven years between intake and followup tend to be more disadvantaged compared with those who had shorter follow-up periods (Table A. 14). This pattern is generally consistent with the fact that those with the longest follow-up periods are those who were hardest to locate for the follow-up survey. On the basis of these results, our general approach has been to control for individual characteristics and the time of enrollment (which is highly correlated with the length of time between intake and followup) in the analysis.

5. **Pooling Across Sites**

Consistent with the earlier round of analyses, we conducted most of the analyses separately by site. First, known differences in the characteristics of both the target populations and the programs are most fully accounted for in site-specific analyses. Second, separate results from three fairly different models of implementing the demonstration guidelines and services provide a basis for drawing conclusions about the effectiveness of the programs and about their replicability.

III. OUT-OF-HOME ACTIVITIES

The primary goal of the Teenage Parent Demonstration (TPD) programs was to promote economic self-sufficiency and reduce welfare dependency among disadvantaged teenage parents. Employment offers disadvantaged young mothers the best prospect for escaping long-term welfare dependency. Yet, when they enrolled in the demonstration, many young mothers faced major barriers to achieving economic self-sufficiency--parenting responsibilities, lack of financial support, poor basic skills and educational histories, youth and immaturity, and difficult family and neighborhood circumstances (Polit 1992).

The demonstration programs sought to address these barriers and promote teenage mothers' involvement in major activities--school, job training, and employment--which would enhance their prospects for achieving long-term economic self-sufficiency. The programs required participants to develop and comply with approved plans for full-time (30 hours per week) self-sufficiency-oriented activities. If they persistently failed to participate in planned activities, the programs initiated sanctions consisting of reductions in monthly AFDC grants by the amount normally allocated to cover the needs of the mother (generally, $160 in New Jersey and $166 in Chicago). The sanctions remained in effect until the young mothers complied with participation requirements. The programs assigned participants to case managers, who assessed their needs and goals, helped them develop individualized self-sufficiency plans, facilitated their enrollment in services, encouraged them and conveyed the clear expectations for participation that were necessary to motivate the young mothers, and monitored their participation. The programs also required participants to attend workshops designed to enhance their personal and parenting skills and prepare

them for later education and employment-related activities. To enable participants to fulfill their obligations, the programs also provided child care and transportation assistance.

The early impacts of the demonstration programs on self-sufficiency-oriented activities were promising. In the short run, the demonstration programs succeeded in increasing participation in school, job training, and employment among mothers in the enhanced-services group relative to mothers in the regular-services group. Overall participation rates in school, training, or work increased from 67 percent among mothers in the regular-services group to 79 percent among mothers in the enhanced-services group. The programs were most effective in increasing school enrollment among participants (from 29 percent of mothers in the regular-services group to 41 percent of those in the enhanced-services group) (Maynard, Nicholson, and Rangarajan 1993).

The early impacts of the demonstration programs on participation in employment-related activities did not translate into longer-term increases in educational attainment, employment, or earnings. After the first followup, the demonstration programs ended, and the activity requirements and special services did not continue for mothers in the enhanced-services group. During this time, mothers in the regular-services group eventually caught up to their counterparts in the enhanced-services group, and program impacts on employment, earnings, and degree attainment faded by the time the second follow-up survey was administered six to seven years after intake.

In the following sections, we examine in more detail the longer-term impacts of the demonstration programs on employment-related activities and child care use. The next section examines overall participation in work, school, and job training activities; subsequent sections examine participation in education, training, and employment. The final section examines the child care used by mothers while they participated in their most recent activity.

A. PARTICIPATION IN ANY MAJOR ACTIVITY

As mothers in the regular-services group entered early adulthood, they were more likely to work, attend school, or participate in job training. At the time of the second follow-up survey, activity rates among mothers in the regular services group ranged from 35 percent in Camden to 46 percent in Chicago. Approximately two-thirds of mothers in the regular-services group participated in some out-of-home activity--employment, school, and/or training--during the year prior to the second follow-up survey (on average, the period 67 to 78 months after intake) (Table III. 1). [1] In any given month during the previous year, 38 to 5 1 percent worked, attended school, and/or participated in job training (Figure 111.1). Activity rates were highest in Chicago, where 46 to 51 percent were active in any given month; in Newark and Camden, these rates ranged from 38 to 44 percent. These monthly activity rates are considerably higher than the monthly activity rates of sample members during the second year after intake (23 to 27 percent in any given month in Camden, 24 to 3 1 percent in Newark, 27 to 42 percent in Chicago) (Maynard, Nicholson, and Rangarajan 1993).

Although the monthly activity rates of mothers in the regular-services group increased between the first and second follow-up surveys, those of mothers in the enhanced-services group increased very little. The mothers in the enhanced-services group, whose monthly activity rates during the second year after intake were significantly higher than those of mothers in the regular-services group, maintained activity rates at about the same level during the year prior to the second follow-up survey (between 33 to 40 percent in Camden, 36 to 40 percent in Newark, and 41 to 50 percent in Chicago).

'The year prior to the second follow-up survey ranges from five to seven-and-a-half years after intake for most sample members. The distribution of the length of the follow-up period did not differ significantly between the enhanced- and regular-services groups.

TABLE III. 1

PARTICIPATION IN ANY ACTIVITY DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Ever in Any Activity (Percent)	66.4	-2.7	67.0	-6.6**	73.0	-0.3
Average Percent of Time in Any Activity						
0	37.9	5.4	38.2	6.3++	30.7	1.3
1 to25	17.5	-1.0	14.2	-0.4++	14.8	1.0
26 to 50	11.6	-2.4	12.7	-6.1++	10.3	-0.5
51 to75	8.5	-2.4	8.1	-5.9++	9.3	2.3
76 to 100	24.5	0.4	26.7	0.1++	34.9	-4.1
(Average)	(36.8)	(-1.9)	(39.1)	(-2.9)	(47.1)	-2.4
Hours per Week in Any Activity'						
1 to 9	9.3	1.6	7.4	5.6	7.5	0.2
10 to 19	21.7	-3.2	18.1	2.5	20.0	-0.2
20 to 29	44.7	-4.3	23.0	-3.1	18.4	-1.2
30 or more	(27.1)	6.0	51.5	0.9	54.1	1.2
(Average hours)		(1.5)	(29.4)	(-0.9)	(29.5)	(0.7)
In Any Activity at Followup	34.7	0.5	39.1	-2.9	45.5	1.1
Sample Size[b]	300-491	620-1,052	309-501	590-l ,605	SOS-738	970-1,441

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

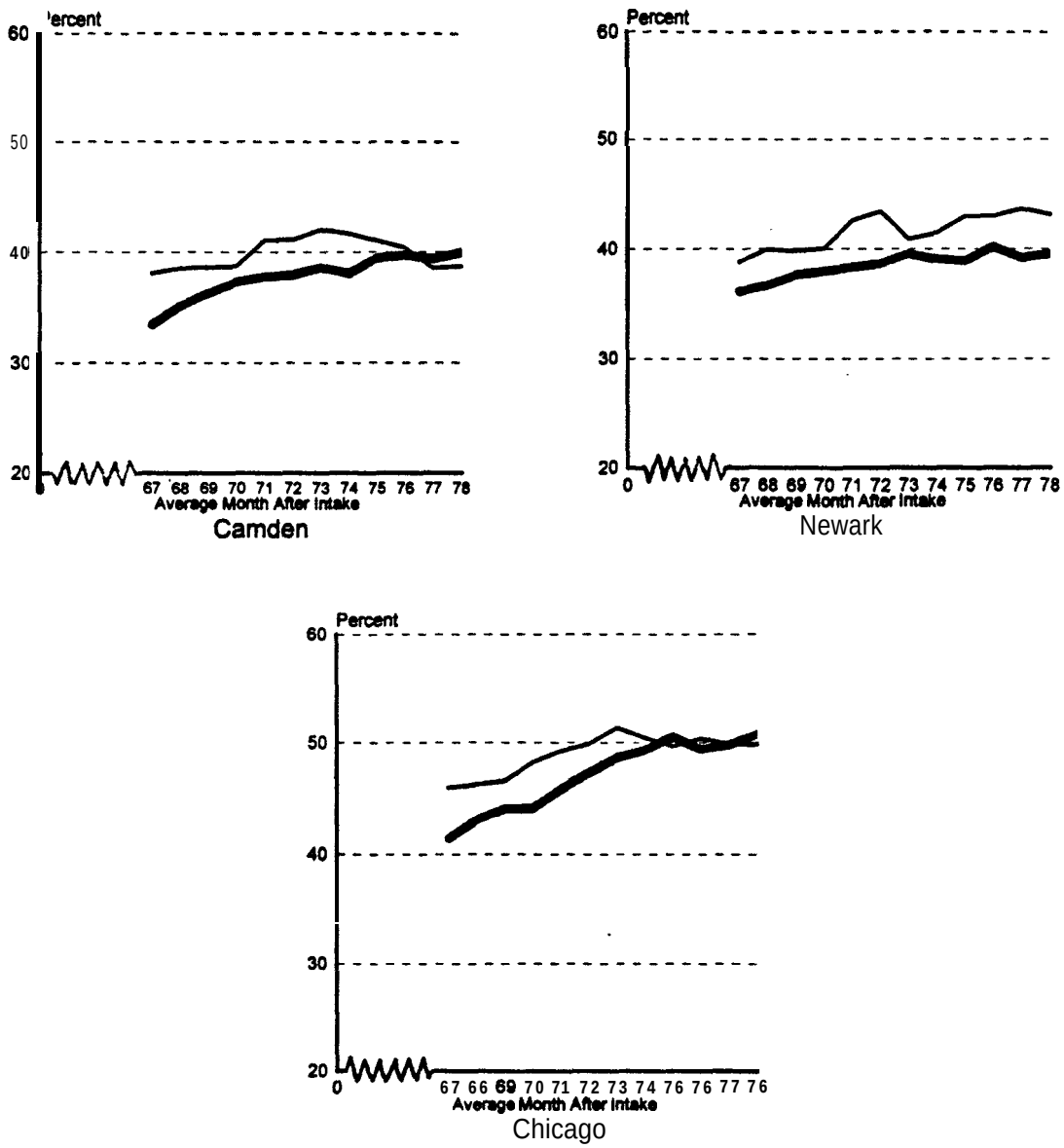
'Hours per week are calculated as the average for the months in which sample members were active, for those who reported some activity during the year prior to intake.

[b] The lower range of the sample size includes those who reported some activity during the year prior to followup.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

FIGURE III.1
MONTHLY ACTIVITY RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY
(ON AVERAGE, 67 TO 78 MONTHS AFTER INTAKE)



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as the difference6 between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and AS. Numbers underlying these graphs are presented in Appendix Tabk B.1.

The increase in participation rates among mothers in the regular-services group, along with no corresponding increase among those in the enhanced-services group, led to an erosion of the program impacts observed approximately two years after intake. The estimated program impacts on monthly activity rates during the year prior to the second follow-up survey are mostly negative in all three sites, but nearly all are small and insignificant (Figure 111.1). Correspondingly, those in the enhanced-services group were also less likely than their regular-services-group counterparts to have participated in activities at some time during the previous year (Table III. 1). These differences are small and not statistically significant for Camden and Chicago, but are significant for the Newark sample. As shown in a later section, these lower rates of activity participation in Newark are driven largely by the lower rates of employment among those in the enhanced-services group than those in the regular-services group during the year prior to the second follow-up survey.

Mothers in both the regular- and the enhanced-services groups who worked, attended school, or participated in training spent an average of 27 to 30 hours per week in these activities during the months they were in activities. Among those who were active, more than two-thirds were in an activity at least 20 hours per week, and approximately half reported being active for at least 30 hours per week. As was the case during the first two years after intake, the demonstration programs had no impact on the intensity of activity among mothers who were active.

Program impacts on activity levels are not significant for most sample subgroups. However, the subgroup analyses suggest that it was mothers who would not have been required to participate in the Job Opportunities and Basic Skills Training (JOBS) program (mostly high school graduates) at the time they enrolled in the demonstration whose activity levels caught up with and exceeded the activity levels of their counterparts in the enhanced-services group. Mothers would have been required to participate in JOBS if they were school dropouts between the ages of 16 and 19. Mothers

aged 16 to 19, who did not have a high school diploma or General Educational Development (GED) certificate but who were attending school were considered at high risk of becoming JOBS mandatory. The negative program impacts on participation in any self-sufficiency-oriented activity during the year prior to the second-follow-up survey were concentrated among mothers who would not have been JOBS mandatory (a 10.1 percentage point reduction), compared with virtually no impacts on mothers who would have been required to participate in JOBS (dropouts aged 16 to 19) and mothers who were at high risk of JOBS participation (school enrollees aged 16 to 19) (see Appendix Table B.7).

B. EDUCATION AND JOB-TRAINING ACTIVITIES

Many of the young mothers entered the demonstration programs with low levels of schooling and basic skills; therefore, the programs encouraged many participants to participate in educational activities rather than to seek employment immediately. Job training offers a supplement to or a substitute for education as a means of increasing skills and employability. Thus, the programs also offered training services through referrals to community training programs and to other vocational programs.

All three demonstration programs significantly increased the school participation of mothers in the enhanced-services group during the first two years after intake, especially participation in Adult Basic Education (ABE) and GED programs. The programs in Camden and Chicago also increased participation in job- or vocational-training programs significantly during the first two years after intake (Maynard, Nicholson, and Rangamjan 1993). Program staff hoped that these early increases in education and training activities would eventually translate into increased employment and better jobs. In addition, because the proportions of young mothers who had not received their high school diploma or GED remained high two years after intake (68 to 74 percent of mothers in the regular-

services group, across the three sites, and 54 to 63 percent of mothers in the enhanced-services group), many mothers may have continued or initiated participation in education activities beyond the first follow-up period.

1. Participation in School

A modest proportion of mothers in the regular-services group reported attending school during the year prior to the second follow-up survey (Table III.2).[2] In Camden, 24 percent of the regular-service group members reported attending school at some time during the previous year, and in any given month during that year, about 10 percent were enrolled in school (Figure 111.2). Most of those who were in school attended a GED program. In Newark, 16 percent attended school at some time during the previous year, and approximately 5 percent were enrolled in school during any given month. In Chicago, approximately 20 percent of regular-services group members attended school at some time during the previous year, and about 10 percent were in school in any given month. Approximately half of those in school were enrolled in a postsecondary program. These school participation rates are somewhat lower than those observed during the year prior to the first follow-up survey in Newark and Chicago, but they are very similar to those observed in Camden. The declines in school participation rates between the two follow-up surveys in Newark and Chicago are consistent with the fact that the mothers were getting older and some had completed high school or a GED program during the period between the surveys (see the next section). In Camden, where participation rates did not decline, the mothers were younger, on average, and were less likely to have completed high school or a GED program by the second year after intake.

*School attendance includes attendance at regular school, postsecondary school, or a GED program. Vocational school participation is included in the section on participation in training.

TABLE III.2

SCHOOLING DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Ever in School (Percent)	24.2	-3.0	15.8	1.1	20.2	-2.4
ABE/GED	15.0	-1.8	8.3	0.6	8.1	-0.2
Regular school	0.4	0.6	0.6	-0.1	0.4	-0.3
Postsecondary school	8.9	-2.1	7.1	3.0	11.7	-1.8
Percent of the Year in School						
0	77.8	3.2	85.3	-0.6	81.6	2.1
1 to 25	8.2	0.2	7.2	-0.5	5.5	1.4
26 to 50	5.5	-1.2	3.6	-0.6	3.6	0.0
51 to 75	3.3	-1.9	0.6	1.4	2.6	-1.3
76 to 100	5.1	-0.3	3.2	0.4	6.8	-2.2
(Average)	(10.8)	(-2.1)	(5.8)	(1.4)	(11.0)	(-3.4**)
Hours per Week in School[a]						
1 to 9	28.4	8.8	36.1	-7.5	35.6	1.6
10 to 19	38.3	-1.4	44.4	-0.3	43.7	0.6
20 to 29	9.4	-3.9	9.7	9.8	13.3	-2.7
30 or more	(15.8)	-3.5	(13.0)	-1.9	7.4	0.6
(Average hours)		(-1.0)		(3.0*)	(14.1)	(-0.3)
Percent in School at Followup	10.9	-2.2	7.2	-0.0	11.0	-3.3**
Sample Size[b]	107-491	210-1,052	72-501	149-1,005	135-738	248-1,441

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as differences between means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

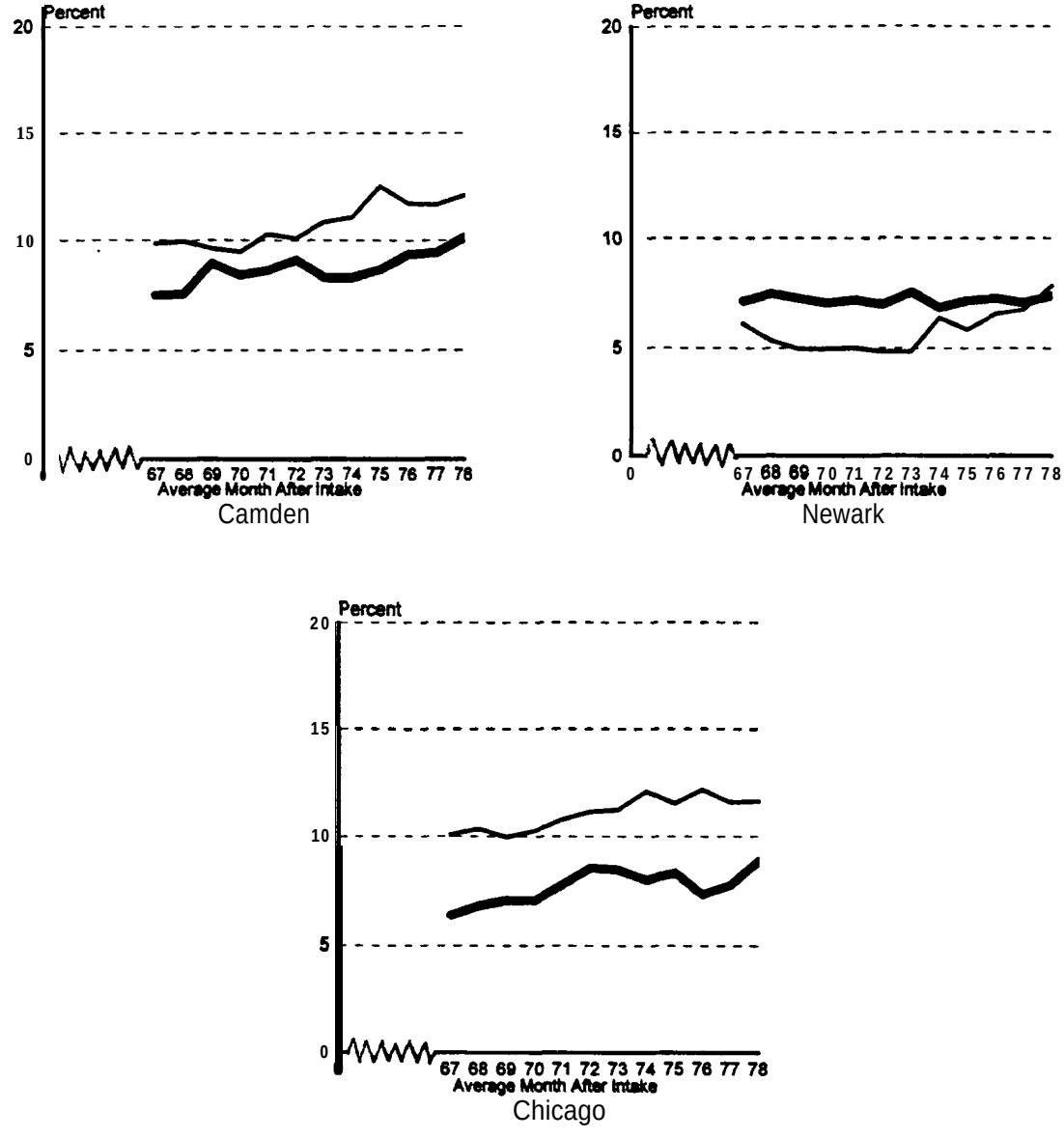
[a] Hours per week are calculated as the average for the months in which sample members were in an education activity, for those who reported some education during the previous year.

[b] The lower range of the sample size includes those who reported attending any school in the year prior to followup.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

ABE = Adult Basic Education program
GED = General Educational Development program

FIGURE III.2
MONTHLY SCHOOL ENROLLMENT RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY
(ON AVERAGE, 67 TO 78 MONTHS AFTER INTAKE)



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for tha control variables are presented in Tables A.4 and A.5 Numbers undertying these graphs are presented in Appendix Table 8.2.

The demonstration programs did not significantly affect the likelihood that mothers in the enhanced-services group ever attended school during the year prior to the second follow-up survey (Table 111.2). However, monthly rates of school participation by mothers in the enhanced-services group during the previous year were significantly lower than those of mothers in the regular-services group in Chicago (by 3 to 5 percentage points in each month--rates of school attendance that were 30 to 40 percent lower than those of mothers in the regular-services group) (Figure 111.2). In Camden, the estimated impacts on monthly school attendance rates are also consistently negative, but the impacts are significant in only one month. In Newark, the estimated impacts on monthly school participation rates are consistently positive but significant in only one month.

Very few mothers (less than one percent) in any of the sites were enrolled in regular high school during the year prior to the second follow-up survey. Camden mothers, who were younger on average, were more likely than those in the other sites to report enrolling in a GED or ABE program (15 percent, compared with 8 percent in the other two sites). Chicago mothers, who were older on average, were more likely to report enrolling in a postsecondary program (12 percent, compared with 7 to 9 percent in the other two sites). The demonstration programs had no significant impact on participation in ABE or GED programs or attendance at regular or postsecondary schools (Table 111.2).

Those who attended school during the year prior to the second follow-up survey spent an average of 13 to 16 hours per week in school while attending school. In Camden, one-third of the mothers in the regular-services group who attended school spent at least 20 hours per week in school. In Newark and Chicago, about 20 percent of mothers in the regular-services group who attended school did so for at least 20 hours per week. Mothers in the enhanced-services group who were in school in Camden were less likely than their regular-services group counterparts to spend at least

20 hours per week in school, and those in Newark were more likely to spend at least 20 hours per week in school (Table 111.2). Only in Newark is the average amount of time spent in school by mothers in the enhanced-services group significantly greater than that of mothers in the regular-services group.

Program impacts on school participation are not significant for most sample subgroups. However, enhanced-services group mothers who were early enrollees and those whose reading skills were relatively high when they enrolled in the demonstration were significantly less likely than their counterparts in the regular-services group to have enrolled in school during the year prior to the second follow-up survey (Appendix Table B.7).

2. **Educational Attainment**

The percentage of mothers in the regular-services group who had received their GED or high school diploma increased between the first and second follow-up surveys, becoming more similar to the percentage for mothers in the enhanced-services group. In Camden, 32 percent of the regular-services group members had received a high school diploma or GED by the time of the first follow-up survey. By the time of the second follow-up survey, about six-and-a-half years after intake, 46 percent had received a diploma or GED. High school diploma and GED attainment did not increase at the same rates among mothers in the enhanced-services group, and the difference between the regular- and enhanced-services group mothers narrowed and became insignificant (Table 111.3). Similarly, in Chicago, the percentage of regular-services group members who had received a diploma or GED increased from 57 to 66 percent between the two follow-up surveys, and the difference between the regular- and enhanced-services group mothers narrowed and became insignificant. In Newark, the percentage of regular-services group members who had received a

TABLE III.3

EDUCATIONAL ATTAINMENT AT THE SECOND FOLLOW-UP SURVEY
(Percentage)

	Enhanced-Services Group	Regular-Services Group	Estimated Impact
Camden			
Highest Grade Completed	10.7	10.6	0.1
Degree/Diploma Receipt			
High School/GED	47.6	45.6	2.0
High school	34.2	29.9	4.4*
GED	13.3	16.2	-2.9
College	1.5	1.0	0.5
Newark			
Highest Grade Completed	11.1	11.1	-0.0
Degree/Diploma Receipt			
High School/GED	51.8	53.8	-2.0
High school	35.9	41.1	-5.2**
GED	15.9	12.9	3.0
College	1.5	1.7	-0.2
Chicago			
Highest Grade Completed	11.9	11.8	0.1
Degree/Diploma Receipt			
High School/GED	69.1	65.9	3.2
High school	53.4	52.7	0.7
GED	15.7	13.2	2.6
College	3.3	3.6	-0.3
Sample Size			
Camden	550	481	1,031
Newark	492	485	977
Chicago	697	725	1,422

SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

diploma or GED increased from 42 to 54 percent, and the difference between the regular- and enhanced-services group mothers remained insignificant.

Consistent with general patterns of school attendance among young adults who have not completed high school, the increase in degree attainment by both regular- and enhanced-services group members between the two follow-up surveys was largely due to attainment of a GED rather than completion of regular high school. Thus, the short-term program impacts on regular high school completion (a significant positive impact in Camden and a significant negative impact in Newark) remained at the time of the second follow-up survey. Moreover, grade-attainment levels in regular school did not change appreciably between the first and second follow-up surveys.

3. **Participation in Training**

Rates of participation in job and vocational training programs during the year prior to the second follow-up survey were relatively low.[3] Approximately 15 percent of the mothers in the regular-services group participated in a training program at some time during the previous year, and 4 to 7 percent attended job training in any given month during the previous year (Table III.4 and Figure 111.3). In Camden, mothers in the enhanced-services group spent a significantly smaller proportion of time in training than those in the regular-services group. In Newark and Chicago, mothers in the enhanced-services group were not consistently more or less likely than their counterparts in the regular-services group to participate in job training. Program impacts on training participation rates are not significant for any of the sample subgroups.

[3]Job training includes regular on-the-job training, as well as vocational and trade school programs and secretarial and business school programs.

TABLE 111.4

TRAINING DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated impact
Ever in Training (Percent)'	18.4	-2.6	17.1	-1.0	18.3	1.3
Average Percent of Time Training'						
0	84.5	3.1++	86.0	0.2	85.0	-1.1
1 to25	7.9	1.2++	8.5	1.1	9.1	0.0
26 to 50	3.5	-1.0++	4.5	-2.1	2.5	0.7
51 to 75	1.2	-2.7++	0.4	0.8	1.2	0.5
76 to 100	(5.4)	-0.7++	0.6	0.4	2.2	-0.2
(Average)		(-2.8)**	(3.5)	(0.3)	(4.7)	(0.6)
Hours per Week in Training[b]						
1 to 9	15.6	13.4	18.1	5.5	40.7	0.4
10 to 19	35.1	-2.2	30.6	1.4	33.6	-5.1
20 to 29	29.9	-0.9	40.3	-5.6	16.8	3.7
30 or more	19.5	-10.3	11.1	-1.4	8.9	1.0
(Average hours)	(20.1)	(-4.3)**	(18.7)	(-1.4)	(13.5)	(1.1)
Percent in Training at Followup	4.9	-1.5	3.1	0.3	3.7	1.3
Percent with a Vocational Degree or Certificate	24.0	1.9	37.5	-1.5	33.5	3.1
Sample Size'	77-490	153-1,050	72-501	144-1,005	113-738	225-1,440

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes. The definition of training includes business schools, secretarial schools and other vocational/technical/trade school.

'The percent ever in training and the average percent who spent 0 time in training do not sum to 100 because of some missing values for calculating the average percent of time in training.

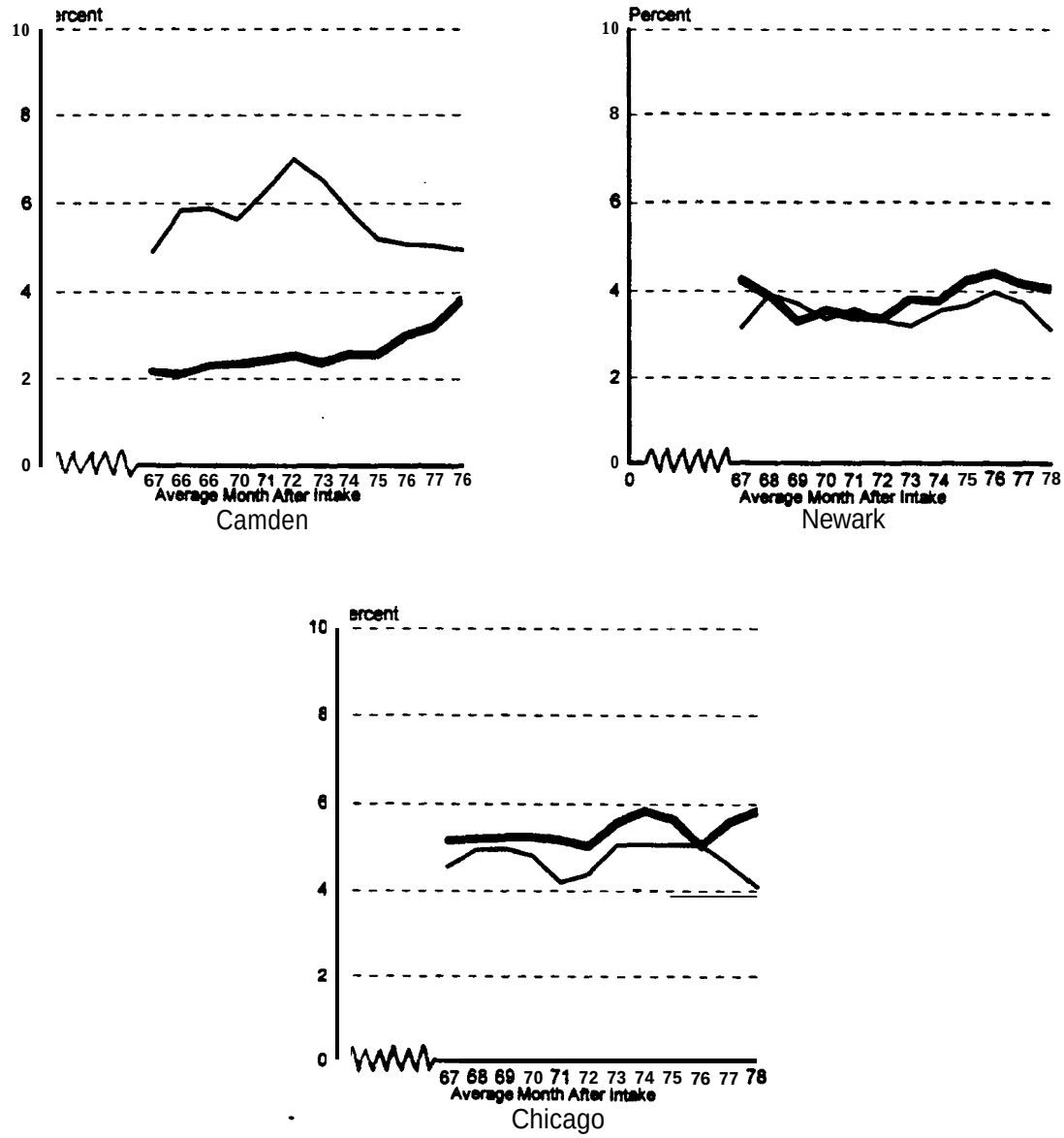
[b]Hours per week are calculated as the average for the months in which sample members were in training for those who reported some training during the previous year.

[c] The lower range of the sample size includes those who reported participating in some training activity during the followup.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

FIGURE III.3
MONTHLY TRAINING PARTICIPATION RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY
(ON AVERAGE, 67 TO 78 MONTHS AFTER INTAKE)



SOURCE: Follow-up survey administered an average of 78 months after sampb intake.

NOTE: Estimated impacts are measured as the differences between the mean6 for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5 Numbers underlying these graphs are presented in Appendix Table 8.3.

On average, mothers who participated in job training did so for 14 to 20 hours per week during the months they were in a training program. Training participants in Chicago spent an average of 14 hours per week in training. Yet, approximately one-fourth participated in relatively intensive training programs and attended training more than 20 hours per week while they were in training. In Newark and Camden, training participants reported spending an average of 19 to 20 hours per week in training. In those sites, approximately half the training participants spent more than 20 hours per week in a training program while participating in the program.

The proportion of regular-services group members who received a vocational degree or certificate increased between surveys and became similar to the proportion for members of the enhanced-services group. One-fourth to one-third of the mothers in the regular-services group completed vocational degrees by the time of the second follow-up survey, compared with 9 to 16 percent who had completed vocational degrees by the time of the first follow-up survey (Table 111.3). Most of these were mothers who had already completed high school or attained their GED and sought further training. There were no significant differences in vocational degree attainment between mothers in the regular- and enhanced-services groups.

C. EMPLOYMENT AND EARNINGS

The demonstration programs produced only modest impacts on employment outcomes in the short term. The first follow-up survey did not suggest that the programs affected the types of jobs the young mothers would be able to get in the future (Maynard, Nicholson, and Rangarajan 1993). However, program staff and policymakers hoped that the short-run increases in education and job training activities would produce later employment effects. Although employment rates increased

among mothers in the enhanced-services group, they also increased among those in the regular-services group; thus, the hoped-for long-run employment effects did not materialize.

1. Employment and Earnings Trends During the First Five Years After Enrollment[4]

A large proportion of the mothers in the regular-services group (70 to 76 percent) were employed at some time during the five years following their enrollment in the demonstration (Table 111.5). The vast majority (81 to 88 percent), however, were employed during less than half of the five-year period. In any given quarter during the five-year period, about one-fourth of the regular-services group mothers were employed. Levels of employment generally rose slowly over the follow-up period (Figure 111.4).

Mothers in the enhanced-services group were significantly more likely than those in the regular-services group to have been employed at some time during the five-year follow-up period. Five years after enrollment, impacts on the cumulative percent employed ranged from three percentage points in Chicago (a four-percent increase) to six percentage points in Camden (an eight-percent increase) (Figure 111.5). In Chicago, mothers in the enhanced-services group also worked a significantly higher proportion of the five-year period. The programs led mothers in the enhanced-services group to begin employment sooner than mothers in the regular-services group; however, mothers in the regular-services group eventually entered employment, and the differences between the regular- and enhanced-services group mothers in their cumulative employment experience diminished over time.

[4]Trends in employment and earnings over the first five years following demonstration enrollment are based on admiistrative wage records data for the full evaluation sample. We focus on the five-year period following enrollment because we have administrative records data covering this period for most sample members.

TABLE III.5

EMPLOYMENT OUTCOMES DURING THE FIVE YEARS AFTER INTAKE
(RECORDS DATA)

	Enhanced-Services Group	Regular-Services Croup	Estimated Impact
Camden			
Percent Ever Employed	75.4	69.7	5.7**
Percent of Total Period Employed			
0	25.1	31.2	-6.1++
1 to25	42.8	40.0	2.8++
26 to 50	19.0	16.5	2.5++
51 to 75	9.3	6.9	2.4++
76 to 100	3.8	5.5	-1.7++
(Average)	(22.3)	(21.0)	(1.3)
Total Earnings over the Five-Year Period (in Dollars)	6,666	6,341	325
Newark			
Percent Ever Employed	75.0	70.4	4.6*
Percent of Total Period Employed			
0	24.5	30.4	-5.9
1 to 25	42.2	38.2	4.0
26 to 50	18.9	17.8	1.1
51 to 75	8.1	8.4	-0.3
76 to 100	6.4	5.3	1.1
(Average)	(23.4)	(22.0)	(1.5)
Total Earnings over the Five-Year Period (in Dollars)	7,764	7,691	73
Chicago			
Percent Ever Employed	78.4	75.5	2.9*
Percent of Total Period Employed			
0	21.1	24.9	-3.8++
1 to 25	37.2	37.7	-0.5++
26 to 50	19.9	18.5	1.4++
51 to 75	13.0	12.7	0.3++
76 to 100	8.9	6.2	2.7++
(Average)	(28.4)	(26.2)	(2.2)**
Total Earnings over the Five-Year Period (in Dollars)'	9,391	8.692	699
Sample Size			
Camden	610-627	565-575	1,175-1,202
Newark	567-572	608-610	1,175-1,182
Chicago	1,434	1,449	1,439

SOURCE: Administrative records data on wages.

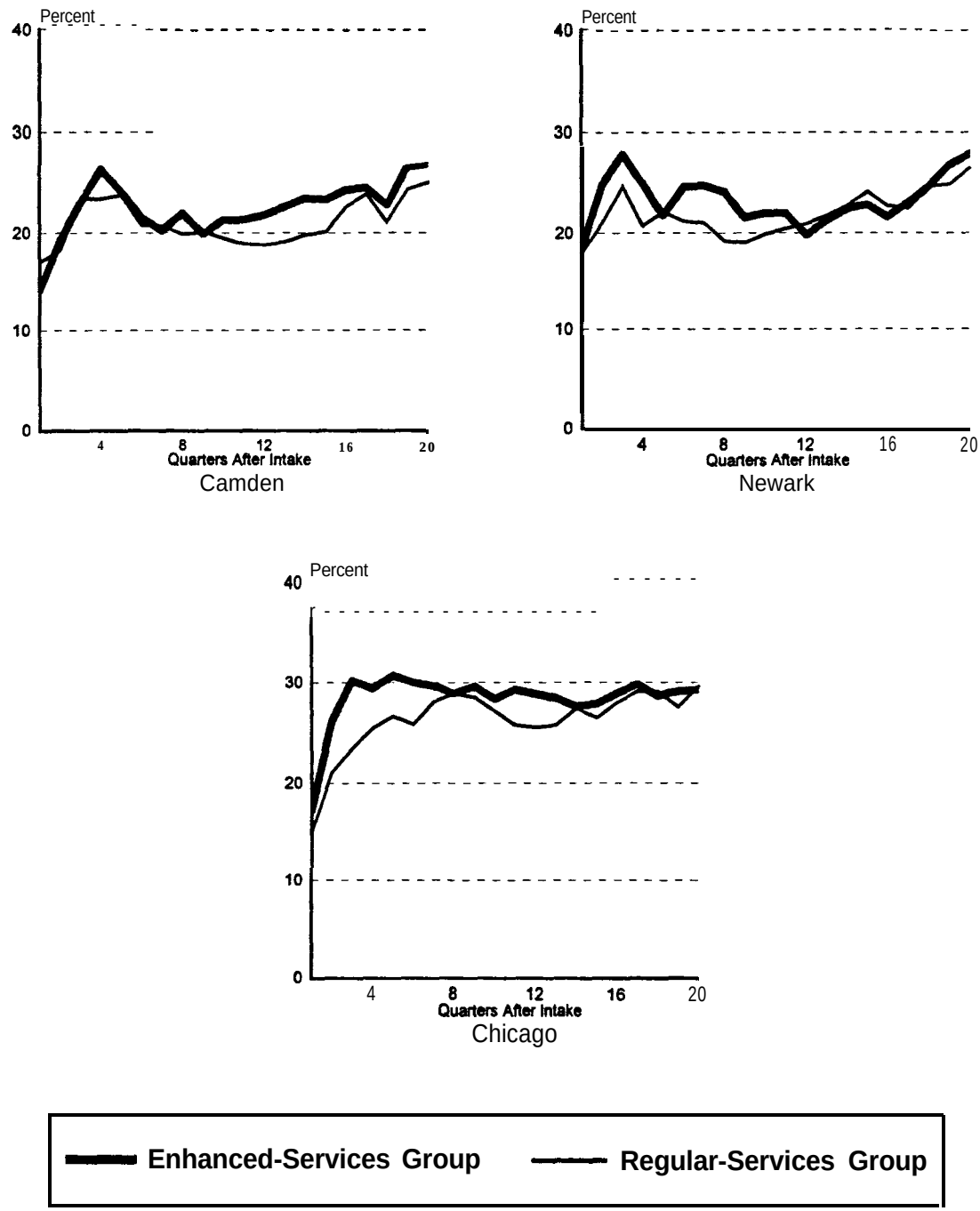
NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and AS. Chi-square tests were used to test the significance of differences in distributional outcomes.

▪ Total earnings are measured in nominal dollars.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

++Difference in distribution between tbe enhanced- and regular-services groups is statistically significant at the 5 percent level.

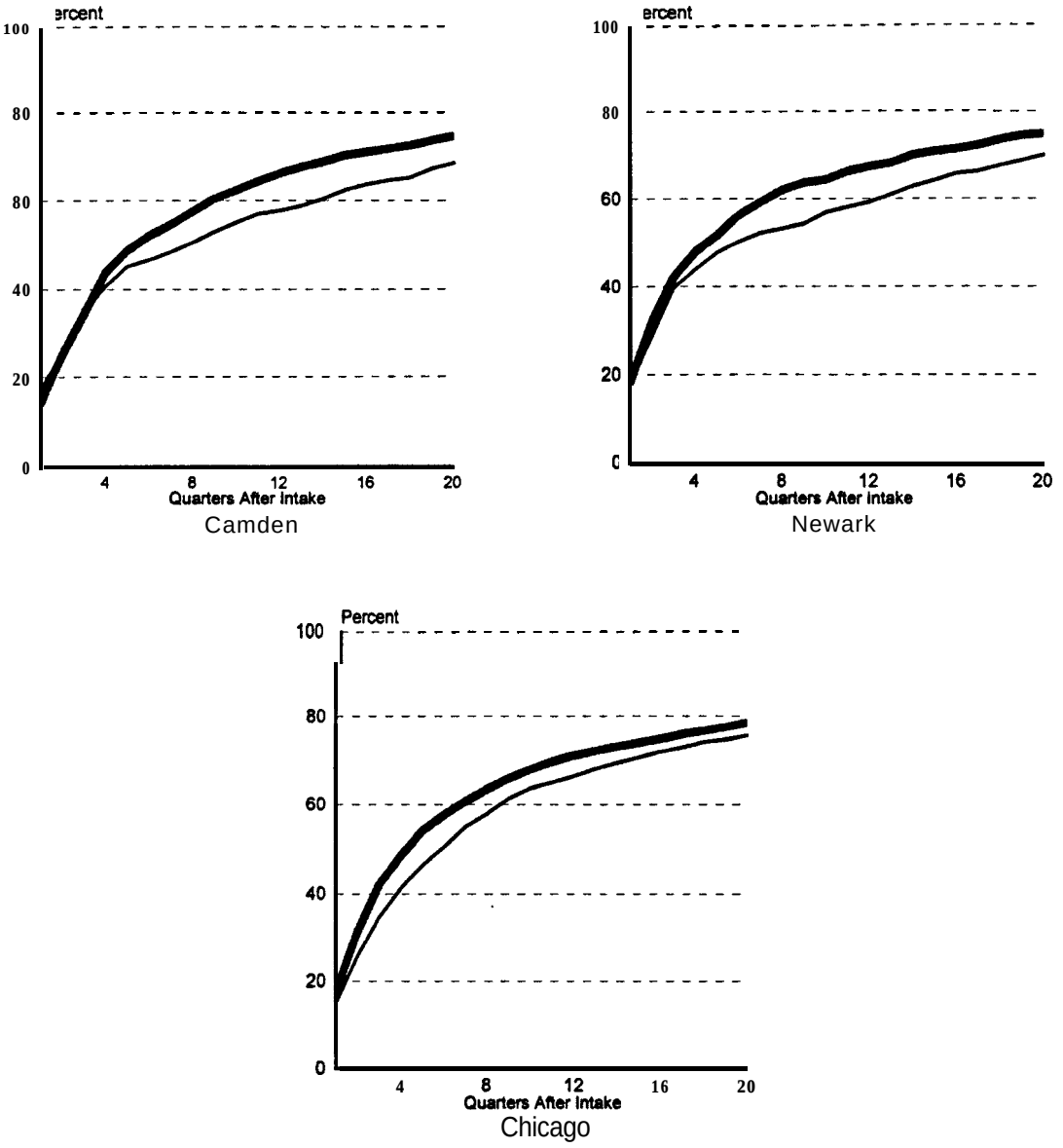
FIGURE III.4
EMPLOYMENT RATES, BY QUARTER AFTER INTAKE



SOURCE: Administrative wage records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5 Numbers underlying these graphs are presented in Appendix Table 6.4.

FIGURE III.5
CUMULATIVE EMPLOYMENT RATES, BY QUARTER AFTER INTAKE



SOURCE: Administrative wage records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5. Numbers underlying these graphs are presented in Appendix Table 8.4.

Program impacts on employment rates occurred primarily during the first three years of the follow-up period and did not persist over the longer term. The demonstration programs increased employment rates significantly in Newark and Chicago during some quarters of the first two to three years of the follow-up period (Figure III.4). However, they did not increase employment rates in any quarter in Camden significantly, nor did they increase employment rates significantly in Newark or Camden during the fourth or fifth year of the follow-up period.

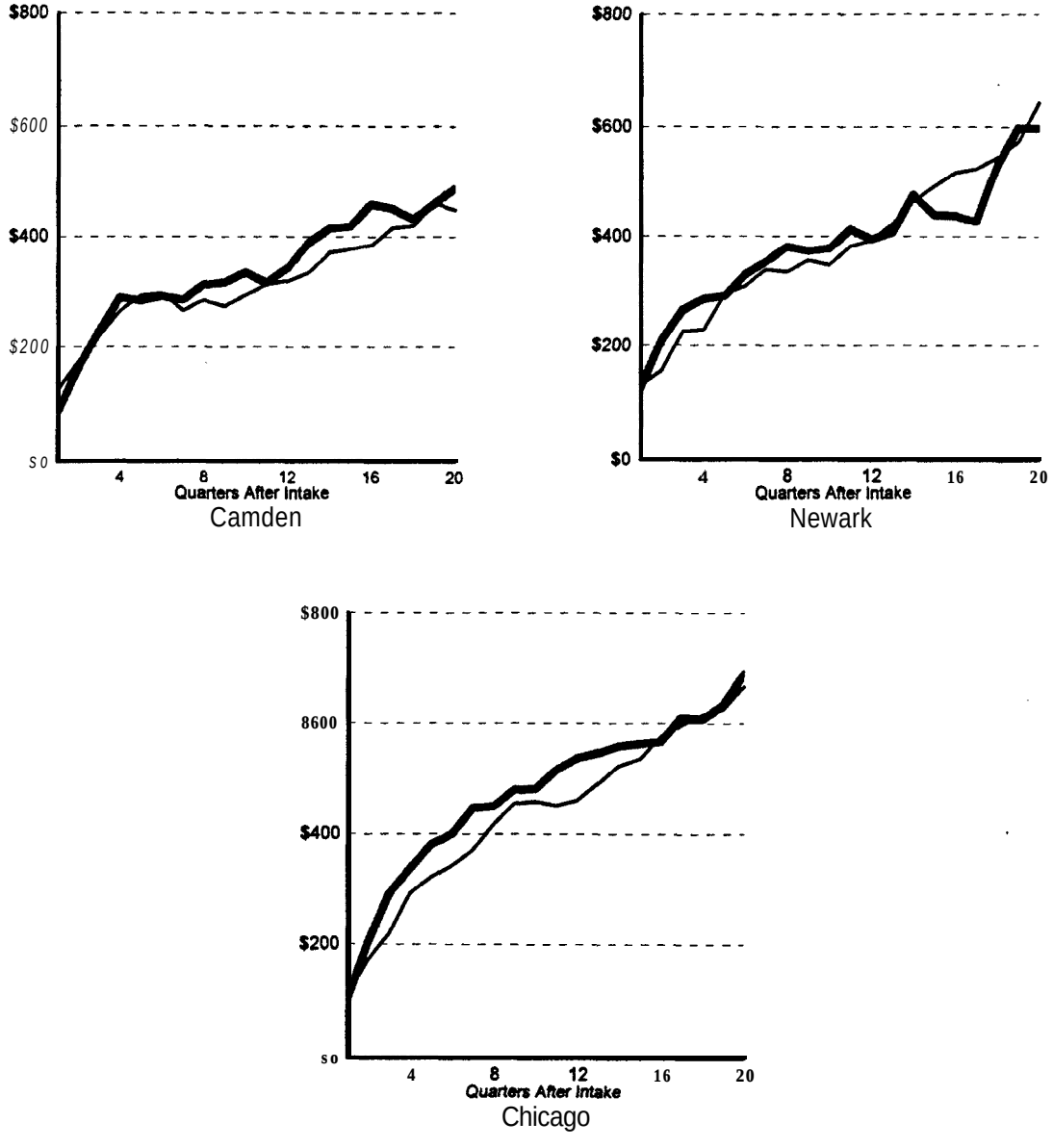
Trends in earnings reflect the trends in employment. The average quarterly earnings of mothers in the regular-services group were low but rose steadily over the five-year follow-up period, reaching $449 in Camden to $665 in Chicago during the twentieth quarter, five years after demonstration enrollment (Figure III.6).[5] Reflecting differences in employment patterns, mothers in the enhanced-services group had higher average earnings during most quarters of the follow-up period, but the differences in earnings were not significant in most quarters. The total earnings of mothers in the enhanced-services group during the five-year follow-up period were not significantly different from those of mothers in the regular-services group (Table 111.5).

2. Employment and Earnings at the Time of the Second Follow-Up Survey

Approximately half the mothers in the regular-services group reported that they had been employed at some time during the year prior to the second follow-up survey conducted six to seven years after demonstration enrollment (Table 111.6). Camden mothers were the least likely to have been employed during the previous year (45 percent), while those in Chicago were most likely to

[5]The quarterly earnings estimates presented here have not been adjusted for inflation. The increase in quarterly earnings over time partly reflects increased employment over time and partly reflects increases in wages due to inflation.

-FIGURE III.6
AVERAGE EARNINGS, BY QUARTER AFTER INTAKE



SOURCE: Administrative wage records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5. Numbers underlying these graphs are presented in Appendix Table B.5.

have been employed (57 percent). Between 19 and 29 percent of the sample members in the three sites were employed during most of the year prior to the second follow-up survey.

Sample members were more likely to be employed as they got older. Monthly employment rates among mothers in the regular-services group were considerably higher during the year prior to the second follow-up survey (five to seven years after intake) than they were during the year prior to the first follow-up survey (one to three years after intake). Monthly employment rates during the year preceding the second follow-up survey were lowest in Camden, where mothers were, on average, younger; approximately one-fourth of the mothers in the regular-services group were employed during any given month (Figure 111.7). In contrast, in Chicago, where sample members were somewhat older, approximately 40 percent were employed during any given month. These estimates reflect a substantial increase in employment compared with the year prior to the first follow-up survey, when monthly employment rates ranged from about 15 percent in Camden and Newark to about 25 percent in Chicago (Maynard, Nicholson, and Rangarajan 1993).

In Camden and Chicago, mothers in the enhanced-services group reported employment experiences very similar to their regular-services group counterparts. The estimated program impacts on employment rates during the year prior to the survey and on the average percentage of the year employed are small and not significant (Table III.6 and Figure 111.7). The estimated impacts on monthly employment rates are consistently positive in Camden but reach statistical significance in only one month. The estimated impacts on monthly employment rates in Chicago are negative early in the year and positive later in the year, but they are never significant.

In Newark, mothers in the enhanced-services group fared worse than their regular-services group counterparts in terms of employment during the year prior to the survey. Enhanced-services group mothers were significantly less likely than mothers in the regular-services group to have been

TABLE III.6

EMPLOYMENT OUTCOMES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY
(APPROXIMATELY SIX TO SEVEN YEARS AFTER INTAKE)

	Enhanced-Services Group	Regular-Services Group	Estimated hnpact
Camden			
Percent Employed During Year Prior to Interview	45.1	44.5	0.6
Percent of Year Employed			
0	55.5	56.2	-0.7
1 to 25	8.9	11.4	-2.5
26 to 50	8.7	8.1	0.6
51 to 75	5.3	5.6	-0.3
76 to 100	21.6	18.7	2.9
(Mean)	-29.6	-27.3	-2.4
Total Earnings over the 12-Month Period	3642	3281	360
Newark			
Percent Employed During Year Prior to Interview	44.3	52.7	**-8.4****
Percent of Year Employed			
0	56.4	48.1	8.3-r
1 to25	8.7	10.0	**-1.3+**
26 to 50	5.9	9.0	**-3.1+**
51 to 75	6.5	7.5	**-1.0+**
76 to 100	22.5	25.5	**-3.0+**
(Mean)	(30.4)	(35.2)	**(-4.8)***
Total Earnings over the 12-Month Period	3,861	4,410	-549
Chicago			
Percent Employed During Year Prior to Interview	58.0	57.3	0.7
Percent of Year Employed			
0	42.4	43.4	-1.0
1 to25	12.7	11.4	1.3
26 to 50	9.6	8.9	0.7
51 to 75	9.3	7.3	2.0
76 to 100	26.1	29.1	-3.0
(Mean)	(38.1)	(39.0)	(-0.9)
Total Earnings over the 12-Month Period	4,930	4,910	20
Sample Size			
Camden	**555**	**488**	**1,043**
Newark	**499**	**499**	**998**
Chicago	**697**	**733**	**1.430**

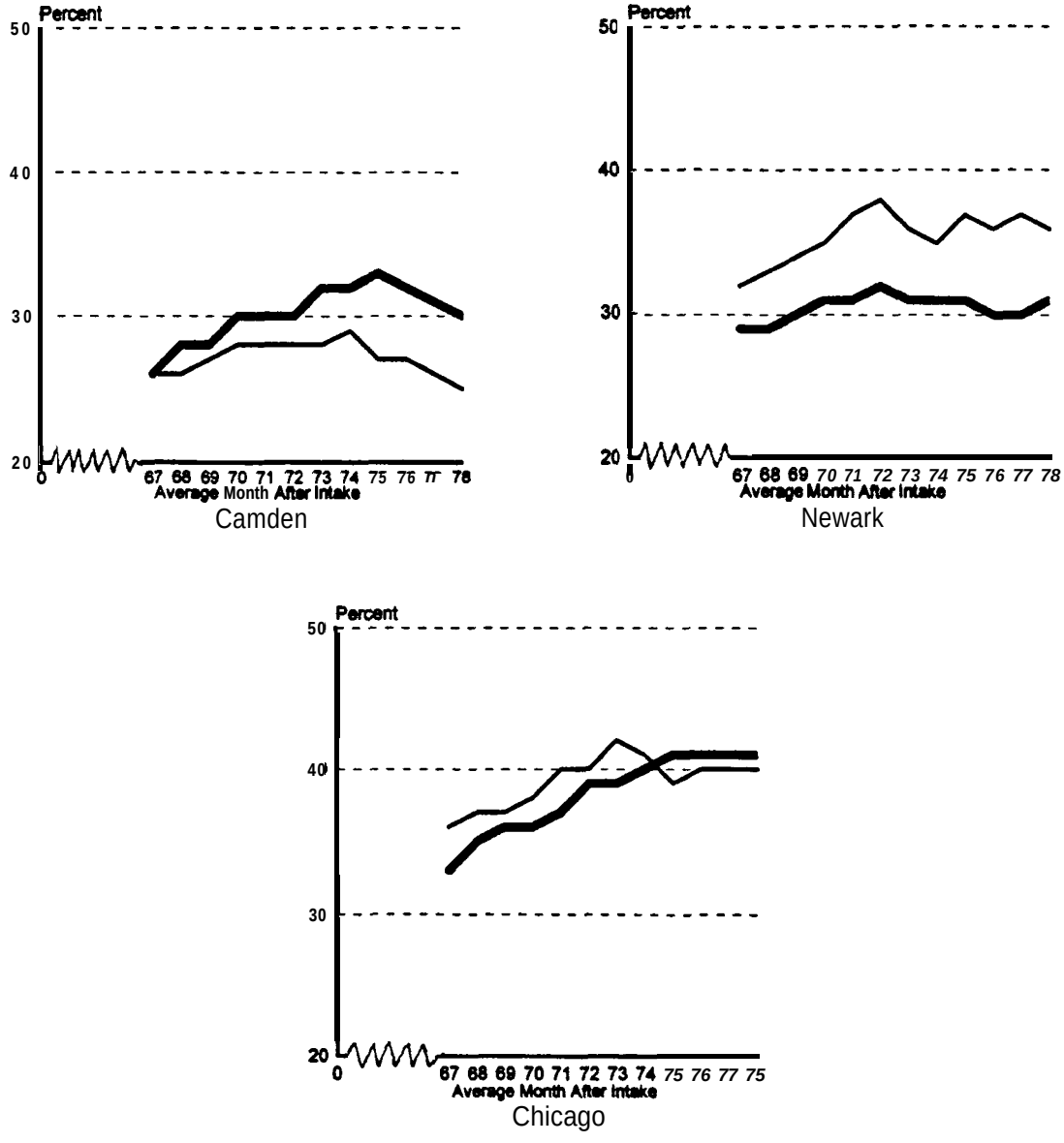
SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

+Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 10 percent level.

FIGURE III.7
MONTHLY EMPLOYMENT RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY
(ON AVERAGE, 67 TO 78 MONTHS AFTER INTAKE)



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5. Numbers underlying these graphs are presented in Appendix Tabb 6.6.

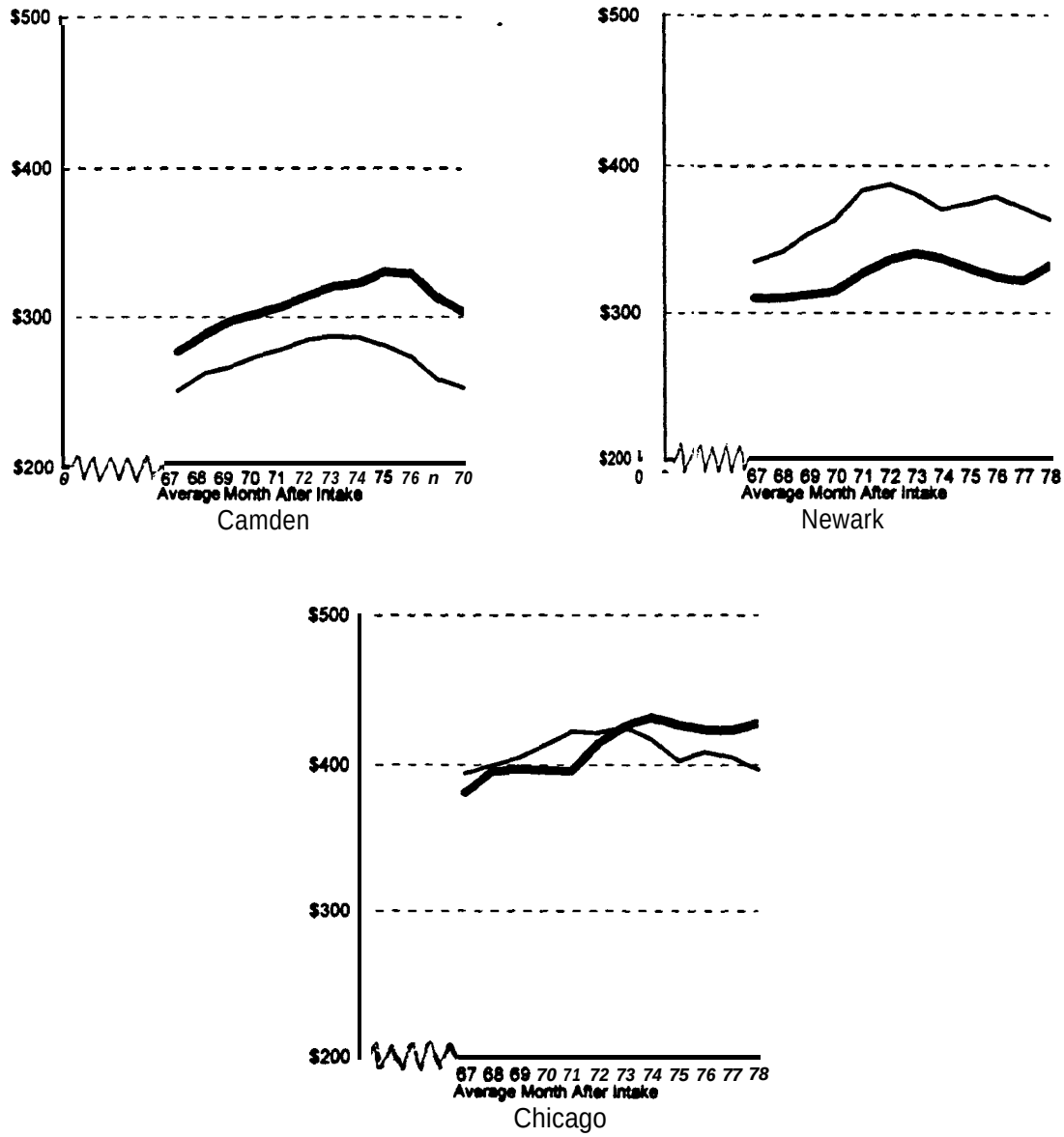
employed at some time during the year prior to the survey (by 8 percentage points--they were 16 percent less likely to have been employed), and on average, the proportion of time during the year that they were employed was significantly lower (by 5 percentage points, a 14 percent decrease). The estimated program impacts on monthly employment rates are consistently negative; they are significant in 5 of the 12 months (Figure 111.7).

Mothers in the regular-services group reported average earnings ranging from $3,281 in Camden to $4,910 in Chicago for the year prior to the second follow-up survey (Table 111.6). The average monthly earnings of mothers in the regular-services group during the year prior to the second follow-up survey ranged from about $250 in Camden to $425 in Chicago (Figure 111.8).

The patterns of program impacts on earnings during the year prior to the survey mirror those on employment during the previous year, but they are not statistically significant. Program impacts on the average total earnings of mothers in the enhanced-services group for the year prior to the second follow-up survey were positive in Camden, positive and very small in Chicago, and negative in Newark; but none were significant. Similarly, the patterns of impacts on average monthly earnings during the previous year show consistently positive (but not significant) impacts in Camden, small negative (but not significant) impacts turning to small positive (and insignificant) impacts in Chicago, and consistently negative (but not significant) impacts in Newark.

For the most part, the estimated impacts on the employment and earnings outcomes for key sample subgroups during the year preceding the second follow-up survey were not significant. However, enhanced-services group members who would not have been required to participate in the JOBS program (high school graduates) were significantly less likely than their regular-services group counterparts to have been employed during the preceding year, and their average monthly earnings during that year were lower (see Appendix Table B.8). These effects are largely driven by

FIGURE III.8
AVERAGE MONTHLY EARNINGS DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY
(ON AVERAGE, 67 TO 78 MONTHS AFTER INTAKE)



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and AS. Numbers underlying these graphs are presented in Appendii Table 8.6.

age; impacts on employment are negative among those age 19 or older. Program impacts on employment are also negative among those who were high school dropouts at the time of program enrollment, but positive among those who were enrolled in a regular middle or high school at the time of intake (and were at high risk of being required to participate in the JOBS program). In addition, mothers in the enhanced-services group who enrolled in the demonstration between July 1988 and June 1989 and mothers whose families received welfare when they were children were significantly less likely than their counterparts in the regular-services group to have been employed during the preceding year.

3. **Job Tenure and Characteristics**

Mothers in the regular-services group were most likely to have had either one job or no jobs during the year prior to the second follow-up survey. However, as shown in Table 111.7, a small minority of mothers held multiple jobs during the previous year (15 to 16 percent in Camden and Newark, 21 percent in Chicago). The demonstration programs in Camden and Chicago had no impact on the average number of jobs held or the distribution of jobs held. In Newark, because mothers in the enhanced-services group were significantly less likely than those in the regular-services group to have had a job during the previous year, they also held significantly fewer jobs, on average, than did mothers in the regular-services group.

Among those who held a job within the previous year, mothers in the regular-services group had, on average, held their current or most recent job for approximately one year. About half the jobs had lasted at least six months, and about one-third lasted at least one year. Mothers in the enhanced-services group had held their jobs for a similar period of time. The mothers tended to experience a high rate of job turnover; between 40 and 50 percent of the mothers in the regular-

TABLE III.7

JOB TENURE

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Number of Jobs Held during the Previous Year						
0	54.0	-1.5	45.4	8.2++	40.3	-1.1
1	30.8	-0.8	38.6	-5.7++	38.9	1.7
2	3.4	1.5	13.2	-4.1++	15.1	0.0
3 or more	(0.7)	(0.1)	2.8	1.6++	5.7	-0.6
(Average number)			(0.7)	(-0.1)*	(0.9)	(0.0)
Length of Most Recent Employment Period (Weeks)* [b]						
1 to 5	16.5	-4.3	12.1	0.5	13.2	1.4
6to 13	20.3	1.1	16.0	-1.5	18.7	0.2
14 to 26	15.6	1.0	17.5	-2.2	12.7	2.1
27 to 52	17.5	-1.2	18.7	-2.4	16.3	1.3
53 to 104	14.2	2.5	17.5	-1.2	15.8	-3.0
More than 104	16.0	1.0	18.3	6.8	23.4	-2.1
(Average number of weeks)	(49.7)	(8.9)	(61.1)	(10.1)	(65.7)	(-1.4)
Terminated from Most Recent Job[b] (Percent)	52.0	-3.9	44.1	-7.7'	41.6	-2.8
Sample Size	226-491	492-1,051	273-500	507-l ,004	440-737	8681,441

SOURCE: Follow-up survey administered an average of 78 months after program intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

[a] 26 to 4 1 percent of the sample members were in the midst of an employment period.

[b] The sample includes only individual who held a job during the pervious year.

[c] The sample includes those who were terminated.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

services group who had been employed experienced at least one job termination during the year preceding the second follow-up survey.

Mothers in the regular- and enhanced-services groups were employed in similar occupations (Table 111.8). The majority of mothers' most recent jobs were in administrative support occupations other than secretarial jobs (20 to 25 percent), sales (18 to 22 percent), or personal, private household, or protective services occupations (16 to 20 percent).

In their most recent job, most mothers in the regular-services group worked at least 35 hours per week. On average, they worked 33 to 36 hours in their most recent job (Table 111.8). In Camden, mothers in the enhanced-services group worked significantly longer hours in their most recent job (35 compared with 33 hours, on average). In the other sites, the average number of hours worked by mothers in the enhanced-services group in their most recent job were similar to those worked by regular-services group mothers.

Nonstandard work hours were common among mothers who worked. In their most recent job during the previous year, 15 to 24 percent of the mothers in the regular-services group worked evening or graveyard shifts, and 22 to 24 percent worked variable shifts. Participation in the demonstration programs had no impact on the likelihood that mothers worked nonstandard hours in their current or most recent job.

On average, mothers in the regular-services group in all three sites earned $6.50 per hour in their current or most recent job during the previous year. The majority of the mothers earned between $5.01 and $10.00 per hour. In Chicago, however, 31 percent earned $5.00 per hour or less in their most recent job, and in Camden and Newark, 13 to 18 percent earned $5.00 per hour or less. Mothers in the enhanced-services group did not earn significantly different wages.

TABLE III.8

CHARACTERISTICS OF MOST RECENT JOB

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Occupation						
Manager/professional/technical	4.9	0.4	5.9	0.1	8.0	1.0
Sales	17.9	1.1	19.6	-1.5	22.1	-2.2
Secretarial	2.2	2.7	5.2	-0.9	3.3	-0.1
Other administrative support	20.6	-2.8	25.2	-3.2	20.2	3.4
Food and beverage preparation	8.5	-0.2	8.2	-4.3	6.8	1.2
Health services	11.2	5.5	10.0	-0.5	11.7	-2.5
Personal/private household/protective services	19.7	-6.4	15.9	11.2	18.1	-1.6
Mechanical/construction/production	5.8	2.9	4.8	-0.5	5.6	-1.0
Other	9.0	-3.3	5.2	-0.5	4.2	1.8
Monthly Earnings						
Less than $600	27.6	-4.0	25.8	-3.1	27.0	-1.1
$601 to $800	11.0	1.7	11.7	-1.3	12.5	-0.8
$801 to $1,000	15.7	0.4	16.3	4.5	14.5	1.7
$1,001 to $1,200	17.1	0.2	13.6	1.3	14.3	0.2
$1,201 to $1,400	15.7	-1.5	14.8	-0.3	11.6	1.1
$1,401 to $1,600	7.6	-1.3	5.3	2.4	6.1	1.7
More than 51,600	5.2	4.6	12.5	-3.5	14.0	-2.8
(Mean monthly earnings)	(931)	(34)	(980)	(-19)	(1,003)	(-34)
Hourly Wage						
Less than 64.00	4.4	1.6	10.6	-1.2	7.7	-0.5
$4.00 to $5.00	8.4	-0.1	7.0	2.9	23.2	4.4
$5.01 to 67.00	55.3	-3.1	49.5	1.4	35.9	-1.6
57.01 to $10.00	27.4	1.1	23.8	1.4	25.7	-1.2
Mote than $10.00	4.4	0.5	9.2	-4.5	7.5	-1.2
(Average hourly wage)	(6.5)	(-0.1)	(6.5)	(-0.2)	(6.5)	(-0.1)
Benefits Offered on the Job						
Health insurance	51.1	-0.4	44.0	6.2	49.4	-2.6
Paid sick leave	46.5	0.0	40.2	8.5*	45.5	-8.4**
Paid vacation	50.9	0.7	48.9	6.7	54.9	-6.0*
Child cam assistance	5.5	2.1	9.2	0.4	6.9	0.8
Flexible hours	42.5	1.5	41.4	-0.0	52.2	-3.6
Transportation	10.4	0.8	11.5	1.2	8.9	-0.8
Retirement benefits	33.0	2.7	30.7	4.4	40.8	-7.0**
Weekly Hours of Work						
20 hours or less	21.2	-4.7	16.5	-0.2	14.3	2.0
21 to 34	19.9	0.4	21.6	-4.1	20.5	-3.4
35 to 39	13.3	-2.4	12.5	3.4	8.9	0.7
40 or more	45.6	6.7	49.5	1.0	56.4	0.7
(Average hours of work)	(33.2)	(1.8*)	(34.9)	(-0.4)	(35.7)	(-0.4)

TABLE III.8 *(continued)*

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Work Schedule						
Day/afternoon shift	54.9	1.0	62.7	-3.9	53.7	-0.5
Evening/graveyard shift	21.4	2.9	15.1	3.1	24.2	-2.0
Variable shift	23.7	-3.9	22.1	0.8	22.1	2.5
Sample Size	**226**	**492**	**273**	**507**	**440**	**868**

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTES: The sample includes mothers who held a job. Estimated impacts are measured as differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

As the mothers aged and found more stable jobs, they also settled into jobs that offered greater fringe benefits relative to the jobs they held during the first two years after intake (Maynard, Nicholson, and Rangarajan 1993). For example, prior to the first follow-up survey, 22 to 26 percent of the mothers who worked were offered health insurance as part of their compensation in their most recent job, compared with 44 to 5 1 percent prior to the second follow-up survey.

Approximately half the regular-services group mothers were employed in jobs that offered health insurance benefits and paid vacation in their most recent job. Between 40 and 52 percent received paid sick leave and reported that their jobs offered flexible hours. Thirty-three to 41 percent reported that they were in jobs that offered retirement benefits. About 10 percent reported employer-provided transportation benefits, and 6 to 9 percent reported that their jobs offered child care assistance.

With a few exceptions, mothers in the regular- and enhanced-services groups were employed in jobs that offered similar fringe benefits. In their most recent job, enhanced-services group mothers in Chicago were significantly less likely than their regular-services counterparts to report that their job offered paid sick leave (eight percentage points), paid vacation (six percentage points), and retirement benefits (seven percentage points). In Newark, mothers in the enhanced-services group were significantly more likely than mothers in the regular-services group to report that paid sick leave was offered in their most recent job.

D. CHILD CARE CHOICES

Mothers of young children need child care in order to participate in employment-related activities. Consistent with the proportion who reported participating in any school, training, or employment activity, approximately two-thirds of the young mothers in the regular-services group used child care during the year preceding the second follow-up survey so they could work or attend

job training or educational classes. By the time of the second follow-up survey, most of the mothers' first-born children had reached school age; the vast majority of mothers, however, had given birth to additional children after enrolling in the demonstration (see Chapter V), and most had preschool children who needed care while they participated in activities.

Many mothers who participated in activities and used child care relied on multiple types of child care arrangements during their most recent main work, training, or educational activity (34 to 44 percent) (Table 111.9). In all three sites, young mothers who needed child care were most likely to rely on relatives (48 to 55 percent) and/or regular school (40 to 54 percent) to care for their children while they worked or attended school or job training.[6] Fourteen to 27 percent placed one or more of their children in centers or preschools, and 15 to 22 percent used family child care arrangements. Across the three sites, the children of active mothers were in child care (including regular school) about 30 hours per week during their mothers' most recent main activity. On average, mothers who were active had been in their most recent main activity and using child care for about one year.

The arrangements used by mothers in the regular-services group during the year preceding the second follow-up survey varied somewhat across sites. In Camden, mothers were relatively more likely to rely on child care centers or preschools and less likely to rely on relatives to care for their child or children. In Newark, where mothers' youngest children were less likely to be infants and toddlers and more likely to be of school age, mothers were more likely to rely on relatives and regular school and less likely to rely on child care centers or preschools. In Chicago, mothers were more likely to rely on relative and family child care providers and less likely to rely on school or child care centers or preschools.

[6]Although nearly all mothers had at least one school-age child, nearly half of employed mothers worked the evening or graveyard shift or a variable shift in their most recent job.

TABLE III.9

CHILD CARE USED DURING MOST RECENT ACTIVITY
WITHIN PAST YEAR FOR ALL CHILDREN

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
	Camden			
Percent Who Used Any Child Care'	**62.6**	**-3.3**	**--**	
Relative care	**30.1**	**-0.8**	**48.2**	**3.0**
Nonrelative family child care	**9.4**	**0.2**	**14.8**	**2.8**
Center-based care	**16.3**	**-0.1**	**26.5**	**-1.4**
School	**30.0**	**-1.6**	**48.6**	**0.9**
Other	**5.1**	**-0.9**	**8.1**	**1.7**
Percent Who Used Multiple Types of Child Care	**25.3**	**-0.9**	**40.8**	**-0.3**
Average Duration of Activity for Which Care was Used (Months)	**7.2**	0.1	11.7	**0.7**
Average Hours Per Week Active and Using Care During Most Recent Main Activity	**18.5,**	**-0.2**	**29.5**	**1.3**
	Newark			
Percent Who Used Any Child Care[a]	**64.7**	**-7.6****	**—**	**—**
Relative care	**33.5**	**0.5**	**52.2**	**6.7**
Nonrelative family child care	**10.3**	**-2.7**	**15.9**	**-2.5**
Center-based care	**11.7**	**-1.5**	**17.9**	**0.1**
School	**34.7**	**-1.4**	**53.7**	**4.6**
Other	**7.2**	**-3.7****	**10.9**	**-4.6****
Percent Who Used Multiple Types of Child Care	**28.2**	**-1.0**	**43.6**	**3.9**
Average Duration of Activity for which Care was Used (Months)	**9.0**	**0.8**	12.9	**2.9***
Average Hours Per Week Active and Using Care During Most Recent Main Activity	**20.8**	**-2.9****	**32.4**	**-1.0**
	Chicago			
Percent Who Used Any Child Care'	**69.5**	**-0.5**		
Relative care	**38.4**	**0.4**	55.1	1.1
Nonrelative family child care	**15.1**	**-1.0**	22.0	-2.0
Center-based care	10.1	**0.4**	14.4	0.8
School	27.8	**1.6**	40.0	2.6
Other	4.9	**0.8**	6.9	1.5
Percent Who Used Multiple Types of Child Care	23.8	**3.3**	**34.3**	**4.8**

TABLE III.9 *(continued)*

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated impact	Regular-Services Group	Estimated Impact
Average Duration of Activity for Which Care was Used (Months)	10.5	-0.3	15.1	-0.1
Average Hours Per Week Active and Using Care During Most Recent Main Activity	22.0	0.2	31.6	0.7
Sample Sizes				
Camden	480-491	1,031-1,052	296-307	618-639
Newark	490-501	981-1,005	311-322	589-612
Chicago	721-738	1,412-1,442	497-514	969-999

SOURCE: Follow-up survey conducted an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

"Sample members may have used multiple forms of care.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

Patterns of child care use differed somewhat among mothers with and without very young children.[7] Active mothers who still had infants at the time of the second follow-up survey were more likely than mothers whose youngest child was older to use relative care and less likely to rely on regular school to care for at least one child (see Appendix Tables B.9 through B.11).[8] Mothers whose youngest child was 3 or 4 years old were relatively more likely to use center-based child care arrangements. Mothers without young children under age 5 were less likely than mothers who had younger children to report relying on relatives to care for at least one child during their most recent activity. They were more likely to report relying on regular school to care for at least one child while they were at work or in school or training.

The programs did not have much impact on patterns or levels of child care use, either in the sample as a whole or in subgroups defined by the age of the youngest child. However, consistent with the estimated negative program impacts on recent participation in education activities, job training, or employment in Newark, young mothers in the enhanced-services group in that site were significantly less likely than mothers in the regular-services group to have used any child care during the past year (57 compared with 65 percent). Active mothers in the enhanced-services group in Newark were not significantly more or less likely to use care by relatives, family child care providers, or centers during their most recent main work, training, or education activity. They were,

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[7]Mothers whose youngest child was an infant or toddler were less likely than mothers whose youngest child was older to have worked, attended training, or attended school and used child care during the year preceding the second follow-up survey (see Appendix Tables B.9 through B.11). The lower rates of activity and child care use for mothers with children under 3 years old may reflect, in part, the relatively greater scarcity of spaces for infants and toddlers in child care centers and family child care homes in the demonstration areas (Kisker et al. 1989).

[8]Due to survey administration time constraints, information on child care was not collected separately for each child. Instead, sample members were asked to report the types of child care they used for all children during each work, training, or education activity.

however, significantly less likely to use other arrangements, such as caring for their child at work, training, or school or relying on a child to care for himself/herself.

E. SUMMARY

By the end of six years after program intake, when they were in their early to mid-20s, the young mothers in both groups were more likely to be working, but they were far from attaining economic self-sufficiency. Nearly half of the mothers had not earned a high school diploma or equivalent, and only two percent had a college degree. Less than half of the young mothers were engaged in education, training, or employment. Between 10 and 15 percent of the young mothers in the three sites were in school or college or were participating in a job training or vocational program. Between 25 and 40 percent of the young mothers were employed at the time of the second follow-up survey.

Participation in education, training, and employment by the young mothers in the enhanced-services group while the programs were operating was higher than it would have been in the absence of the programs, resulting in positive, although modest, impacts in the short run. However, these early impacts started to erode at about the time that the participation requirements and support services ended for the enhanced-services group and mothers in both groups were subject to the same JOBS requirements. After the demonstration programs ended in mid-l 99 1 and the mothers in the enhanced-services group no longer faced activity requirements, the increases in their participation in self-sufficiency-oriented activities slowed, and the mothers in the regular-services group caught up with them.[9] Although activity rates increased among both regular- and enhanced-services group members between two and six years after intake, they increased much more among regular-services

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'Such control group "catch-up" has been observed in other long-term impact evaluations (Bos and Fellerath 1997; Friedlander and Burtless 1995).

group members (Table III. 10). Thus, the early increases in participation among enhanced-services group members were not sufficient to enable more of the young mothers to attain self-sufficiency by six to seven years after intake.

An additional year or two of similar requirements and services probably would not have enabled significantly more young mothers to attain self-sufficiency by the end of the follow-up period. Young mothers who enrolled in the programs when they first began operating and had nearly four years of exposure to the program services and requirements experienced no different impacts on participation in self-sufficiency-oriented activities than those who enrolled later and had less than two years of exposure to program requirements and services. Even for the young mothers who faced longer periods of program mandates, the impacts faded soon after the programs ended.

TABLE 111.10

CHANGE IN ACTIVITY RATES OVER TIME

	Regular-Services Group Mean	Enhanced-Services Group Mean	Estimated Impact
Camden			
Percentage Who Were Active 24 Months After Intake	25.1	32.7	7.6**
Percentage Who Were Active 72 Months After Intake	41.1	37.9	-3.2
Increase Between 24 and 72 Months After Intake			
Percentage point increase	16.0	5.2	
Percentage increase	63.8	15.9	
Newark			
Percentage Who Were Active 24 Months After Intake	26.5	32.7	6.2*
Percentage Who Were Active 72 Months After Intake	43.4	38.6	-4.8
Increase Between 24 and 72 Months After Intake			
Percentage point increase	16.9	5.9	
Percentage increase	63.8	18.0	
Chicago			
Percentage Who Were Active 24 Months After Intake	40.4	46.2	5.8**
Percentage Who Were Active 72 Months After Intake	49.9	47.2	-2.7
Increase Between 24 and 72 Months After Intake			
Percentage point increase	9.5	1.0	
Percentage increase	23.5	2.2	
Sample Sizes[a]			
Camden			
24 months after intake	399	427	
72 months after intake	481	551	
Newark			
24 months after intake	373	376	
72 months after intake	494	495	
Chicago			
24 months after intake	892	883	
72 months after intake	726	690	

SOURCE: Follow-up surveys conducted an average of28 months after intake and 78 months after intake.

NOTE: The definition of the activity rate differs slightly between the two follow-up periods. The 24-month activity rate is the percentage of sample members who were in school, training, or a job *exactly* 24 months after intake. The 72-month activity rate is the percentage of sample members who were in school, training, or a job six months prior to the second follow-up survey, *an average of* 72 months after intake.

'The sample sixes in the New Jersey sites for activity rates 24 months after intake exclude the approximately 20 percent of sample members who were interviewed for the first followup less than 24 months after intake. The 72-month sample sixes in Chicago are smaller than the 24-month sample sizes because the second follow-up survey was conducted with a random subsample of sample members in Chicago.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

IV. WELFARE DEPENDENCE AND ECONOMIC WELL-BEING

The long-term goal of the Teenage Parent Demonstration (TPD) programs was to increase economic self-sufficiency and reduce welfare dependency. Beyond simply reducing welfare dependency, the programs hoped to increase mothers' overall income levels by increasing their earnings and other sources of income, such as child support.

The demonstration programs sought to enhance participants' prospects for achieving long-term economic self-sufficiency by requiring them to develop and comply with approved plans for full-time (30 hours per week) self-sufficiency-oriented activities. If they persistently failed to participate in planned activities, the programs initiated sanctions consisting of reductions in monthly welfare grants by the amount normally allocated to cover the needs of the mother (generally, $160 in New Jersey and $166 in Chicago). The sanctions remained in effect until the young mothers complied with participation requirements. The programs assigned participants to case managers, who assessed their needs and goals, helped them develop individualized self-sufficiency plans, facilitated their enrollment in services, encouraged them and conveyed the clear expectations for participation that were necessary to motivate the young mothers, and monitored their participation. The programs also required participants to attend workshops designed to enhance their personal and parenting skills and prepare them for education and employment-related activities. To enable participants to fulfill their obligations, the programs also provided child care and transportation assistance.

When the demonstration programs were operating, they promoted modest progress toward self-sufficiency by mothers in the enhanced-services group (Maynard, Nicholson, and Rangarajan 1993). During the first two years after intake, mothers in the enhanced-services group received lower average monthly welfare benefits than did mothers in the regular-services group, and relied more

heavily on earnings. This shift toward greater reliance on earnings was not accompanied by significant increases in average income levels, although poverty rates among mothers in the enhanced-services group in Camden declined somewhat.

The modest short-term impacts of the demonstration programs on welfare receipt faded once the demonstration ended. The programs' sanction policies and support services, which together led to modest reductions in welfare receipt and benefit amounts, did not permanently alter the welfare needs of the young mothers. By the time of the second follow-up survey, approximately three to four years after the programs ended, the majority of mothers in both the regular- and enhanced services groups were still living in poverty and relying on AFDC for at least some of their income. In Camden, mothers in the enhanced-services group received significantly higher average earnings than did mothers in the regular-services group during the month before the survey; the increased earnings were not sufficient to lift them out of poverty, however, because they experienced modest reductions in AFDC benefits. Mothers in the sample reported receiving very little financial child support, but nearly half reported that they were currently receiving in-hind child support.

In the following sections, we examine mothers' patterns of welfare dependence and incomes in greater detail. The next section examines the demonstration programs' impacts on welfare dependence, using administrative welfare records data. The following section draws on survey data to examine mothers' income levels and sources of income.

A. WELFARE DEPENDENCE

On average, the young mothers targeted by the demonstration received welfare for a substantial proportion of the five-year period after enrollment in the demonstration.[1] The typical mother in the regular-services group received welfare for two-thirds to three-fourths of the time during the five-year period (Table IV. 1). In Camden and Newark, mothers in the regular- and enhanced-services group spent similar portions of time receiving AFDC, while in Chicago, enhanced-services group mothers received welfare for significantly less time (about three percent less) than did their regular-services group counterparts.

Many sample members were long-term welfare recipients. Between 9 and 21 percent of the sample members received AFDC during the entire five-year follow-up period, while another 40 percent received AFDC for over three-quarters of the time during the same period. In Camden and Chicago, mothers in the enhanced-services group were significantly less likely than those in the regular-services group to receive welfare during the entire five-year follow-up period.

Over the five-year period, mothers in the enhanced-services group in all three sites received lower average AFDC benefit amounts than did those in the regular-services group. As with AFDC receipt, these effects were statistically significant only in Chicago, where enhanced-services group members received about $600 less than did those in the regular-services group over the five-year period, a five percent reduction in the amount of benefits received.

Most of the program effects on AFDC benefit amounts occurred during the first two to three years after program entry, when the programs were still operating. In all three sites, mothers in the enhanced-services group received approximately 10 percent lower AFDC benefits during the first

[1]We focus on examining welfare receipt over the five-year period after intake because we have administrative welfare records for most sample members for this period.

TABLE IV. 1

AFDC AND FOOD STAMP RECEIPT DURING THE FIVE YEARS AFTER INTAKE

Outcome Measure	Camden		Newark		Chicago	
	Regular-Group Mean	Services Impact	Regular-Group Mean	Services Impact	Regular-Group Mean	Services Impact
Percent of Time Received AFDC During the Five-Year Period Following Intake						
< 50	31.1	0.2+	22.6	2.3	29.2	0.9++
50 to 74	16.6	-1.3+	15.3	-2.1	17.9	3.6++
75 to 99	40.9	5.3+	41.5	-1.3	43.9	-1.7++
100	11.4	-4.1+	20.6	1.1	9.0	-2.9++
(Mean)	(65.6)	(-1.1)	(73.2)	(-0.9)	(67.1)	(-2.3**)
Total AFDC Benefits During the Five-Year Period Following Intake (Dollars)	14,713	-688	15,874	-668	12,216	-571**
Ever Received AFDC During (Percentage)						
Year 1	92.6	1.1	96.7	-3.2**	97.7	-0.1
Year 2	82.4	-2.4	88.6	-2.4	86.3	-2.9**
Year 3	76.6	-1.3	79.1	1.3	79.1	-2.1
Year 4	72.3	-0.7	75.0	-1.0	76.0	-1.7
Year 5	67.8	1.4	72.7	-0.5	71.3	0.1
AFDC Benefits Received During (Dollars)						
Year 1	3,112	-152*	3,490	-447**	2,546	-228**
Year 2	3,000	-396**	3,259	-268**	2,394	-194**
Year 3	2,971	-240**	3,161	-32	2,392	-88
Year 4	2,878	-32	3,034	42	2,445	-42
Year 5	2,760	93	2,962	0	2,436	-6

TABLE IV.1 *(continued)*

Outcome Measure	Camden		Newark		Chicago	
	Regular-Services Group Mean	Impact	Regular-Services Group Mean	Impact	Regular-Services Group Mean	Impact
Percent of Time Received Food Stamps During the Five-Year Period Following Intake (Percentage)						
<50	27.0	0.3	25.2	2.5	n.c.	n.c.
50 to 74	14.5	-0.8	18.7	-1.0	n.c.	n.c.
75 to 99	39.3	-1.5	39.8	-1.9	n.c.	n.c.
100	19.2	2.0	16.3	0.4	n.c.	n.c.
(Mean)	(70.2)	(-1.3)	(69.8)	(-1.7)	(63.1)	(-1.3)
Total Food Stamps During the Five-Year Period Following Intake (Dollars)"	8,829	-91	9,337	-290	8,077	-40
Ever Received Food Stamps During (Percentage)						
Year 1	90.8	-0.3	84.2	-5.8**	87.0	0.6
Year 2	84.4	-2.7	82.9	-3.7	82.4	-1.3
Year 3	79.7	-1.6	78.9	0.7	79.7	-1.3
Year 4	76.4	-2.1	77.9	-1.8	79.8	-1.6
Year 5	72.9	-0.5	76.0	0.1	76.2	0.4
Food Stamp Benefits Received During (Dollars)						
Year 1	1,437	43	1,449	-72	1,437	-16
Year 2	1,564	-25	1,649	-40	1,457	-19
Year 3	1,794	-77	1,924	-39	1,602	-25
Year 4	2,243	-69	2,411	-95	1,772	-1
Year 5	2,197	31	2,324	-45	1,806	36
Sample Size	585	1,218	615	1,190	1,450	2,889

SOURCE: Administrative records data.

TABLE IV. 1 *(continued)*

NOTES: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and AS, Chi-square tests were used to test the significance of differences in distributional outcomes. In calculating amount of time spent on welfare or benefits received over the five-year period, we imputed and prorated the values for the missing months based on the fraction of time or benefits received for the nonmissing months.

"As described in Appendix C, the samples for food stamp receipt and benefit amounts in Chicago are smaller due to missing observations in some months. Because of the larger number of individuals with missing food stamp information in Chicago, we did not calculate the percent of time sample members received food stamps.

*Significantly different from zero at the IO percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

n.c. = not calculated

+**Difference** in distribution between the enhanced- and regular-services groups is statistically significant at the IO percent level.
++**Difference** in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

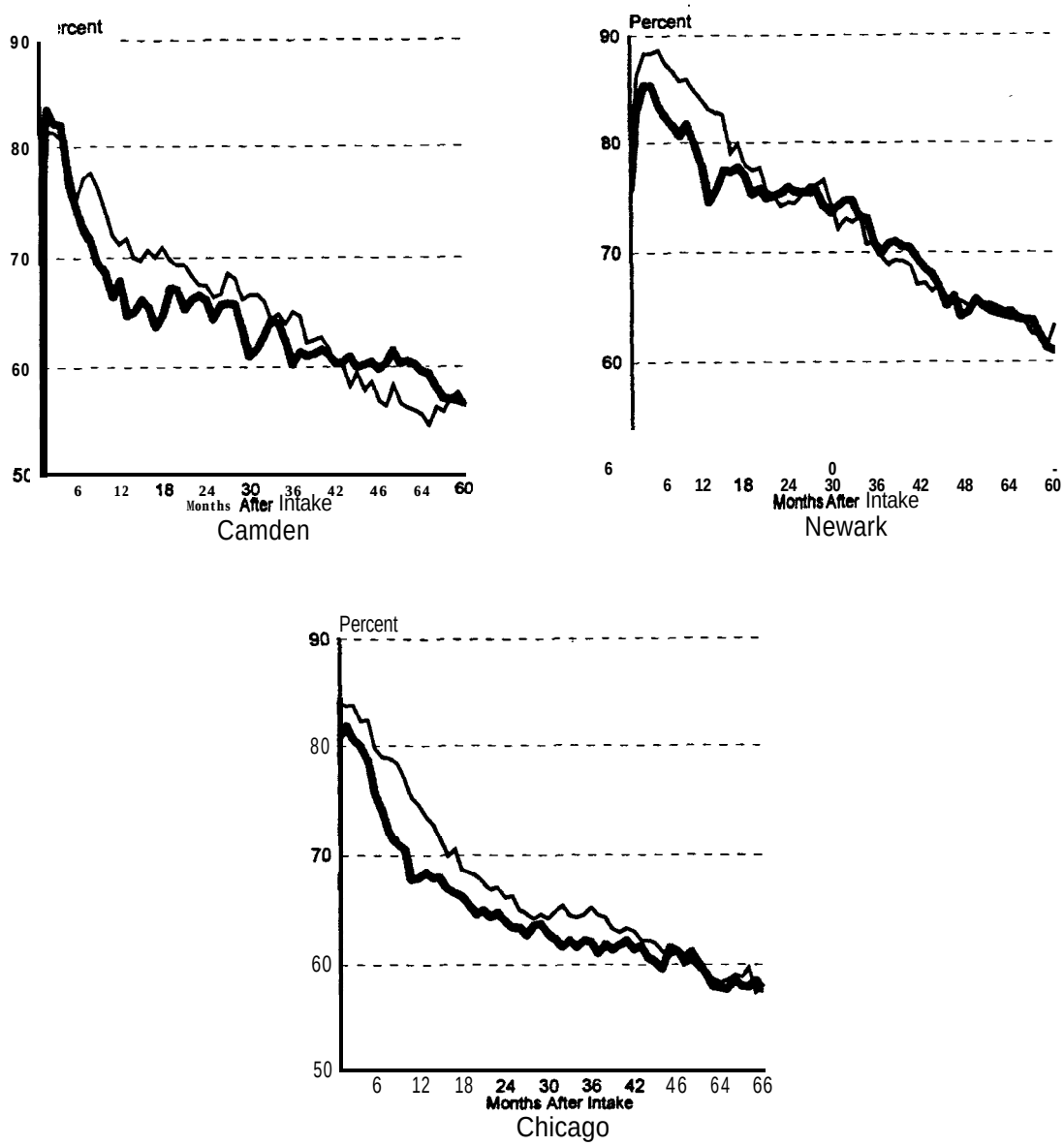
two years after intake, compared with those in the regular-services group. These reductions in AFDC benefit amounts, however, faded in the postprogram period three to five years after intake. This pattern of reductions in benefit amounts, in conjunction with the lack of impacts on levels of AFDC receipt, suggests that these benefit reductions largely reflect the sanction policies that were in effect (particularly in the New Jersey sites) during the first two years.[2] In Chicago, where sanction policies were less rigorously imposed, the observed impacts on AFDC receipt and benefit amounts during the first two to three years more likely reflect the modestly higher earnings of those in the enhanced-services group, compared with those in the regular-services group.

Administrative records data suggest that sample members also received food stamps for a substantial part of the five-year follow-up period (63 to 70 percent of the time) (Table IV. 1). The demonstration programs, however, had no significant impacts on food stamp receipt either during the period that the programs were operating or over the longer term. In Newark, mothers in the enhanced-services group consistently received lower food stamp benefits, but these differences are not statistically significant.

In general, levels of AFDC and food stamp benefit receipt declined steadily over the five years following intake but remained high at the end of the period (Figures IV.1 and IV.2). During the third month after enrollment, more than 80 percent of the mothers in the regular-services group were receiving AFDC; by 60 months after intake, 60 percent were receiving AFDC. Consistent with earlier analyses, mothers in the enhanced-services group in all three sites had somewhat lower rates of welfare receipt during the early months after enrollment when the demonstration programs were

[2]In all three programs, enhanced-services group members who did not comply with program requirements could be sanctioned (that is, their AFDC grants could be reduced by the amount normally allocated to cover the needs of the mother--$160 in New Jersey and $166 in Chicago). The sanction policy was implemented somewhat more rigorously by the New Jersey program than by the Chicago program (Gleason et al. 1993).

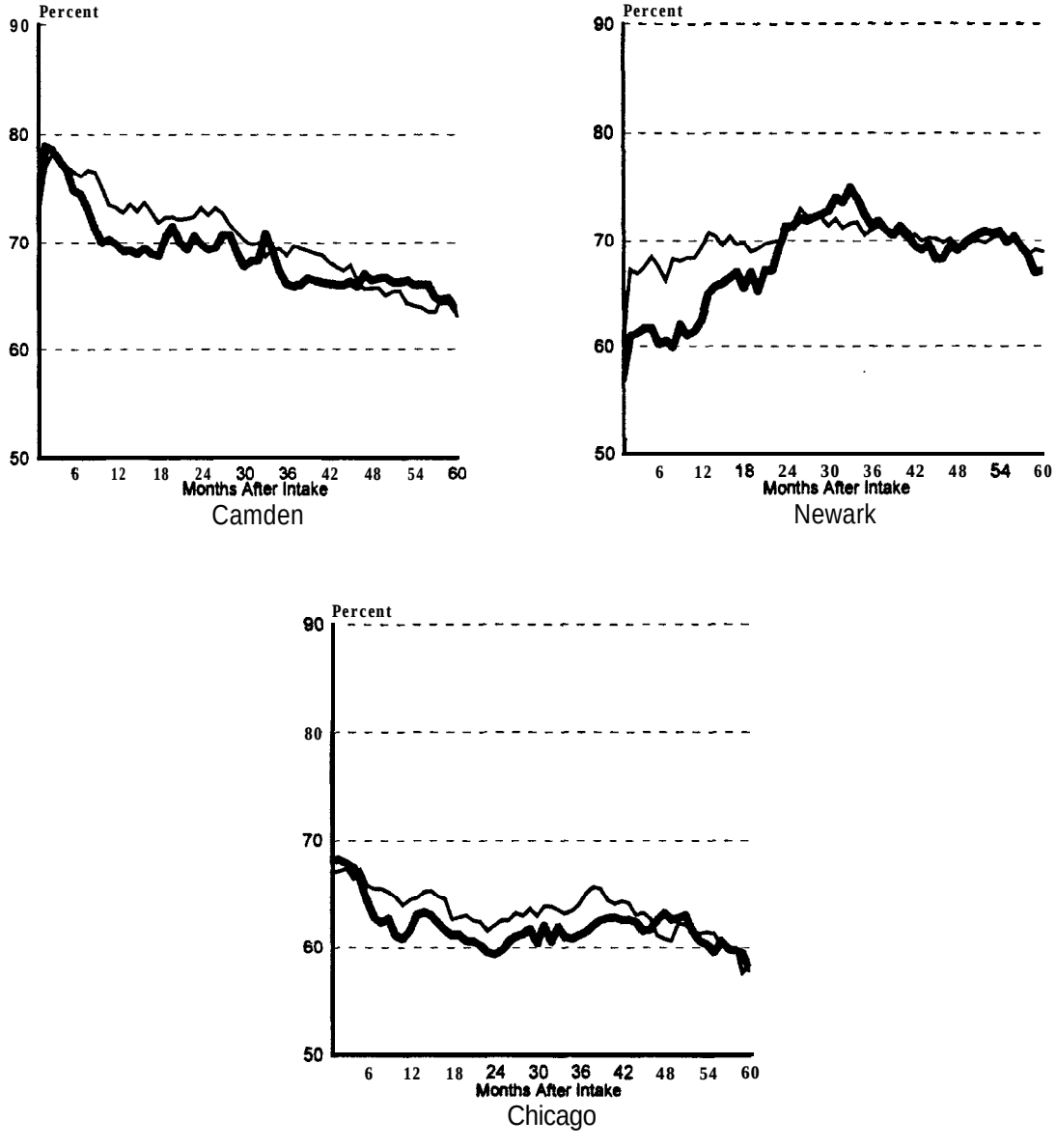
FIGURE IV.1
MONTHLY RATES OF AFDC RECEIPT
DURING THE FIVE YEARS AFTER INTAKE



SOURCE: Administrative **welfare** records data.

NOTE: Estimated impacts are measured as the **differences** between the means for **the** enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5 Numbers underlying these graphs are presented in Appendix Table C.4.

FIGURE IV.2
MONTHLY RATES OF FOOD STAMP RECEIPT DURING THE FIVE YEARS AFTER INTAKE



SOURCE: Administrative welfare records data

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and **A.5**. Numbers underlying these graphs are presented in Appendix Table C.6.

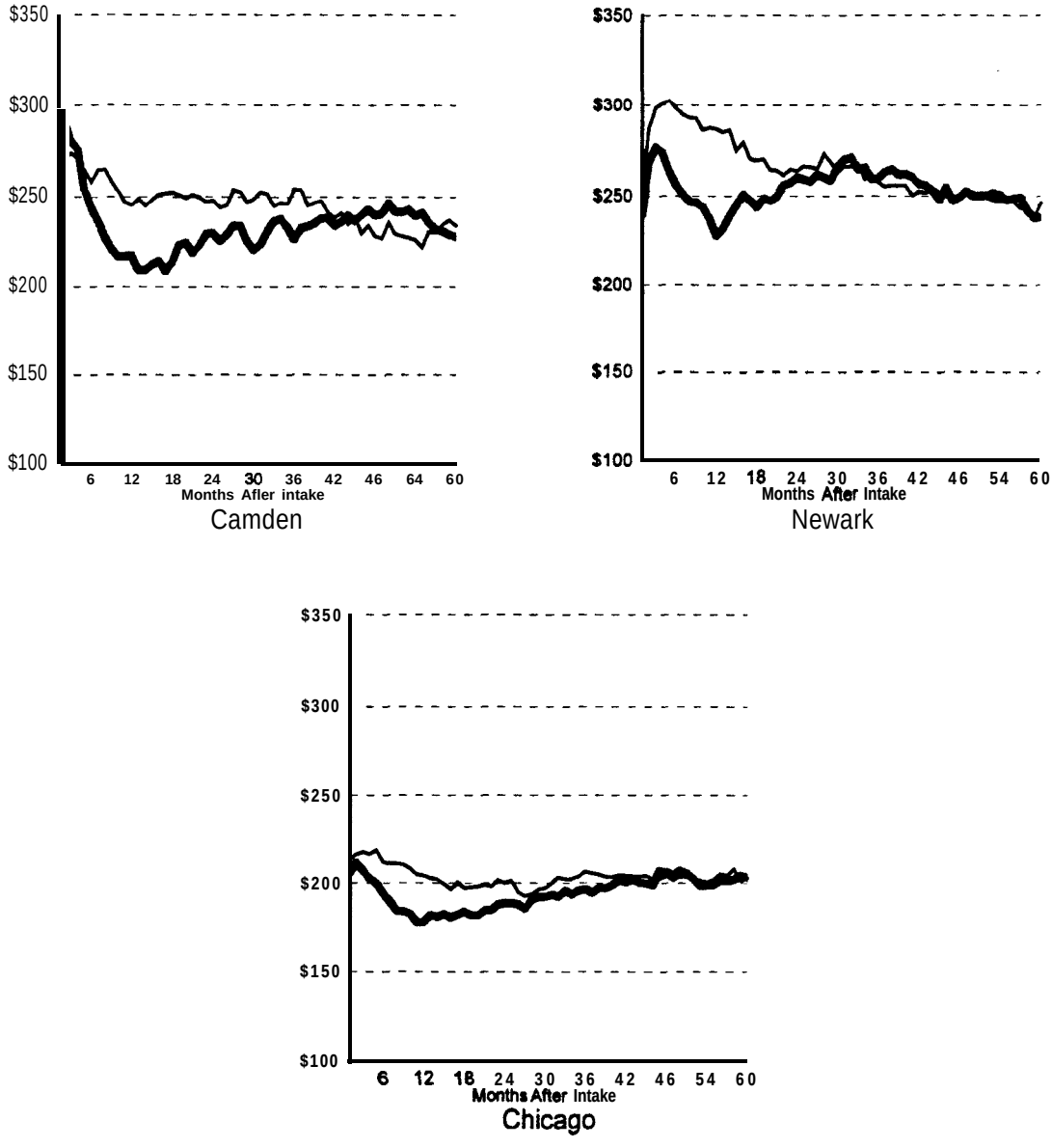
operating compared with those in the regular-services group. This difference disappears over time, however, as the programs ended and mothers in the enhanced-services group became subject to regular Job Opportunities and Basic Skills Training (JOBS) services and welfare policies. Only in Chicago are rates of AFDC receipt consistently lower among mothers in the enhanced-services group, compared with those in the regular-services group, throughout the five-year follow-up period. The patterns of food stamp receipt are similar to those of AFDC receipt except in Newark, where levels of food stamp receipt rose during the first two years after intake, then leveled off.[3]

Although, generally speaking, levels of AFDC and food stamp receipt declined over the five-year follow-up period, average AFDC and food stamp benefit amounts did not decline over the same period (Figures IV.3 and IV.4). In fact, food stamp benefit amounts increased during the five-year period. The increases in food stamp benefit amounts likely reflect the larger benefit amounts that individuals could receive with larger household sizes as the number of children born to sample members increased over time, in conjunction with early small reductions in food stamp receipt. In addition, nominal benefit amounts increased modestly over time.

Consistent with the subgroup differences in the early impacts of the programs on AFDC receipt and benefit amounts, impacts on AFDC receipt and benefit amounts during the five-year follow-up period tended to be concentrated among mothers who were relatively less disadvantaged when they enrolled in the demonstration. Impacts were concentrated among mothers with the highest reading skills, older mothers, mothers whose English was not limited, and mothers whose families did not receive welfare when they were children. However, we also observed significant impacts among those who would have been required to participate in the JOBS program, possibly reflecting the

[3]We suspect that some of the increase in food stamp receipt during the demonstration period in Newark resulted from sample members' reduced income due to sanctions.

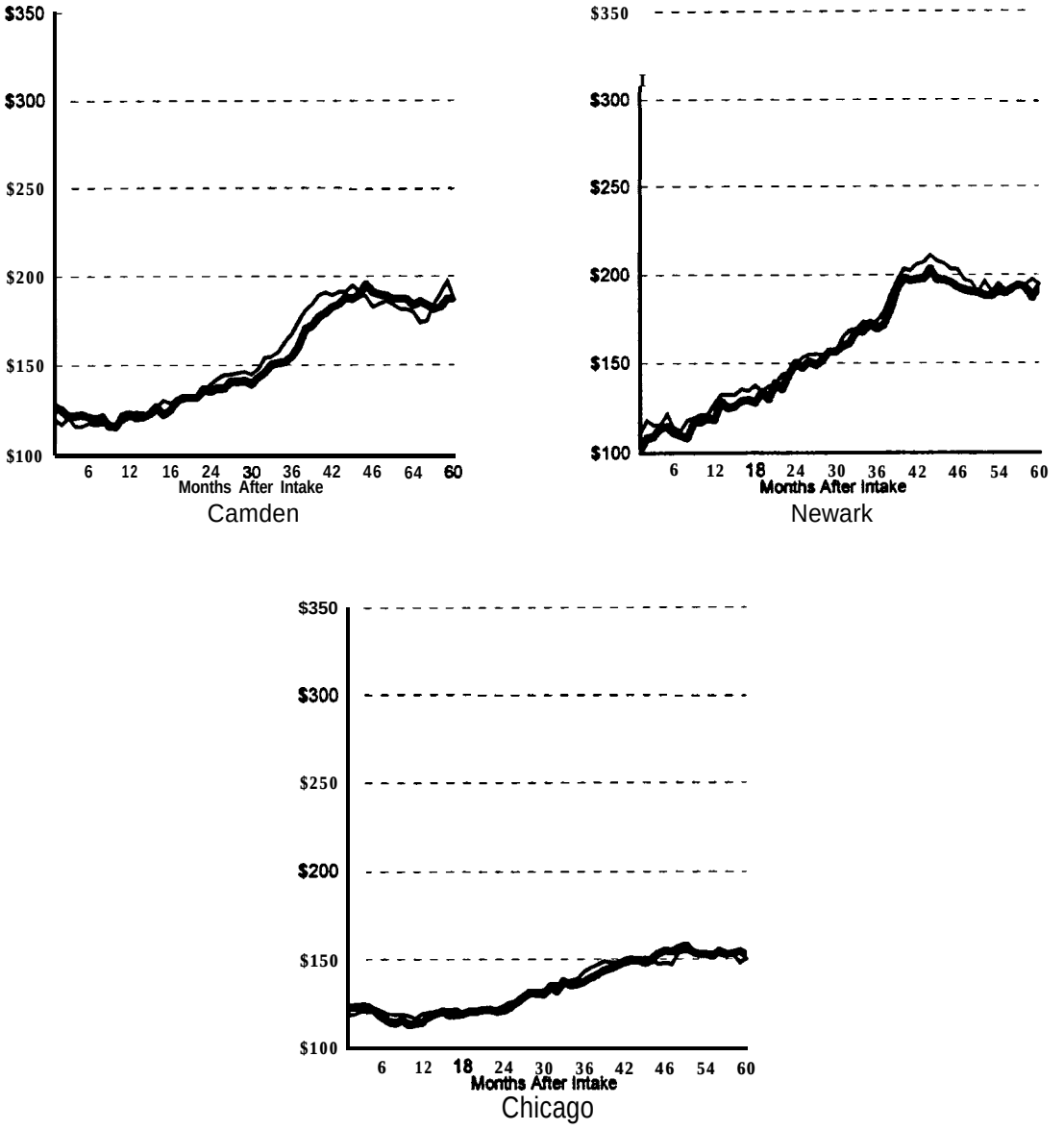
FIGURE IV.3
MONTHLY AFDC BENEFIT AMOUNTS DURING THE FIVE YEARS AFTER INTAKE



SOURCE: Administrative welfare records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5. Numbers underlying these graphs are presented in Appendix Table C.5.

FIGURE IV.4
MONTHLY FOOD STAMP BENEFIT AMOUNTS DURING THE FIVE YEARS AFTER INTAKE



SOURCE: Administrative welfare records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5. Numbers underlying these graphs are presented in Appendix Table C.7.

higher likelihood that these mothers received sanctions while in the programs. For the most part, subgroup differences in food stamp receipt and benefits were not significant (Appendix Tables C.9 and C.10).

B. INCOME AND ECONOMIC WELL-BEING AT FOLLOWUP

On average, the incomes of mothers in the regular-services group were low. AFDC and food stamps continued to provide a major portion of their income, and a large proportion of mothers continued to receive incomes below the poverty level.

1. Income and Its Sources

During the month prior to the second follow-up survey, conducted approximately six-and-a-half years after program intake, mothers in the regular-services group reported receiving an average total income ranging from $778 in Camden to $867 in Chicago (Table IV.2). These monthly incomes correspond to annual incomes of $9,336 in Camden and $10,404 in Chicago.

Except in Camden, the incomes of mothers in the enhanced-services group at the time of the second follow-up survey were not significantly different from those of their regular-services group counterparts. In Camden, mothers in the enhanced-services group reported receiving $62 more in income during the month prior to the second follow-up survey than mothers in the regular-services group. This amounts to $744 more per year. The significant positive program impact on total income in Camden resulted from the significantly greater likelihood that mothers in the enhanced-services group in that site received income from earnings.

TABLE IV.2

TOTAL INCOME AND INCOME SOURCES DURING THE MONTH PRIOR TO THE SECOND FOLLOW-UP SURVEY

	Enhanced-Services Group	Regular-services Group	Estimated Impact
Camden			
Total Income	S 840	$ 778	S 62**
Earnings	280	221	59*
Unearned Income	559	557	2
AFDC	284	287	-3
Food stamps	200	197	3
Child support	17	16	1
Other unearned income	57	57	-1
Newark			
Total Income	S841	$ 846	S-4
Earnings	296	335	-40
Unearned Income	546	510	36
AFDC	259	259	0
Food stamps	196	186	10
Child support	18	11	7
Other unearned income	73	55	18*
Chicago			
Total Income	$ 879	$ 867	$ 12
Earnings	366	355	11
Unearned Income	510	511	-1
AFDC	250	244	6
Food stamps	190	186	5
Child support	12	15	-3
Other unearned income	57	65	-7
Sample Size			
Camden	561	491	1,052
Newark	504	501	1,005
Chicago	704	738	1,442

SOURCE: Follow-up survey administered ao average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

During the month prior to the second follow-up survey, mothers in the regular-services group were most likely to report that they received income from AFDC and food stamps (Table IV.3).[4] The percentages who received income from AFDC ranged from 66 percent in Chicago to 73 percent in Camden. A similar percentage were receiving food stamps.

Fewer than one-third of the regular-services group mothers reported receiving income from earnings during the month preceding the second follow-up survey. Mothers in Camden were the least likely to have had earnings (2 1 percent); those in Chicago were most likely to have had income from earnings (32 percent). Only in Camden do we observe a significant difference in the contribution of earnings to income, with 25 percent of the mothers in the enhanced-services group in Camden receiving some income from earnings during the month prior to the second follow-up survey, compared with 2 1 percent of the regular-services group mothers.

On average, across all three demonstration sites, AFDC and food stamps constituted the highest proportion of mothers' incomes (Figure IV.5). The percentage of income from AFDC ranged from 36 percent in Chicago to 44 percent in Camden. The average percentage of income from food stamps was similar in the three sites, ranging from 27 percent in Chicago and Newark to 29 percent in Camden. Together, AFDC and food stamps provided 63 to 73 percent of the average mother's income.

On average, mothers in the regular-services group received about one-fifth to one-quarter of their income from earnings. In Newark and Chicago, mothers in the regular-services group received 25 to 27 percent of their income from earnings. The programs had no lasting impacts on the contribution of earnings to income; mothers in the enhanced-services group in those sites received

[4]Information on AFDC receipt at followup was obtained from survey data and is not directly comparable to the figures from administrative records discussed in the preceding section.

TABLE IV.3

SOURCES OF INCOME DURING THE MONTH PRIOR TO THE SECOND FOLLOW-UP SURVEY
(Percentage Receiving)

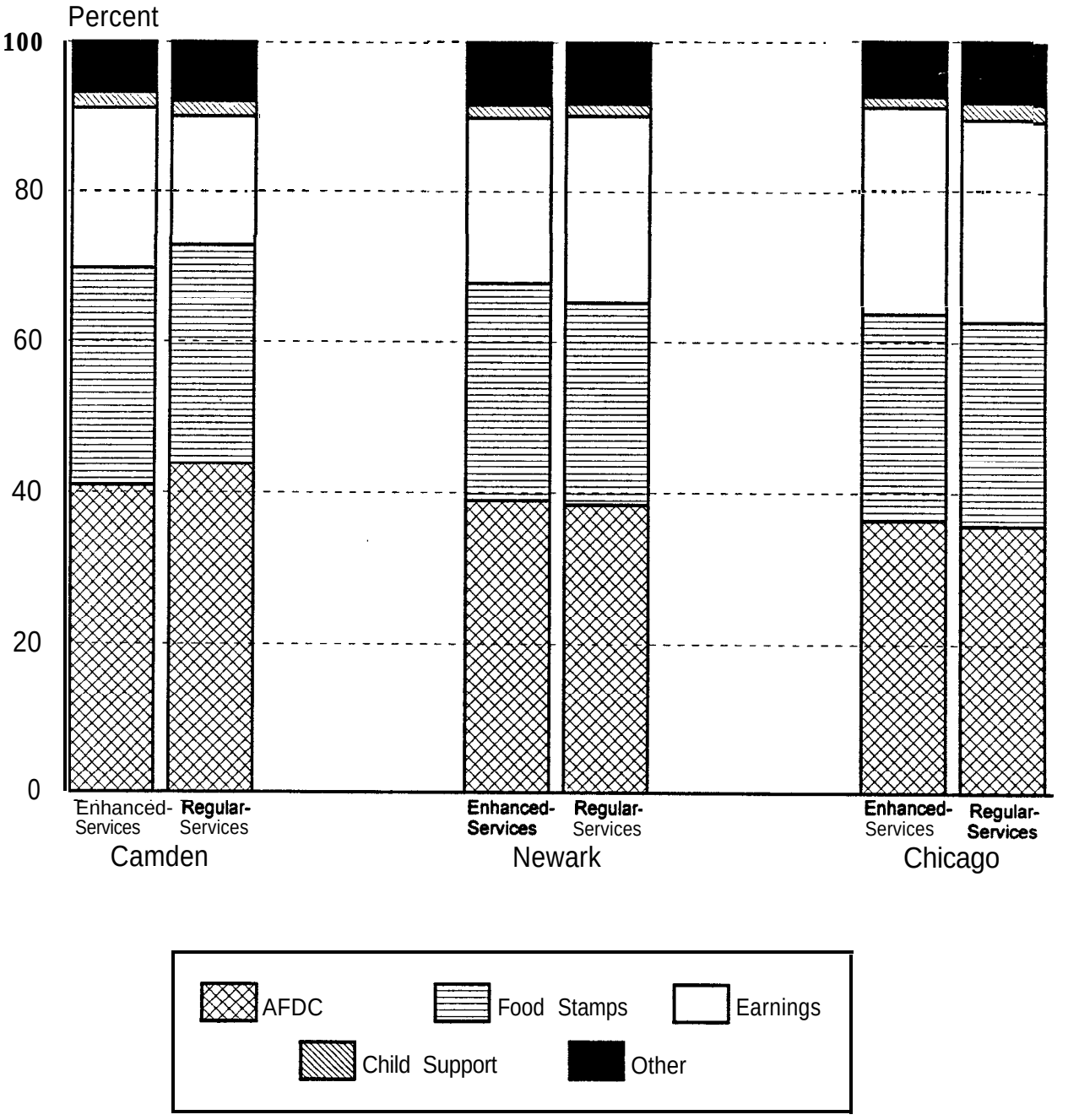
Income Sources	Enhanced-Services Group	Regular-Services Group	Estimated Impact
Camden			
Earnings	25.3	20.8	4.4*
AFDC	70.5	72.6	-2.1
Food Stamps	75.1	73.0	2.1
Child Support	17.6	17.2	0.4
Other Unearned Income	1.4	2.7	-1.3
Newark			
Earnings	27.0	30.4	-3.4
AFDC	69.6	69.0	0.6
Food Stamps	74.0	71.7	2.3
Child Support	12.9	11.1	1.8
Other Unearned Income	3.7	2.6	1.1
Chicago			
Earnings	34.0	32.0	2.0
AFDC	69.0	66.4	2.6
Food Stamps	70.2	70.0	2.6
Child Support	9.2	9.2	0.0
Other Unearned Income	4.5	5.5	-1.0
Sample Size			
Camden	561	491	1,052
Newark	504	501	1,005
Chicago	704	738	1,442

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

FIGURE IV.5
PROPORTIONAL CONTRIBUTION OF VARIOUS SOURCES TO TOTAL INCOME AT FOLLOWUP



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as the **differences** between the means for the **enhanced-** and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and **A.5.** Numbers underlying this graph are presented in Appendix Table C.8.

22 to 28 percent of their incomes from earnings. In Camden, mothers in the regular-services group received a smaller proportion of their income from earnings (17 percent), but the demonstration program significantly increased the average proportion of income from earnings to 22 percent.

The majority of mothers in the regular-services group reported no income from child support during the month prior to the second follow-up survey. Mothers in Camden were most likely to have received income from child support (17 percent), while those in Chicago were least likely to have received income from child support (9 percent).[5] On average, child support constituted only about two percent of the mothers' incomes. The demonstration programs did not have any significant impacts on the likelihood that mothers were receiving child support income or on the average percentage of income from child support.

2. Economic Well-Being

At the time of the second follow-up survey, many mothers in the regular-services group were still receiving incomes below the federal poverty level for themselves and their children. The percentage of mothers receiving incomes below 100 percent of the federal poverty level ranged from 59 percent in Newark and Chicago to 64 percent in Camden (Table IV.4). One-third of the mothers in the regular-services group were receiving incomes below 75 percent of the federal poverty level. Only 8 to 14 percent of the mothers were receiving incomes greater than 175 percent of the poverty level.

The programs did not affect the poverty rates of mothers in the enhanced-services group. This was true even in Camden, where, despite their significantly higher incomes, mothers in the enhanced-services group were equally likely to have incomes below the federal poverty level. Sixty

[5] See Chapter V for more discussion of child support and father involvement. Six percent of children lived with their fathers.

TABLE IV.5

HOUSEHOLD INCOME AS A PERCENTAGE OF THE POVERTY LEVEL DURING THE MONTH PRIOR TO THE SECOND FOLLOW-UP SURVEY
(Percentage)

	Enhanced-Services Group	Regular-Services Group	Estimated Impact
Camden			
Under 50	57.1	58.8	-1.8
Under 75	77.8	16.5	1.2
Under 100	**83.6**	**83.8**	-0.2
Under 125	89.5	89.4	0.1
Under 150	91.8	91.2	0.6
Under 175	93.7	96.8	**-3.0****
Newark			
Under 50	59.6	55.1	4.5
Under 75	74.8	75.1	-0.3
Under 100	83.0	80.2	2.9
Under 125	88.0	84.0	**4.1***
Under 150	90.4	87.6	2.7
Under 175	92.1	92.1	0
Chicago			
Under 50	54.0	54.3	-0.3
Under 75	68.9	70.3	-1.3
Under 100	**77.1**	**77.9**	-0.9
Under 125	81.2	82.8	-1.6
Under 150	86.5	87.5	-0.9
Under 175	90.8	91.4	-0.6
Sample Size			
Camden	471	423	894
Newark	427	436	863
Chicago	613	641	1,254

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTES: Incomes in the survey month expressed as a percentage of the federal poverty guidelines obtained from "Annual Update of the HHS Poverty Guideline," published in the ***Federal Register*** by the U.S. Department of Health and Human Services. Income is the total household income and is compared with the poverty level based on all household members. Estimated impacts are measured as the differences between the means for enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

percent of enhanced-services group mothers received incomes that were below 100 percent of the federal poverty level. However, the significantly higher incomes of the enhanced-services group mothers in Camden were reflected in the significantly lower percentages of mothers in the enhanced-services group in Camden who were receiving incomes that were below 125 percent of the poverty level.

When we take into account the presence of other household members and total household income reported by the mothers, the prevalence of mothers living in extreme poverty appears to be somewhat greater than it would be if they were living alone with their children.[6] Most of the mothers in the regular-services group belonged to households with incomes below 100 percent of the federal poverty level; more than half belonged to households with incomes below 50 percent of the poverty level (Table IV.5). The demonstration programs did not significantly affect the poverty levels of mothers' households except in Camden, where significantly fewer enhanced-services group mothers lived in households with incomes below 175 percent of the poverty level, and in Newark, where significantly more mothers in the enhanced-services group lived in households with incomes below 125 percent of the poverty level.

3. **Other Support**

The economic well-being of the mothers and their children depends not only on their own income and benefits, but also on the income and benefits received by other household members and

[6]This income is likely to be measured with more error than the mother's own income, because the mothers may not have known the precise amount of their household income during the past year. In addition, 15 to 20 percent of sample members across the three sites did not report household income.

TABLE IV.5

HOUSEHOLD INCOME AS A PERCENTAGE OF THE POVERTY LEVEL DURING THE MONTH PRIOR TO THE SECOND FOLLOW-UP SURVEY
(Percentage)

	Enhanced-Services Group	Regular-Services Group	Estimated Impact
Camden			
Under 50	57.1	58.8	-1.8
Under 75	77.8	76.5	1.2
Under 100	**83.6**	**83.8**	**-0.2**
Under 125	89.5	89.4	0.1
Under 150	91.8	91.2	0.6
Under 175	93.7	96.8	**-3.0****
Newark			
Under 50	59.6	55.1	4.5
Under 75	74.8	75.1	-0.3
Under 100	**83.0**	**80.2**	**2.9**
Under 125	88.0	84.0	**4.1***
Under 150	90.4	87.6	2.7
Under 175	92.1	92.1	0
Chicago			
Under 50	54.0	54.3	-0.3
Under 75	68.9	70.3	-1.3
Under 100	**77.1**	**77.9**	**-0.9**
Under 125	81.2	82.8	-1.6
Under 150	86.5	87.5	-0.9
Under 175	90.8	91.4	-0.6
Sample Sue			
Camden	471	423	8 9 4
Newark	427	436	863
Chicago	613	641	1.254

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTES: incomes in the survey month expressed as a percentage of the federal poverty guidelines obtained from "Annual Update of the HHS Poverty Guideline," published in the ***Federal Register*** by the U.S. Department of Health and Human Services. Income is the total household income and is compared with the poverty level based on all household members. Estimated impacts are measured as the differences between the means for enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

on the amounts of other types of in-kind support they receive. Although approximately half the mothers lived with other adults, only about 30 percent reported that other members of their household had any earned income (Table IV.6). Seven to 12 percent reported that other household members received AFDC, and 8 to 9 percent reported that other household members received income from other public assistance programs. The programs failed to alter mothers' choices about their living arrangements, and they did not affect the likelihood that mothers were living with other adults who contributed to the total household income.

Many of the mothers reported receiving in-kind economic support. Most of those in the regular-services group reported receiving Medicaid coverage (7 1 to 83 percent), and approximately one-third reported that they received other health insurance coverage. Although mothers in the sample reported receiving very little financial child support, 40 to 45 percent of the mothers in the regular-services group reported that they were currently receiving in-kind child support. A significant proportion of mothers (22 to 33 percent) also received rent subsidies or lived in public housing. Relatively few (two to six percent) of the mothers reported receiving federal surplus food.

For the most part, the demonstration programs had no lasting impacts on receipt of in-kind support. During the month prior to the second follow-up survey, however, mothers in the enhanced-services group in Newark were significantly less likely than those in the regular-services group to receive federal surplus food, while mothers in the enhanced-services group in Chicago were significantly more likely than those in the regular-services group to receive federal surplus food.

TABLE IV.6

OTHER SOURCES OF ECONOMIC SUPPORT DURING THE MONTH PRIOR TO THE SECOND FOLLOW-UP SURVEY
(Percentage)

	Enhanced-Services Group	Regular-Services Group	Estimated Impact
Camden			
Other Household Members			
Earned income	25.4	27.6	-2.2
AFDC income	8.4	9.8	-1.4
Other public assistance program	7.8	7.6	0.2
Other sources	1.1	0.4	0.7
In-Kind Sources of Support			
WIC	34.6	32.9	1.7
Federal surplus food	2.2	3.4	-1.1
Medicaid	84.1	83.1	1.0
Other health insurance	33.5	32.5	1.0
In-kind child support	43.9	39.8	4.1
Rent subsidy/public housing	33.9	29.4	4.5
Newark			
Other Household Members			
Earned income	25.9	30.5	-4.5
AFDC income	10.2	11.6	-1.4
Other public assistance program	8.4	8.0	0.4
Other sources	1.3	1.3	-0.0
In-Kind Sources of Support			
WIC	23.5	26.0	-2.5
Federal surplus food	2.4	5.6	-3.2**
Medicaid	79.8	80.2	-0.3
Other health insurance	31.8	34.7	-2.9
In-kind child support	44.7	44.5	0.2
Rent subsidy/public housing	36.6	33.1	3.5
Chicago			
Other Household Members			
Earned income	33.3	30.2	3.1
AFDC income	5.4	6.6	-1.3
Other public assistance program	8.6	8.6	-0.0
Other sources	0.1	0.1	0.0
In-Kind Sources of Support			
WIC	25.7	25.7	0.0
Federal surplus food	3.4	1.9	1.5*
Medicaid	74.5	71.1	3.4
Other health insurance	30.4	33.8	-3.4
In-kind child support	40.6	42.0	-1.4
Rent subsidy/public housing	24.0	22.1	1.9
Sample Size'			
Camden	561	491	1,052
Newark	504	501	1,005
Chicano	704	738	1,442

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates arc regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

'As is typical in survey data, there was a high rate of item nonresponse on questions about the income of other household members.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

C. SUMMARY

For most of the young mothers, the cycle of welfare dependency had not yet been broken by the time they reached their early- to mid-20s. Over time, as the young mothers matured and started entering employment, their dependence on welfare declined. However, the majority were still dependent on welfare five years after beginning to receive welfare and were likely to have long spells of welfare over their lifetimes. Approximately 70 percent of the mothers in both groups reported receiving income from AFDC at the time of the second follow-up survey. Furthermore, their earnings and welfare benefits combined were not always sufficient to lift the mothers out of poverty. At the time of the second follow-up survey, more than three-fourths of the mothers lived in households with incomes below the poverty level.

The early impacts of the programs on welfare receipt were promising, although the programs did not improve young mothers' overall economic well-being. However, consistent with the patterns of impacts on employment and earnings, the impacts on welfare receipt and benefit amounts faded at about the time the programs ended and sanctions for noncompliance with program requirements were discontinued. As mothers in the regular-services group caught up with mothers in the enhanced-services group in their employment and earnings, their need for welfare benefits declined to a comparable level as well.

V. SOCIAL, DEMOGRAPHIC, AND HEALTH OUTCOMES

The life circumstances of young parents can either help or hinder their efforts to become economically self-sufficient and be good parents. Unstable or unsupportive living arrangements and lack of support from family members and children's fathers may undermine mothers' efforts.to become self-sufficient. Living in neighborhoods where crime and drug use are prevalent may limit the hours when mothers can safely come and go to work, as well as limiting the extent to which mothers go out with their children. Continued childbearing increases young mothers' parenting responsibilities and child care needs, as well as the complexity and costs of the child care arrangements they need to work or attend school or training. Poor health, or drug or alcohol use by the mothers themselves, may limit their ability to find employment and retain it.

Through workshops, individual case management, and efforts to promote social and economic support from fathers, the demonstration programs attempted to change some of the social and demographic circumstances of the lives of participants that could interfere with their efforts to become economically self-sufficient. Mandatory initial workshops on life skills and family life management, child support, family planning, HIV and drug abuse were designed to help participants manage their family life, avoid health risks, delay subsequent pregnancies, and cope with particular problems (Gleason et al. 1993). Case managers provided individualized support and encouragement, as well as guidance for personal problems, during the one to three years that participants were subject to the program requirements. They made no attempt, however, to intervene directly in decisions about living arrangements, unless a particular living arrangement was clearly interfering with a young mother's ability to pursue economic self-sufficiency (Maynard 1993). The programs

attempted to promote fathers' financial and social support primarily by counseling mothers in workshops and discussions with case managers.'

For the most part, the demonstration programs did not have enduring effects on mothers' living situations, involvement with the fathers of their children, fertility, or health, either for the full sample or for key sample subgroups. At the time of the second follow-up survey, three to four years after the demonstration policies and services ended, most of the young mothers were not married. About half were living on their own with their children. The extent to which the young mothers received child support from the father of their first-born child, already low approximately two years after intake, decreased even further by six to seven years after intake. About 10 percent of the mothers reported receiving regular child support payments from the father of their first-born child, and between 6 and 26 percent of the fathers of these children were currently providing various kinds of in-kind support such as clothing and toys.

Approximately three-fourths of the young mothers gave birth to at least one additional child after intake, and more than half still had a child who was three years old or younger at the time of the second follow-up survey. Nearly all of the mothers received prenatal care during their most recent pregnancy, and more than 80 percent began receiving prenatal care during the first trimester of their pregnancy. Consistent with national rates of low birthweight, between 11 and 15 percent of the most recent infants born to the mothers were low-birthweight babies.

Most of the young mothers reported that they were in good health at the time of the second follow-up survey; however, 8 to 16 percent reported that they had to cut down on or limit the amount

'The Chicago program tried offering services to fathers, but few participated. The Newark and Chicago programs also arranged for staff from the state child support enforcement agency to spend time at the program site conducting interviews necessary for establishing paternity and child support orders.

of work they did or other regular activities because of physical or emotional health problems. Approximately one-third of the young mothers reported smoking frequently, but fewer than 10 percent reported drinking alcohol or using other drugs frequently during the year preceding the survey. Although reported levels of drug use by the mothers themselves were low, many reported drug problems among household members and other close relatives and friends.

In the following sections, we examine the circumstances of the young mothers' lives approximately six years after they enrolled in the demonstration, three to four years after the demonstration programs ended. Where appropriate, we describe program impacts that are significant.

A. LIVING ARRANGEMENTS

As was true at the time of the first follow-up survey, about half the young mothers in the sample were living with at least one other adult when the second follow-up survey was conducted (Table V.1). These adults--parents or grandparents, husbands or male partners, and other adults--were probably important sources of support for these mothers.*

As they made the transition to adulthood, many young mothers in the sample moved out of their parents' or grandparents' households. By the time of the second follow-up survey, when sample members were, on average, 24 to 25 years old, only about one-fourth of them lived with their parents or grandparents, compared with about 40 percent at the time of the first follow-up survey and more than half at intake.

Although marriage or a stable relationship with a partner offers one route to economic self-sufficiency, most of the young women in the sample had not taken this route by the time of the

*Some mothers reported, in earlier focus groups and in-depth interviews, that other household members often, but not always, supported their efforts to become self-sufficient (Polit 1992).

TABLE V.1

HOUSEHOLD COMPOSITION AND LIVING ARRANGEMENTS
(Percentage)

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Living Arrangements						
Living with other adult	50.7	-4.7	50.9	-3.7	48.4	3.9
Husband/partner	16.4	0.9	16.9	-4.8**	16.1	2.2
Parent/grandparent	22.6	-3.6	23.2	1.6	24.8	-0.7
Other adult	23.1	-3.0	252	-3.0	22.0	-1.5
Living with children only	46.6	4.1	46.8	3.0	49.3	-3.6
Living alone	1.0	0.3	0.9	0.5	0.9	-0.0
Ever Married	16.6	1.4	15.0	-3.0	25.1	1.3
Marital Status at Followup						
Married[b]	9.2	0.9	9.1	-4.0**	12.7	0.7
Living with partner	7.1	0.2	8.7	-1.8	5.1	-0.5
Separated/divorced/widowed	7.2	0.7	5.4	1.2	11.6	0.9
Number of Children Living in the Household						
0	3.3	-0.0	3.4	0.6	2.0	1.1
1	19.8	0.5	29.1	-4.3	22.7	-0.6
2 to 3	63.5	-2.7	56.1	6.0	61.8	-2.8
4 or More	13.4	2.3	11.4	-2.3	13.5	2.3
(Mean)	(2.3)	(-0.0)	(2.1)	(-0.0)	(2.3)	(0.0)
Age of Youngest Child in the Household						
Less than 1	14.8	0.7	14.2	-1.9	14.1	1.2
1 to3	49.6	-2.7	40.4	-1.2	47.6	-4.7
4 to 5	20.8	-0.1	15.8	6.5	14.8	4.3
6 or more	14.8	2.1	29.6	-3.5	23.6	-0.8
(Mean)	(3.2)	(0.2)	(3.8)	(0.1)	(3.5)	(0.1)
Living with All of Own Children	82.9	1.7	89.9	-1.6	90.1	-0.7
Mothers Who Have a Child Living with Father (and Not the Mother)	4.8	-1.1	2.2	0.4	1.2	0.3
Percent of All Children Living with Father (And Not the Mother)	2.5	-0.5	1.3	0.2	0.6	0.1
Sample Size	491	1,051	501	1,005	738	1,442

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

'Note that the components add up to more than the percent living with other adult since there are multiple adults in some households.

[b] Sample members who are married may or may not be living with their husband at the time of the survey.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

second follow-up survey. Relatively few sample members were living with spouses or male partners, and most had never married. Marriage was relatively more common in Chicago, where 25 percent of the young women in the regular-services group had ever married. At the time of the second followup, 13 percent remained married, and 5 percent were living with a male partner. In Camden and Newark, 15 to 17 percent had ever married, and nine percent remained married at the time of the second follow-up survey. Seven to nine percent were living with a partner. The demonstration programs did not alter marriage and cohabitation patterns significantly except in Newark, where enhanced-services group members were significantly less likely to be married at the time of the second follow-up survey (5.1 compared with 9.1 percent were married) and, therefore, were significantly less likely to be living with a husband or male partner (12.1 compared with 16.9 percent).

The majority of young mothers were living with multiple children at the time of the second follow-up survey. More than half were living with at least one child who was three years old or under. Thus, six to seven years after enrolling in the demonstration, child care for young children remained a potentially important barrier to employment-related activities for the mothers in both the regular- and the enhanced-services groups.

. Most of the young mothers in the sample retained custody of all their children at the time of the second follow-up survey. In Newark and Chicago, 90 percent of the mothers were living with all their own children, and in Camden, 83 percent were living with all their children (Table V.l). In some cases, when they did not have custody, the children's fathers were caring for the children. This was relatively more common in Camden (where five percent of the mothers had children who were in their fathers' custody) than in Newark or Chicago (where two and one percent, respectively, had children in their father's custody).

B. NEIGHBORHOOD CONTEXT

Some aspects of families' neighborhoods--for example, safety, crime, physical environment, and the extent to which neighbors are employed or rely on welfare-can potentially support or impede mothers' motivation and efforts to become self-sufficient and provide a positive environment for their children. Mothers concerned about unsafe conditions in their neighborhoods may limit the times when they are willing to go out for employment or for activities with their children. Mothers who live in neighborhoods where many adults are not employed, and where many families depend on welfare, tend to have few role models for achieving economic self-sufficiency and receive limited support or encouragement from neighbors and friends for meeting this goal.

Many mothers in the study expressed concerns about crime and safety in their neighborhoods. Some mothers reported fears and concerns that might restrict their willingness to leave their homes, at least during certain hours, for employment or related activities or to participate in other activities with their children. About half the mothers reported that they were afraid to walk around their neighborhood alone at night; 14 to 21 percent reported that they were afraid to walk around their neighborhood alone during the day (Table V.2). Most reported that they usually felt safe and secure in their home at night, but 11 to 16 percent did not feel safe. Between 7 and 10 percent reported that their home had been burglarized within the previous year. In Chicago, mothers in the enhanced-services group were significantly more likely than those in the regular-services group to report that they usually felt safe in their home at night (92 compared with 89 percent).

Many mothers in the sample lived in neighborhoods where welfare dependence was common. In Camden and Newark, 29 to 30 percent of the mothers in the regular-services group reported that most or almost all of their neighbors received welfare. In Chicago, 21 percent reported that they lived in neighborhoods where most or almost all of their neighbors received welfare. In Camden,

TABLE V.2

NEIGHBORHOOD CONTEXT

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Mean Total Neighborhood Problems Score	9.7	0.1	10.1	-0.4*	9.0	-0.0
Percentage with Many Neighbors Receiving Welfare	29.3	5.6*	29.8	3.1	21.3	-3.2
Percentage with Many Young Neighbors using Drugs	28.8	-0.6	35.3	0.4	21.9	1.4
Percentage Afraid to Walk Around During the Night	53.3	-0.0	56.3	-3.1	49.0	1.6
Percentage Afraid to Walk Around During the Day	14.4	3.5	21.1	0.4	17.3	-0.3
Percentage Feel Safe in Home at Night	84.3	0.4	87.6	-0.4	89.4	2.9*
Percentage Burglarized in Last Year	9.0	1.8	9.5	0.0	7.3	0.3
Sample Size	404-490	875-1,050	410-498	819-999	597-737	1,153-1,438

SOURCE: Follow-up survey administered an average of 78 months after intake

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and AS.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

mothers in the enhanced-services group were even more likely than those in the regular-services group to report living in neighborhoods where most or almost all of their neighbors received welfare.

Most of the mothers in the sample had incomes. below the poverty level at the time of the follow-up survey. Their options for places to live were probably very limited. In Camden and Chicago, one-third of the mothers in the regular-services group reported that they had had trouble finding a good place to live within the past year. In Newark, nearly half the mothers had had trouble finding a good place to live. Mothers in the enhanced-services group did not fare significantly better than those in the regular-services group in their efforts to find a good place to live, and in Camden, significantly more of them reported having trouble finding a good place to live.

C. CUSTODIAL RESPONSIBILITY AND SUPPORT FROM FATHERS

Relatively few of the sample members' first-born children lived with their fathers at the time of the second follow-up survey. Approximately 9 percent of first-born children in the three sites lived with their fathers and presumably had frequent contact and received regular support from them. Approximately 3 percent of first-born children had fathers who were deceased by the time of the second follow-up survey. The demonstration programs did not have a significant impact on the likelihood that sample members' first-born children lived with their fathers.

The likelihood that mothers' first-born children who did not live with their fathers had regular contact with their fathers was already low at the time of the first follow-up survey, when only slightly more than one-quarter of the children had regular contact with their noncustodial fathers (Maynard, Nicholson, and Rangarajan 1993). Contact between mothers' first-born children and their noncustodial fathers decreased further by the time of the second follow-up survey. Fewer than one-quarter of the first-born children had regular contact with their noncustodial father at the time of the second follow-up survey ('Table V.3). Only about 10 percent of the first-born children who did not

TABLE V.3

SOCIAL AND FINANCIAL SUPPORT FROM NONCUSTODIAL FATHER OF FIRST-BORN CHILD AT FOLLOWUP

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Child Has Regular Contact with Father	18.5	2.8	23.2	-0.9	18.7	-0.8
Child Regularly Stays Overnight with Father	9.6	-2.1	12.1	2.9	10.9	-0.4
Monetary Support Provided by Father						
None	84.2	-3.9++	75.3	1.0	83.6	1.2
Occasionally	5.9	5.3++	13.9	-2.0	7.3	-0.6
Regularly	9.9	-1.4++	10.8	1.0	9.2	-0.6
Monetary Support in Month Prior to Interview	8.1	2.8	13.3	-0.7	10.5	-1.1
Father Required to Provide Child Support	69.7	-2.6	59.4	-2.4	29.2	4.5*
Support Currently Provided by Father						
Baby food	10.3	3.3	16.1	-3.6	11.1	-0.7
Child care items	10.2	0.0	15.3	-5.7**	9.2	-1.1
Household items	6.3	0.9	11.1	-1.5	7.5	0.0
Clothing	20.1	2.5	23.8	-1.7	20.9	0.3
Toys	20.2	5.2*	26.3	-1.2	22.2	1.4
Medicine	9.1	0.9	14.3	-3.5	9.6	0.9
Child care	8.2	2.2	11.9	0.3	9.9	1.3
Sample Size'	**401-425**	**851-900**	**408-429**	**814-862**	**617-638**	**1,186-1234**

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTES: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

'Nine percent of the children lived with their fathers and are excluded from the table. The fathers of approximately 3 percent of the children were deceased, and those children are also excluded from the table.

*Statistically significant at the 10 percent level, two-tailed test.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

live with their fathers regularly stayed overnight with their fathers. The decreasing contact between the first-born children and their noncustodial fathers over time may reflect either mothers' or fathers' preferences or actions. The decreasing contact may reflect increases in mothers' desires to avoid contact with their former partners and/or prevent the continuing involvement of the fathers in their children's lives, increases in fathers' desires to distance themselves from the mothers or decreases in their interest in or ability to maintain contact with their children, or exposure to other people or factors that may have pushed mothers, fathers, and children apart.

Overall, the proportion of the first-bon children's noncustodial fathers who provided regular financial support was very low, and it changed little between the first and second follow-up surveys. Although more than half the mothers in Camden and Newark, and more than one-quarter of those in Chicago, reported that their first-born child's noncustodial father was required to provide child support, only about 10 percent reported that they received regular financial support from the noncustodial father of their first-born child. An additional 6 to 14 percent reported that they received financial support occasionally. Eight to 13 percent of the mothers in the regular-services group reported that they received financial support from the noncustodial father of their first-born child during the month preceding the second follow-up survey. The demonstration programs, which attempted to promote greater financial and social support from the fathers of the mothers' children primarily by counseling mothers, did not increase the likelihood that the noncustodial fathers of mothers' first-born children provided financial support, except in Camden, where mothers were less likely to report that they received no financial support from the noncustodial father of their first-born child and more likely to report that they received occasional financial support. In Chicago, mothers were more likely to report that the father of their first-born child was required to provide child support, although they were not significantly more likely to receive financial child support.

Between 6 and 26 percent of the mothers in the regular-services group reported that the noncustodial fathers of their first-born children were currently providing various types of in-kind support. Noncustodial fathers were most likely to be providing clothing and toys (about 20 percent). Ten to 15 percent of the first-born children's noncustodial fathers were providing baby food, child care items, or medicine; approximately 10 percent sometimes cared for their children. In Camden, the mothers in the enhanced-services group were significantly more likely than those in the regular-services group to report that their first-born child's noncustodial father was currently providing toys. In Newark, mothers in the enhanced-services group were less likely to report that their first-born child's noncustodial father was currently providing child care items.

D. SEXUAL ACTIVITY, FAMILY PLANNING, AND FERTILITY

Many of the young mothers in the sample recognized that having more children right away would interfere with other goals. In their contacts with case managers and in focus groups during the first phase of the evaluation, young mothers emphasized their desire to avoid having more children, at least until their lives were more stable (Polit 1992). To help young mothers delay subsequent pregnancies, all three demonstration programs offered mandatory initial workshops on family planning to discuss topics related to sexuality, contraception, and relationships. The duration of these workshops ranged from 1.5 hours in Chicago to 54 hours in Newark (Gleason et al. 1 993).[3] The Camden program offered a richer family planning workshop for all clients, and case managers had smaller overall caseloads, permitting them to offer more intensive case management to all clients.

[3]Although these workshops were mandatory, some mothers in the enhanced-services group did not attend them. Participation rates in initial family planning workshops were high in Chicago (nearly 85 percent), but they were much lower in the New Jersey sites (37 percent in Camden and 21 percent in Newark) (Gleason et al. 1993).

Despite their expressed desire not to have more children until their lives were more stable, the majority of young mothers in the sample were sexually active at the time of the first follow-up survey, and about one-third had not used an effective birth control method the last time they had intercourse (Maynard et al. 1993). Levels of sexual activity remained high at the time of the second follow-up survey; most of the young mothers in both the regular- and enhanced-services groups had been sexually active within the six months prior to the survey (88 to 92 percent).

The majority of young mothers in the sample reported using an effective contraceptive method the last time they had intercourse (either alone or in combination with another method).[4] The young mothers were most likely to rely on condoms (54 to 62 percent), douching (40 to 44 percent), birth control pills (18 to 24 percent), and/or withdrawal (20 to 26 percent) the last time they had intercourse (Table V.4).[5]

Most of the young mothers in the regular-services group (8 1 to 87 percent) became pregnant at least once during the follow-up period (Table V.5). Many young mothers became pregnant again within a short time after enrolling in the demonstration. A large proportion (27 to 40 percent) became pregnant within one year, nearly two-thirds became pregnant within three years (59 to 71 percent), and more than three-quarters became pregnant at least once within five years after enrollment (74 to 82 percent) (Figure V.l).

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[4]Effective methods of birth control include those with very low failure rates when used correctly: birth control pill, condom, diaphragm, IUD, Norplant, sterilization, and vasectomy.

[5]For the most part, we found no evidence that the demonstration programs influenced young mothers' contraceptive choices. In Camden, however, young mothers in the enhanced-services group were more likely than those in the regular-services group to report using withdrawal and less likely to report using Norplant. In Chicago, mothers in the enhanced-services group were significantly less likely to report using withdrawal.

TABLE V.4

SEXUAL ACTIVITY AND CONTRACEPTIVE **PRACTICES**
(Percents)

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Months Since Sexual Intercourse*						
0 to 6 months	88.1	2.7	90.5	-3.4++	91.9	0.8
7 to 12 months	8.4	-2.8	3.2	5.1++	4.9	-0.4
More than 12 months	3.5	0.1	6.4	-1.7++	3.2	-0.4
Don't know	0.0	0.0	0.0	o.o++	0.3	-0.3
(Average months since active)	-3.0	(-0.3)	-3.0	-0.6	-2.4	(-0.2)
Percent Who Used an Effective Method of Birth Control at Last Intercourse'	76.2	-3.3	72	2.8	72.6	3.0
Percent Who Used Indicated Type of Birth Control at Last Intercourse[b]						
Birth control pill	23.0	-0.5	17.6	2.5	24.4	-0.3
Condom	56.5	-1.1	62.4	1.2	54.1	1.9
Douching	41.4	2.3	44.0	-4.9	40.0	-0.7
Withdrawal	20.3	5.9**	25.9	-1.3	25.4	-4.6.
Sterilization	17.1	0.2	10.2	0.0	16.6	3.3
Norplant	7.2	-2.8*	4.1	-1.5	3.7	-0.4
Foam	4.8	1.0	2.1	0.6	3.2	-0.1
Diaphragm	1.8	-0.0	1.6	0.5	0.7	-0.6
Vasectomy	2.0	-0.2	0.0	0.0	0.3	0.1
IUD	1.4	-0.6	0.7	-0.5	0.3	0.2
Rhythm	0.4	-0.3	0.2	0.6	0.5	-0.1
Sample Size	398-491	847-1,052	424-501	988-1,005	593-704	1,226-1,442

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

'Excludes sample members who were pregnant at the time of the follow-up survey. Effective methods of contraception include those with very low failure rates when used correctly: birth control pill, condom, diaphragm, IUD, Norplant, sterilization, and vasectomy.

[b]Sample members could give multiple responses to this question.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

TABLE V.5

PREGNANCIES SINCE INTAKE AND THEIR OUTCOMES

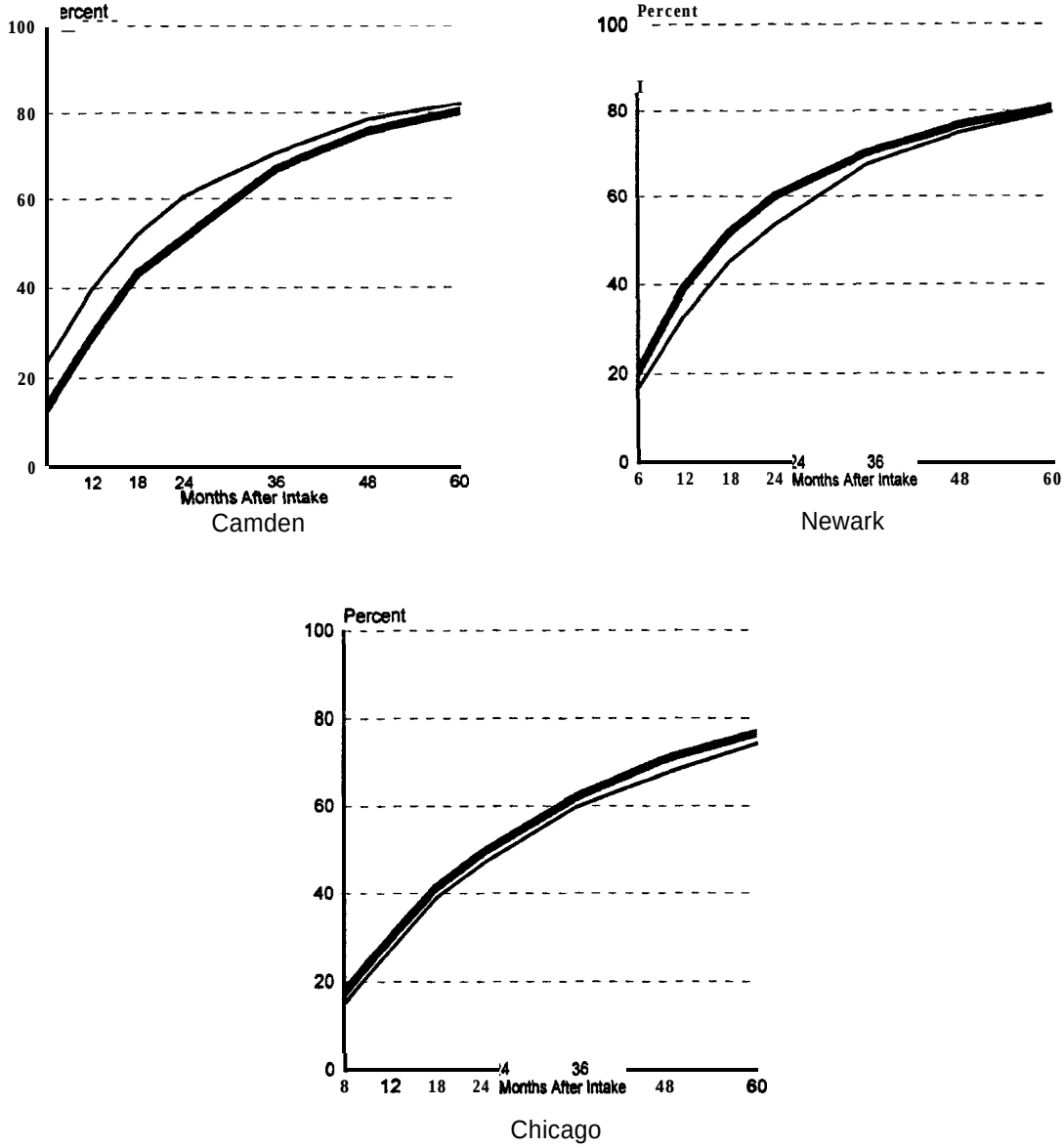
	Regular-Services Group	Enhanced-Services Group	Estimated Impact
Camden			
Any Pregnancy (percent)	87.6	85.2	-2.4
Number of Pregnancies	1.9	1.7	-0.2**
Any Birth (percent)	84.4	81.2	-3.3
Number of Subsequent Births	1.6	1.5	-0.1*
Any Abortion (percent)	19.0	19.8	-0.1
Any Miscarriage or Stillbirth (percent)	14.5	12.9	-1.6
Newark			
Any Pregnancy (percent)	84.1	83.6	-0.5
Number of Pregnancies	1.7	1.7	-0.1
Any Birth (percent)	70.5	72.3	1.8
Number of Subsequent Births	1.2	1.2	0.0
Any Abortion (percent)	28.1	26.8	-1.3
Any Miscarriage or Stillbirth (percent)	22.6	20.5	-2.2
Chicago			
Any Pregnancy (percent)	8 0 . 8	83.5	2.7
Number of Pregnancies	1.7	1.7	0.0
Any Birth (percent)	77.5	77.9	-0.4
Number of Subsequent Births	1.4	1.4	0.1
Any Abortion (percent)	19.0	23.3	4.3*
Any Miscarriage or Stillbirth (percent)	19.8	18.2	-1.7
Sample Sizes			
Camden	412-489	494-56 1	906-1,021
Newark	373-501	369-501	742- 1,002
Chicago	646-737	602-702	1,248-1,383

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. Ail estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

FIGURE V.1
CUMULATIVE PREGNANCY RATES, BY MONTHS AFTER INTAKE



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

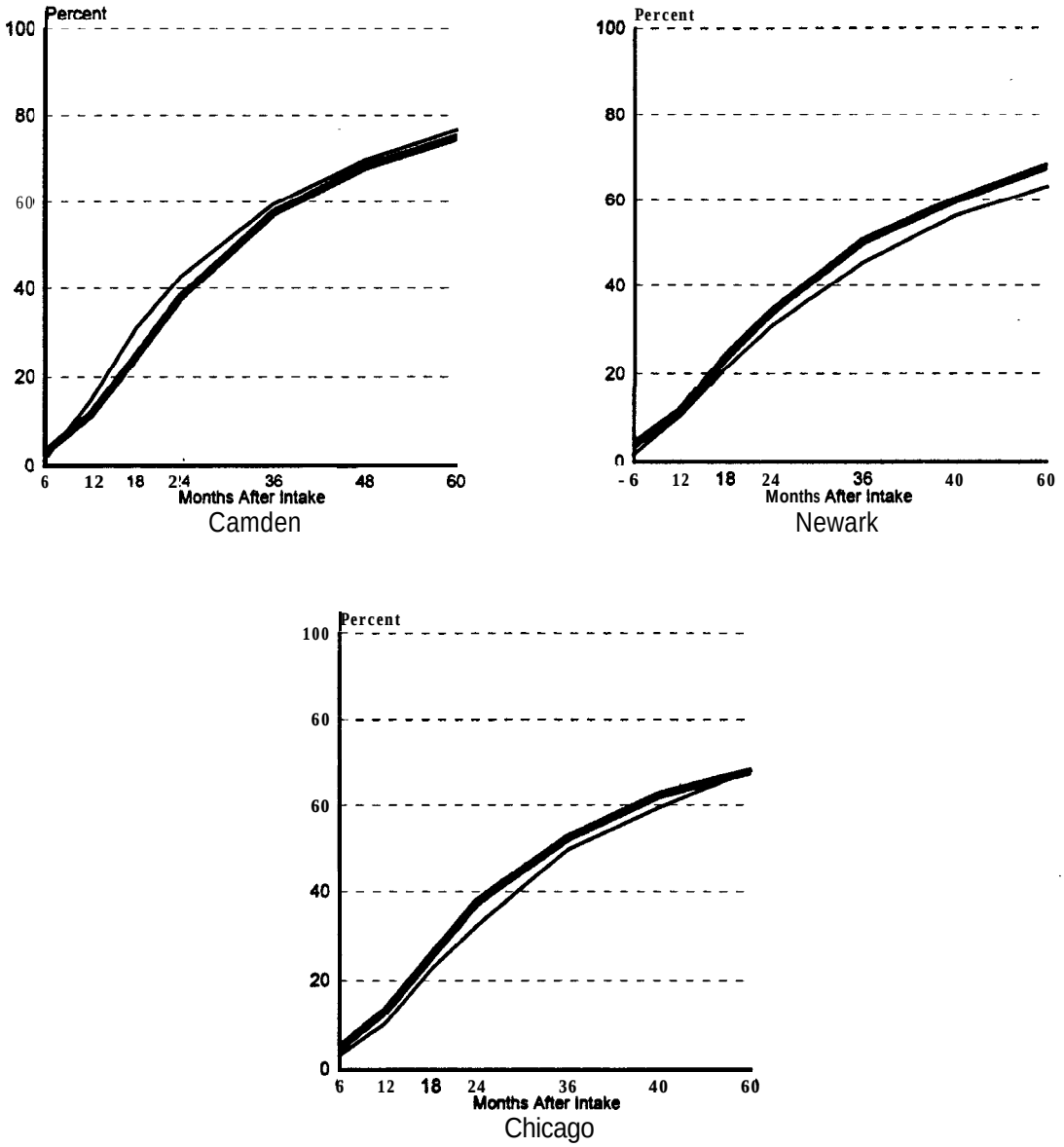
NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and AS. Numbers underlying these graphs are presented in Appendix Table D.1.

On average, the young mothers became pregnant twice during the follow-up period. A majority of the young mothers in the three sites gave birth to a second child during the follow-up period (71 to 84 percent). On average, mothers gave birth to between one and two additional children (1.2 to 1.6 children). Consistent with the high rates of subsequent pregnancies early in the period after demonstration enrollment, nearly one-third to one-half of the young mothers in the regular-services group in the three sites gave birth to a second child within two years after enrollment (31 to 43 percent) (Figure V.2). By five years after enrollment, between 63 and 77 percent of the young mothers in the regular-services group had at least one additional child. The young mothers in Camden were most likely to have given birth to at least one additional child during the follow-up period (84 percent). A smaller percentage of the young mothers in Chicago and Newark had given birth to at least one additional child (68 and 63 percent, respectively).

A majority of pregnancies resulted in births. However, a significant proportion of the young mothers in the three sites ended at least one pregnancy with an abortion. Young mothers in Newark were most likely to report having had an abortion during the follow-up period (28 percent); while those in Camden and Chicago were less likely to report having had an abortion (19 percent) (Table V.5).

Only in Camden, where the program had a relatively stronger focus on reducing repeat pregnancies, did the program influence pregnancies and births. There, where pregnancy rates were the highest, the program reduced the proportion of young mothers who became pregnant during the evaluation period by 2.4 percentage points and reduced the proportion who gave birth to another child by 3.3 percentage points (not statistically significant). The estimated reductions in the average number of pregnancies and births are statistically significant, but small (0.2 pregnancies and 0.1 births).

FIGURE V.2
CUMULATIVE BIRTH RATES, BY MONTHS AFTER INTAKE



SOURCE: Follow-up survey administered an average of 78 months after sample intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5 Numbers underlying these graphs are presented in Appendix Table D.1.

Mothers in the enhanced-services group in Camden were significantly less likely to have become pregnant at all durations since program intake, but the analysis shows that the programs in Newark and Chicago had no significant impacts on the timing of pregnancies or births (with a few small exceptions) (Figures V.l and V.2). In Camden, the estimated impacts are largest for the earliest months since intake and diminish as the follow-up period lengthens, suggesting that the Camden program not only led young mothers to have slightly fewer pregnancies and births, on average, during the five years after enrollment, but also led a significant number of young mothers who became pregnant to delay their first subsequent pregnancy. Consistent with the pattern of impacts on pregnancies, a significant number of young mothers in the enhanced-services group in Camden delayed having a child during the early period after enrollment.

Mistimed (and possibly unwanted) pregnancies were common among the young mothers in the three sites. The majority of young mothers in the regular-services group who became pregnant during the follow-up period reported that they wanted to get pregnant when they did the last time, but a substantial proportion (3 1 to 44 percent) did not.

E. PRENATAL CARE AND INFANT HEALTH INDICATORS

Nearly all the young mothers received prenatal care during their most recent or current pregnancy since demonstration enrollment (95 to 98 percent), and most received it regularly (90 to 94 percent) (Table V.6). More than 80 percent of those who received prenatal care (81 to 86 percent) began receiving it during the first trimester of their most recent pregnancy, and most of the remaining young women began prenatal care during the second trimester.

Very few infants born to sample members in either group died at birth (Table V.6). Between 11 and 15 percent of the young mothers in the sample gave birth to a low-birthweight baby the last

TABLE V.6

PRENATAL CARE AND INFANT HEALTH INDICATORS, MOST RECENT PREGNANCY SINCE INTAKE
(Percent)

	Camden		Newark		Chicano	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Prenatal Care[a]						
Any prenatal care	96.5	0.5	95.1	1.5	96.8	1.4
Regular prenatal care	94.2	-2.1	89.8	2.0	91.4	0.3
Percent of prenatal care that started in the first trimester	82.4	1.2	80.9	1.0	85.5	-2.8
Infant Health Indicators[b]						
Infant death	0.0	0.2	0.0	0.4	0.0	0.1
Low birthweight	13.5	-0.5	14.5	1.9	10.6	0.8
Hospitalized in neonatal intensive care unit	13.6	-1.3	9.0	4.7	6.8	1.9
Sample Size	298-328	640-706	239-266	477-533	452-493	846-939

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: The sample includes sample members who became pregnant and gave birth after program intake. Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

[a]Includes sample members who were currently pregnant and those whose most recent pregnancy ended in a birth.

[b]Includes only sample members whose most recent pregnancy ended with a birth.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

time they gave birth, and between 7 and 14 percent reported that their baby was hospitalized in the neonatal intensive care unit. These rates of low-birthweight births are consistent with those of young mothers nationally.[6,7]

F. OTHER OUTCOMES

In workshops and individual counseling, the programs provided information about drug abuse and the health risks of smoking and drinking alcohol. The programs also sought to reduce the young mothers' exposure to and involvement in crime. By the time of the first follow-up survey, the programs had had only very limited effects on the extent of drug use or involvement with crime reported by members of the enhanced-services group. Even fewer impacts were evident by the time of the second follow-up survey.

1. Health

Poor health may limit mothers' ability to work or limit the range of jobs they are able to hold. Ten to 16 percent of the mothers in the regular-services group rated their health as fair or poor (Table V.7). During the month prior to the second follow-up survey, 10 to 15 percent reported that they had cut down on or limited the amount of work they did or other regular activities because of physical health problems. Eight-to 16 percent reported that they had cut down on or limited the amount of work they did or other regular daily activities because of emotional health problems, such as feeling anxious or depressed. Mothers in the enhanced-services group were just as likely to report that their health was fair or poor, and they limited their activities due to health problems to the same extent,

[6]The sample includes sample members who gave birth after program intake (74 to 86 percent).

'Nationally, 13 percent of babies born to black non-Hispanic mothers and 6 percent of babies born to Hispanic and white non-Hispanic mothers were low-birthweight babies in 1993 (National Center for Health Statistics 1996).

TABLE V.7

MATERNAL HEALTH AND LIFE CIRCUMSTANCES

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Physical Health						
Percentage in Fair or Poor Health	15.9	2.1	15.5	1.2	10.1	0.7
Percentage Limiting Work Because of Physical Problems	15.3	3.7*	14.5	-2.1	10.3	-0.9
Percentage Limiting Work Because of Emotional Problems	16.2	2.6	14.2	1.0	8.2	1.1
Life Stress						
Mean Difficult Life Circumstances Score	2.8	0.4**	3.4	-0.4**	3.1	-0.1
Percentage Robbed, Mugged, Attacked	7.6	1.3	10.6	2.9	5.8	1.3
Percentage Had Trouble Finding Housing	36.2	6.0*	45.9	-4.5	34.4	-2.7
Percentage With Someone Close Sent to Jail	25.5	2.9	25.3	-5.4**	19.8	-0.4
Percentage Bothered by Bill Collectors	26.8	0.2	32.1	-3.9	44.3	-3.0
Percentage With Utilities Turned Off	16.6	3.0	20.5	0.6	21.6	-2.4
Percentage With Unwanted Cohabitants	11.1	-0.6	10.6	-0.7	10.9	-0.6
Percentage Bothered by Neighbors	9.6	3.3*	10.6	-0.7	10.8	-2.1
Percentage Who Lost a Loved One	36.7	1.9	46.5	-4.3	38.0	-2.7
Percentage With a Seriously Ill Loved One	30.0	2.5	37.8	-8.2**	29.6	2.7
Percentage Living With Someone with Alcohol/Drug Problem	10.0	1.3	11.3	-3.3*	9.8	-0.0
Percentage Who Have Loved One With Alcohol/Drug Problem	26.6	8.1**	37.4	-7.1**	31.7	-2.8
Percentage Physically, Emotionally or Sexually Abused	6.2	3.0'	6.4	-1.1	7.8	2.3
Percentage Who Argue Often with Boyfriend/Spouse	24.2	3.6	29.2	-4.3	29.4	1.0
Percentage Who Have Problems With Former Boyfriends/Husbands	15.6	3.2	16.8	-0.6	20.6	2.4
Sample Size	481-489	1,030-1,047	491499	992-1,000	731-737	1,153-1,436

SOURCE: Follow-up survey administered 78 months after intake.

Non: Estimated impacts are measured as the differences between the means for the enhanced- and regular-se&es groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

except in Camden, where they were more likely than their regular-services group counterparts to report that they had limited their activities due to physical health problems.

Difficult life circumstances and events are stressful, and coping with them may interfere with mothers' efforts to become self-sufficient. On average, mothers reported experiencing three types of difficult circumstances and events (Table V.7). The most common types of difficult circumstances mothers experienced during the year preceding the second follow-up survey include the death of a loved one (35 to 47 percent), difficulty fmding housing (3 1 to 46 percent), the serious illness of a loved one (30 to 38 percent), the drug or alcohol problem of a loved one (27 to 37 percent), and being bothered by bill collectors (27 to 44 percent).

2. Cigarette Smoking, Alcohol and Drug Use

About 40 percent of the young mothers in the sample reported smoking cigarettes at least occasionally during the year prior to the second follow-up survey; about one-third reported smoking frequently (Table V.8). The demonstration programs did not affect smoking rates in any of the three sites, although in Chicago, mothers in the enhanced-services group were significantly less likely to report that they had ever smoked (46 compared with 5 1 percent).

Alcohol use during the year prior to the second follow-up survey was not affected by participation in the demonstration programs. In Camden and Newark, 42 to 45 percent of mothers in the sample reported that they drank alcohol at least occasionally. Drinking was more prevalent among young mothers in Chicago, where 56 percent reported that they drank alcohol at least occasionally.

TABLE V.8

SMOKING, ALCOHOL USE, DRUG USE, AND ARRESTS
(Percentage)

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Cigarette Smoking						
Ever Smoked	48.5	2.0	48.5	2.7	51.3	-5.5**
Frequency of Smoking During Year Prior to Interview						
Not at all	61.3	-3.7	60.7	-3.7	59.7	4.5
Occasionally	5.3	-1.0	5.6	-1.4	4.6	-1.0
Frequently	33.3	4.7	33.7	5.1	35.7	-3.5
Alcohol Use						
Ever Consumed Alcohol Beverages	49.6	1.2	50.7	1.1	64.6	-3.5
Frequency of Drinking During Year Prior to Interview						
None	57.6	-2.9	57.2	-3.5	43.8	3.0
Occasionally	36.3	3.3	37.4	2.7	47.5	-1.6
Frequently	6.2	-0.4	5.4	0.8	8.7	-1.4
Drug Use						
Ever Used Marijuana/Hash	17.3	2.1	20.8	-0.9	26.3	-1.5
Use of Marijuana/Hash During Year Prior to Interview						
None	92.4	-1.2	92.6	-1.2	89.1	1.6+
Occasionally	5.8	1.2	6.0	0.6	8.2	0.1 +
Frequently	1.8	-0.1	1.4	0.6	2.7	-1.7+
Ever Used Cocaine	5.4	0.2	8.4	-1.0	7	-0.8
Frequency of Cocaine Use During Year Prior to Interview						
None	98.4	-0.5	97.4	-1.4	95.8	1.5
Occasionally	0.4	0.3	1.4	1.6	2.9	-1.3
Frequently	1.2	0.2	1.2	-0.2	1.4	-0.3
Ever Used Other Drugs	2.8	-0.1	3.8	-0.5	1.7	0.2
Ever Went to a Drug Treatment Program[a]	5.8	1.3	8.5	0.3	7.5	-0.4
Arrests						
Ever Arrested	9.5	-1.3	8.9	-0.6	7.6	0.3
Arrested in the Last Two Years						
One time	5.8	-1.3	5.0	-1.2	3.9	0.9
More than one time	1.2	-0.5	0.8	0.8	1.1	0.1
Sample Size	488	1046	520	1002	701	1437

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates except those that are part of distributions are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5. Chi-square tests were used to test the significance of differences in distributional outcomes.

'Among those who used drugs.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

+Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 10 percent level.

Mothers also reported similar levels of marijuana, cocaine, and other drug use.[8] Approximately 10 percent of the young mothers reported that they had used marijuana or hashish at least occasionally during the year prior to the second follow-up survey. In Chicago, mothers in the enhanced-services group were significantly less likely to report using marijuana frequently, and more likely to report not using it, but the difference is small. Less than five percent of the young mothers reported using cocaine in the preceding year.

Although most of the mothers in the sample did not report using drugs themselves, a substantial proportion reported that drugs were a problem in their neighborhoods. Across the three sites, 22 to 35 percent of mothers in the regular-services group reported that most or all of the teenagers and young adults in their neighborhood used hard drugs such as cocaine, crack, or heroin. The demonstration programs did not significantly affect the likelihood that mothers in the enhanced-services group lived in neighborhoods where many young neighbors used drugs.

Even if mothers themselves did not use drugs or alcohol, many reported drug problems among household members and other close relatives or friends. Approximately 10 percent reported that within the previous year they had lived with someone who had a problem with drugs or alcohol. Twenty-seven to 37 percent reported that someone close to them had experienced a drug or alcohol problem within the past year. The demonstration programs had no consistent impacts on the extent of drug and alcohol problems among people close to the mothers. In Camden, mothers in the enhanced-services group were significantly more likely to report that someone close to them had a

*Information obtained through program observations, in-depth interviews, and focus groups suggests that mothers substantially underreported their drug use and criminal justice contacts in the first follow-up survey (Maynard, Nicholson, and Rangarajan 1993), and because the same survey data collection methods were used for the first and second follow-up surveys, it is likely that mothers continued to underreport their drug use and arrests. There is no reason to believe that underreporting differed between the regular- and enhanced-services groups; however, underreporting tends to bias downward estimated impacts and their significance levels.

drug or alcohol problem within the past year. In Newark, mothers in the enhanced-services group were significantly less likely than their regular-services counterparts to have lived with someone who had a drug or alcohol problem within the past year.

Among those who reported using drugs, very few reported receiving treatment from a drug treatment program (six to nine percent). The demonstration programs did not increase the likelihood that mothers who had used drugs ever entered a drug treatment program.

3. Criminal Justice Contacts

Mothers in the regular- and enhanced-services groups reported similar experiences with being arrested. Eight to 10 percent of mothers in both groups had at some time been arrested. Five to eight percent reported that they had been arrested within the past two years.

G. SUMMARY

Many of the young mothers faced significant obstacles to continued progress toward self-sufficiency. At the time of the second follow-up survey, approximately half of the young mothers were living alone with their children, with no other adult in the household to share parenting responsibilities or provide child care. Most of the young mothers became pregnant again and gave birth to one or two additional children. As a result, more than half of the young mothers still had children under age three at the time of the second follow-up survey. Fewer than 20 percent of the mothers were receiving any child support income, and only 10 percent reported receiving regular financial support from the father of their first-born child.

Many of the young mothers also faced other potential barriers to making continued progress toward self-sufficiency. One-third to one-half of the mothers reported having concerns about neighborhood safety and having problems finding adequate housing. Between 10 and to 15 percent

reported physical health problems that affected their daily activities or caused them to limit work. The prevalence of difficult living situations--housing problems, safety concerns, and single parenthood without support from the absent parent--and the high rates of subsequent fertility experienced by the young mothers suggest that it will be very difficult for many to find and maintain employment without support services that address these potential barriers.

Exposure to the demonstration programs did not substantially change the life circumstances of the mothers in the enhanced-services group or delay subsequent pregnancies and births. The demonstration programs attempted to help mothers improve their life circumstances by offering workshops on life skills and family management, child support, and family planning and through individual counseling by case managers. However, these services were not sufficient to enable more young mothers to escape difficult living situations or to control their fertility as they desired.

VI. MOTHERS' WELL-BEING, PARENTING, AND CHILD OUTCOMES

Early experiences set children on a developmental trajectory that affects their later academic abilities and their social and emotional well-being. Recent research shows that during the first few years of life, stimulating experiences are critical for brain development (Krasnegor, Lyon, and Goldman-Rakic 1997). Thus, the period during which mothers participated in the demonstration programs was a critical time in the development of their children, especially their first-born children, most of whom were infants and toddlers at the time their mothers enrolled in the demonstration programs.

The demonstration programs focused primarily on improving the life chances of welfare-dependent teenage mothers by requiring mothers to participate in education, training, or employment activities and by providing needed support services. To participate, mothers needed to place their children in child care, often relative care. The programs assisted mothers in finding and paying for child care when necessary. The programs also provided case management and workshops designed to enhance the teenage mothers' personal skills; prepare them for later education, training, and employment activities; and provide them with information to help them cope with their new responsibilities as parents.' Participants were subject to the program requirements and received support services for one to three years after enrolling in the demonstration.

The demonstration programs did not intervene directly to improve the development of the teenage mothers' children, Nevertheless, the programs may have indirectly affected the

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'The Chicago program offered a 1.5-hour parenting workshop. The Newark program offered parenting workshops lasting 20 hours. In Camden, the parenting workshops were offered on an "as-needed" basis and lasted 21 hours. Other relevant workshop topics included life skills/family life management; family planning; health and nutrition; HIV/drug abuse; and child support (Gleason et al. 1993).

developmental progress of participants' children as a result of increasing mothers' participation in out-of-home activities and altering their early child care.

Because the program may have indirectly influenced the developmental progress of participants' children, the second follow-up data collection included conducting in-home child assessments with sample members' first-born children who were between five and eight years old and still lived with their mother in the demonstration program areas. Approximately three-fourths of the mothers had children who were eligible for the assessments. The assessments focused on parenting and the home environment and the children's cognitive, social, and emotional well-being and physical health.

The impact analysis results suggest that mothers' participation in out-of-home activities and use of child care neither harmed their children nor enhanced their development and well-being. We found no significant, meaningful differences between the regular- and enhanced-services groups in children's cognitive and social-emotional well-being and physical health. In addition, we found no consistent evidence that the demonstration programs significantly influenced the quality of parenting or children's home environments. Only in Newark do we find some consistent evidence of small but significant negative impacts on children's outcomes. These differences are small, however, and not very meaningful in developmental terms.

The following sections present the framework that guided our choice of outcomes and potential mediating factors, describe our selection of measures, and present the findings in more detail.

A. POTENTIAL PROGRAM EFFECTS ON CHILDREN

With the support and guidance of case managers, young mothers in the enhanced-services group were required to set self-sufficiency goals and work toward them. Mothers faced reductions in their welfare grants (by the amount normally allocated to cover the needs of the mother, generally $160 in New Jersey and $166 in Chicago) if they did not comply with the activity requirements. The

sanctions remained in effect until the young mothers complied with participation requirements. Participation in activities (out-of-home education, job training, or employment) may have influenced three key aspects of the mothers' lives, which, in turn, may have affected their children: (1) their child care use, (2) their family income and resources, and (3) their social and psychological well-being.

The demonstration programs increased mothers' use of all types of child care, especially center-based care, when their children were very young. During the first two years after intake, mothers in the enhanced-services group were 13 percentage points more likely to engage in a self-sufficiency-oriented activity and use child care. The programs increased the use of all types of child care arrangements and increased the use of center-based care three times as much as the use of other types of arrangements (Schochet and Kisker 1992). The programs also increased the intensity of child care use. On average, mothers in the enhanced-services group spent about two months more than mothers in the regular-services group in activities during the two-year follow-up period, and they used child care for over three hours more per week (Schochet and Kisker 1992).

Although a special study of early child care use by mothers in the regular- and enhanced-services groups found that the structural indicators of the quality of child care they used were comparable, family child care providers used by mothers in the enhanced-services group were significantly less likely to have completed high school or a GED, and mothers in the enhanced-services group were more likely to express concerns about the quality of their arrangements (Kisker, Silverberg, and Maynard 1990).

Greater participation in child care when the children were infants and toddlers may have had positive or negative impacts on the children's later development. On the one hand, if the child care arrangements mothers used provided stimulating environments for the children, it is possible that

the greater participation in child care led to improved developmental outcomes. If mothers who were required to participate in out-of-home activities settled for low-quality arrangements, however, the greater participation in child care may have led to poorer developmental outcomes.

Early experiences in child care are important for children's cognitive and social development (Love et al. 1996; Phillips et al. 1987; and Whitebook et al. 1989). Recent fmdings from the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care reveal that the quality of the language environment in child care experienced by children from birth to age three is related to children's language ability and general cognitive capacity. Howes and colleagues have demonstrated that child care quality affects children's cognitive performance and emotional security (Howes and Hamilton 1992; and Howes, Smith, and Galinsky 1995). There is also evidence that cognitive, language, and behavioral outcomes for children in poverty can be improved when the children participate in high-quality educational child care programs (Barnett 1995; and Bryant and Maxwell 1997). These studies suggest that the early TPD program impacts on child care use may have led to impacts on children's early experiences and development (not measured in the evaluation) and subsequent developmental progress in early elementary school (the focus of the second followup).

During the first two years after program intake, when the children were infants and toddlers, the demonstration programs significantly increased the teenage mothers' participation in out-of-home activities but did not change their economic resources significantly. Their increased participation in workshops and major activities might have improved their feelings of self-worth and control over their lives and decreased their levels of depression (Hall et al. 1985, 1991; Moore et al. 1996; and Quint et al. 1994). Participation in activities also might have increased mothers' stress levels. On

the other hand, guidance from case managers may have helped mothers manage their activities and reduce potential sources of stress.

Reduced maternal depression can reduce children's behavior problems and improve children's school performance and physical health (Downey and Coyne 1990). Mothers with a more internal locus of control feel more in control of the forces that affect their lives, have a greater sense of efficacy, and experience greater educational and occupational success, which may benefit their children. On the other hand, increased maternal stress can have negative effects on parenting and thereby on young children (Crnic and Greenberg 1990; and McLoyd and Wilson 1991). Difficult life circumstances and events--such as being robbed, having utilities turned off, losing a loved one, or having problems with former boyfriends or husbands-are stressful and have been associated with a lower frequency of positive mother-child interactions. Social support, however, may reduce the impact of stress on mothers' lives (Hashima and Amato 1994). Previous research findings suggest that if the TPD programs influenced mothers' depression levels, feelings of mastery/locus of control, stress levels, and/or social support (not measured in the first followup), they may have influenced mothers' interactions with their children when the children were very young and on children's early development (not measured in the evaluation). The programs also may have had lasting impacts on mothers' well-being and social support, and these impacts may have influenced children's developmental progress in early elementary school (the focus of the second followup).

Participation in the parenting workshops, as well as education and training activities, also may have influenced the environments mothers provided for their children, as well as mothers' attitudes toward education for their children, their involvement in their child's schooling, and their ability to help their children with schoolwork. Increased confidence in their own abilities may have caused mothers in the enhanced-services group to modify their parenting strategies in ways that support

their children in school. The TPD programs may have had early impacts on participants' attitudes toward education, the home environments participants provided for their children, and/or their parenting practices (not measured in the evaluation), and any early impacts in these areas may have translated into impacts on the quality of children's home environments and parental involvement in children's schooling when they were in early elementary school (the focus of the second followup).

Early home experiences have a consistent, well-documented effect on children's cognitive, language, and social competence (Bradley and Caldwell 1988; and Elardo and Bradley 1981). Family cohesiveness--how close a family feels and how much pleasure family members get from being together--has been positively linked to children's cognitive competence and the quality of stimulation provided in the home for children. On the other hand, conflict and violence between parents or between mothers and their boyfriends negatively affects the climate of the home and can result in severe problems for children (Straus and Kantor 1987).

Parents can provide stimulating experiences for their children even if they have few financial resources. Exposing children to varied experiences and actively engaging them in games and reading have positive effects on child cognition and social behavior (Walker et al. 1994). Regulating children's access to television has been associated with reductions in children's aggressive behavior, going to bed early, being taken on family outings, and other positive effects on children's learning and development (Wright and Huston 1995).

Recent evidence suggests that neighborhood characteristics can also influence children's cognitive abilities and incidence of behavior problems, even after family characteristics are taken into account (Brooks-Gunn et al. 1993; and Klebanov et al. 1994).

B. CHILD ASSESSMENT MEASURES AND MEDIATING VARIABLES

Because the TPD programs were not designed to influence child outcomes, these outcomes were not assessed as part of the first follow-up data collection. Because the programs not only increased teenage mothers' participation in education and employment activities but also altered their child care choices during the first two years after they'entered the demonstration, however, the programs may have influenced children's development (see previous section). Thus, child outcomes and key mediating factors were included in the data collection for the second followup.

The second follow-up data collection included a direct assessment of the well-being of each sample member's first-born child (the child she had, or was due to have, when she enrolled in the demonstration) if the sample member still lived in the demonstration program area and had custody of her child. At the time of the second follow-up survey, the first-born children ranged in age from 5 to 10; most were between 6 and 8 years old. Mothers were asked about their parenting and their home and neighborhood environments, as well as their children's progress in school.

We selected maternal report and direct child assessment measures that would be appropriate for children in kindergarten through second grade and that tap several important areas of functioning: the child's cognitive well-being (verbal ability and achievement in reading and math) and transition to school, social and emotional well-being (behavior problems and prosocial behavior), and physical health. In addition, we measured key family and home characteristics that might mediate or moderate children's developmental outcomes, including maternal well-being (risk of depression, physical health, locus of control, life stress, and social support), the quality of the home environment, parenting, and quality of the neighborhood environment. Our priority was to select measures that had demonstrated validity and reliability, could be competently administered by a trained interviewer in a home setting, were culturally appropriate for use with disadvantaged minority mothers and

children, could be completed in a one-hour home visit, and were being used in other large-scale studies. The measures chosen include a combination of standardized tests, self-report measures from both the child and parent, and interview and observational items. Table VI. 1 presents the measures we selected; Appendix E provides a full description of each measure.

The child assessments were administered in sample members' homes as close in time to the main follow-up interview as possible. While the field interviewers were administering the assessments, the mothers completed a self-administered questionnaire about their child. Assessments were completed with 2,096 children.[2]

C. MATERNAL WELL-BEING AND SOCIAL SUPPORT

By the time of the second follow-up survey, which was conducted three to four years after the demonstration programs ended, mothers of children in the sample (those who still lived in the demonstration areas and had custody of their first-born children) reported high levels of depression and modest levels of social support. Many of them reported experiencing stressful life events and difficult circumstances during the year preceding the second follow-up survey. We found no strong, consistent evidence of program impacts on maternal well-being and social support; most differences between mothers in the enhanced-services and regular-services groups were not significant. We note the differences that were significant below.

'Mothers whose children were between the ages of five and eight at the time of the main follow-up interview were eligible for the assessment if they lived together in the demonstration areas. Of the 2,680 who were eligible for the assessment, 2,096 (78 percent) completed the assessment. See Chapter II for a full description of the child assessment sample.

TABLE VI. 1

FAMILY AND CHILD MEASURES

Outcome	Measure
Maternal Well-Being	
Depression	Center for Epidemiologic Studies of Depression CES-D) Scale (Radloff 1977)
Locus of Control	Pearlin Mastery Scale (Pearlin et al. 198 1)
Life Stress	Daily Hassles (Seidman et al. 1990) Difficult Life Circumstances (Child Trends 1992)
Social Support	Perceived Support Available from Social Support Vignettes (Chen and Lazarus 1977) Living with Partner Living with Parent
Maternal Health	Mother's Report of Her Health Status (National Health Interview Survey, Current Population Survey)
Home Environment and Parenting	
Quality of the Home Environment	Home Observation for Measurement of the Environment (HOME) (Caldwell and Bradley 1984) Family Environment Scale (FES): Cohesion Subscale (Moos 1974) Conflict Tactics Scale: Verbal Aggression and Violence Subscales (Straus 1979)
Parenting Activities	Maternal Report of Types of Parent-Child Activities (Coates 1992)
Television Viewing	Maternal Report of Number of Hours Television Is on in the Home and Number of Hours Child Watches (Child Trends 1992)
Neighborhood Quality	
Cohesiveness	Maternal Report of How Close-Knit Neighbors Are (Furstenberg et al. 1990)
Social Control	Maternal Report of Likelihood Neighbors Would Become Involved if There Were Trouble (Furstenberg et al. 1990)

TABLE VI.1 *(continued)*

Outcome	Measure
Student Chances	Maternal Report of Likelihood Neighborhood Students Will Complete High School or College, Get Jobs, Enter the Military (Furstenberg et al. 1990)
Neighborhood Problems	Maternal Report of Neighborhood Problems with Unemployment, Drugs, Crime, Dilapidation for Total Scale (General Social Survey)
	Two Interviewer Rating Items of How Well-Kept Home and Neighborhood Appear
	Maternal Report of Neighborhood Welfare Receipt and Feelings of Safety
Child Cognitive Well-Being	
Receptive Vocabulary	Peabody Picture Vocabulary Test-Revised (PPVT-R) (Dunn and Dunn 1981)
Reading Achievement	Woodcock-Johnson Psychoeducational Battery-Revised (WJ-R) Letter-Word Identification Test (Woodcock and Johnson 1989, 1990) WJ-R Passage Comprehension Test (Woodcock and Johnson 1989, 1990)
Math Achievement	WJ-R-Calculation Test (Woodcock and Johnson 1989, 1990) WJ-R Applied Problems Test (Woodcock and Johnson 1989, 1990)
Transition to School	What Child Thinks of School (Child Report) (Reid and Landesman 1988) Child's Adjustment to School (Maternal Report) (Reid and Landesman 1988)
Child Social and Emotional Well-Being	
Behavior Problems	Behavior Problems Index (BPI) (Peterson and Zill 1986)
Positive Social Behavior	Adaptive Social Behavior Inventory (ASBI) (Scott and Hogan 1990) Expressiveness and Compliance Subscales (Scott and Hogan 1990)
Child Physical Health	
Child Health	Maternal Report of Child's Health Status (National Health Interview Survey, Child Supplement)

1. Depression

Many mothers were depressed at the time of their child's assessment survey. One-third to almost half of the mothers in the three sites received scores of 16 or above on the CES-D, indicating that they were likely to be depressed (Table VI.2). Twenty to 26 percent of the regular-services mothers received CES-D scores between 16 and 22, indicating that they were at some risk .or "possibly depressed." Sixteen to 22 percent of the regular-services group mothers received scores between 23 and 60 points, indicating that they were at high risk or "probably depressed."[3]

We found some evidence of program impacts on depression.[4] In Newark, mothers in the enhanced-services group were significantly less likely than mothers in the regular-services group to be at some risk for depression (19 percent, versus 26 percent of the regular-services group members); they tended to be either at no risk for depression or at high risk for depression. Enhanced-services group mothers in Chicago received significantly higher CES-D total scores, on average (16 versus 14). They were also less likely than regular-services group mothers to be at no risk for depression (55 versus 64 percent) and more likely to be at high risk for depression (24 versus 16 percent).

2. Locus of Control

Mothers of children in the sample received high locus of control scores (on average, 22 out of 28 possible points) that were comparable to those reported by mothers participating in the descriptive

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[3]These rates 0f depression, although greater than those found in the general population (Eaton and Kessler 1981), are similar to those reported for other samples of low-income mothers (Reis 1988).

[4]Maternal depression was assessed only at the time of the second followup for mothers whose children participated in the in-home child assessment portion of the second follow-up data collection. Because mothers were randomly assigned to the regular- and enhanced-services groups, it is unlikely that there were initial differences between the two groups in their risk of depression.

TABLE VI.2

ESTIMATED IMPACTS ON MATERNAL WELL-BEING

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Depression						
Mean CES-D Total Score	15.1	-1.2	14.9	-0.4	13.9	1.7**
Percentage Who Are Not at Risk for Depression (CES-D <16)	55.9	5.9	54.7	4.6	63.9	-9.2**
Percentage Who Are at Some Risk "Possibly Depressed" (CES-D =16-22)	21.8	-1.1	26.4	-7.5**	20.1	1.2
Percentage Who Are at High Risk "Probably Depressed" (CES-D =23-60)	22.3	-4.8	18.9	2.9	16.0	8.0**
Locus of Control						
Mean Mastery Score	22.0	-0.0	22.0	-0.2	22.3	-0.1
Life Stress						
Mean Daily Hassles Score	9.8	-0.0	10.2	0.4	9.8	0.1
Mean Difficult Life Circumstances Score	2.8	0.6**	3.5	-0.4**	3.1	0.0
Percentage Robbed, Mugged, Attacked	6.5	2.7	12.6	1.2	6.6	-0.4
Percentage Had Trouble Finding Housing	34.8	10.7**	46.1	-3.8	30.9	4.7
Percentage with Someone Close Sent to Jail	27.4	4.1	25.0	-4.4	20.3	0.5
Percentage Bothered by Bill Collectors	25.5	2.8	32.7	-4.6	45.8	-4.9
Percentage with Utilities Turned Off	18.3	3.4	20.1	0.8	22.4	-4.0
Percentage with Unwanted Cohabitants	10.4	-0.7	10.0	1.8	9.3	0.7
Percentage Bothered by Neighbors	11.0	1.8	11.1	0.2	10.2	-2.0
Percentage Who Lost a Loved One	40.3	1.0	45.1	-1.8	37.6	0.0
Percentage with a Seriously Ill Loved One	30.2	4.2	39.6	-9.5**	29.2	6.0'
Percentage Living With Someone with Alcohol/Drug Problem	8.2	4.2*	13.3	-5.1**	8.6	-1.3
Percentage Who Have Loved One with Alcohol/Drug Problem	25.9	11.2**	40.4	-8.7**	31.6	-4.4
Percentage Physically, Emotionally or Sexually Abused	5.5	3.4	6.8	-2.8	7.5	-0.3
Percentage Who Argue Often with Boyfriend/Spouse	22.6	8.9**	28.7	-3.2	27.1	4.0
Percentage Who Have Problems with Former Boyfriends/Husbands	16.6	2.5	18.4	-1.5	19.3	4.7

TABLE VI.2 *(continued)*

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Social Support						
Mean Perceived Support Available	5.6	0.1	6.0	**-0.4****	5.8	-0.0
Percentage Who Live with Partner	14.0	-0.4	15.8	**-7.0****	14.3	1.5
Percentage Who Live with Parent/Step-Parent	22.0	-3.7	23.3	2.2	24.5	-0.8
Physical Health						
Percentage in Fair or Poor Health	20.1	-1.2	17.2	1.3	16.7	**5.4***
Percentage Limiting Work Because of Physical Problems	18.2	4.4	18.0	**-6.4****	18.7	1.2
Percentage Limiting Work Because of Emotional Problems	17.1	4.3	17.2	-1.1	14.7	3.9

SOURCE: Child assessments administered an average of 81 months since intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

study of the Job Opportunities and Basic Skills Training (JOBS) program (on average, 2 1 points) (Moore et al. 1996).

3. Stress

Mothers of children in the sample reported a low level of daily hassles in their lives, scoring an average of 10 out of a possible 20 points on the scale (Table VI.2). This means that, for the five potential sources of hassles we asked about (children, other family members, state or federal agencies, friends and neighbors, and children's caregiver), on average, mothers reported that they were "a bit" hassled.

On average, mothers in the regular-services group reported experiencing 3 or 4 difficult life circumstances or events (out of a possible 14) in the past year. As with the full sample of mothers, the most frequently cited difficult circumstances were the death of a loved one, the serious illness of a loved one, difficulty finding housing, having a loved one with a drug or alcohol problem, and being harassed by bill collectors.

In Camden, mothers in the enhanced-services group reported a significantly higher number of difficult experiences than did mothers in the regular-services group. In Newark, on the other hand, mothers in the enhanced-services group reported a significantly lower number of difficult life experiences than did mothers in the regular-services group.

4. Social Support

Mothers in the regular-services group reported that a moderate amount of social support was available to them.' In all three sites, mothers in the regular-services group received average perceived support scores of about six, indicating that, on average, mothers of children in the sample could name one person they could call on for help in each of five situations (Table VI.2). Relatively few mothers were living with husbands or partners who might have been important sources of social support (14 to 16 percent). Approximately one-fourth were living with their parents. In Newark, mothers in the enhanced-services group had significantly lower perceived support scores than their regular-services group counterparts, and seven percent fewer reported living with a partner.

5. **Physical Health**

Approximately one-fifth of the mothers with children in the sample reported that their health was poor or that they limited their work or other activities because of physical or emotional problems (Table VI.2). These rates of health problems, though high, are consistent with the rates reported for other national samples of low-income, single mothers (Wolfe and Hill 1993). In Newark, mothers in the enhanced-services group did not rate their overall health differently than their regular-services group counterparts, but they were less likely to report that they had limited work or other activities in the month prior to the survey because of physical problems (12 versus 18 percent). In Chicago, significantly more enhanced-services group mothers than regular-services mothers rated themselves

[5]We used five social support vignettes to measure mothers' perceptions of how much support is available to them. From the vignette responses, we created a perceived support score, an index of the number of vignettes for which mothers reported they had someone who could help them and the number of vignettes for which mothers reported they had three or more people who could help them. Possible scores range from zero to 10.

as being in fair or poor health (22 versus 18 percent); however, the proportions of mothers in the two groups who limited work because of health problems did not differ significantly.

D. HOME AND NEIGHBORHOOD CONTEXT

We found no evidence of consistent, developmentally meaningful effects of maternal program participation on the quality of the home environment for children, parenting activities, television viewing, and quality of the neighborhood. The impact analyses suggest that mothers in the enhanced-services group in Newark may provide slightly less stimulating home environments for their children than mothers in the regular-services group, but these impacts are very small and not meaningful in terms of their likely implications for children's development.[6] Most other impacts are not significant.

1. Quality of the Home Environment for Children

We measured the quality of the home environment by administering maternal report and interviewer observation items from the Middle Childhood Home Observation and Measurement of the Environment (HOME), asking mothers to complete the family cohesion subscale from the Family Environment Scale (FES), and asking mothers to report how often they and their male partners were verbally aggressive or violent with each other. As measured by the HOME, the average quality of the home environments for children whose mothers were in the regular-services

[6]For example, Robert Bradley (Personal communication, April 27, 1997), one of the authors of the Middle Childhood Home Observation and Measurement of the Environment (HOME), reported that there is no evidence that differences in HOME scores that are less than one-third of a standard deviation are meaningful and have significant effects on child outcomes. None of the differences we found in the HOME is greater than one-fifth of a standard deviation.

group was fair, with the mean Middle Childhood HOME total score ranging from 30 to 32 out of a possible 42 (Table VI.3).[7]

Maternal ratings of family cohesion--how close a family feels and how much pleasure family members get from being together--as measured by the FES Cohesion score, were high for mothers in the sample (a mean of seven out of a possible nine points) and varied little across sites (Table VI.3).

The mothers' reports of the conflict tactics they and their partners use with each other indicate that mothers and their partners exhibit moderate levels of verbal aggression and fairly high levels of violence.* On average, they reported that in the past year they had been verbally aggressive with their partners (scores ranged from 9 to 10 out of a possible 36 points) and that their partners had been verbally aggressive with them (scores ranged from 7 to 9 out of a possible 36 points). On average, regular-services group mothers reported that they had been violent with their partners from three to four times in the past year and that their partners were violent with them one to two times in the past year (Table VI.3). These average rates of violence are higher than those reported in studies of other populations.

'From the 42 Middle Childhood HOME items administered, we created a HOME total score and three HOME subscale scores--Maternal Responsivity, Maternal Acceptance, and Physical Environment. HOME scores were not reported for the 62 children under age six for whom all the Middle Childhood HOME items were not administered.

*Conflict tactics questions were asked only if the mother reported that she was married, lived with a male partner, or had a relationship with a male friend with whom she spent a lot of time. Responses from 1,333 to 1,340 mothers were used to create the conflict tactics scores.

TABLE VI.3

ESTIMATED IMPACTS ON HOME ENVIRONMENT AND PARENTING

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated impact	Regular-Services Group	Estimated impact	Regular-Services Group	Estimated Impact
Quality of the Home Environment						
Mean HOME Score	30.8	-0.2	29.6	**-1.3****	32.1	-0.4
Mean HOME Maternal Responsivity Subscale Score	6.5	-0.2	6.3	**-0.3****	6.6	-0.1
Mean HOME Maternal Acceptance Subscale Score	5.2	-0.1	4.9	-0.3"	5.1	-0.1
Mean HOME Physical Environment Subscale Score	6.0	-0.0	5.8	-0.2	6.4	0.1
Mean Family Environment Scale (FES) Cohesion Score	7.2	-0.1	6.8	0.3	7.1	-0.0
Conflict Tactics Used by Adults in Home Toward Each Other--Mother and Partner						
Mother's Mean Verbal Aggression Score	8.7	0.8	9.5	-0.0	10.1	0.3
Partner's Mean Verbal Aggression Score	6.7	**1.5***	7.6	-0.2	8.5	1.1
Mother's Mean Violence Score	2.8	0.3	4.1	-0.5	3.1	0.2
Partner's Mean Violence Score	1.4	0.2	1.6	-0.2	1.9	0.4
Parenting Activities						
Percentage Who Frequently Take Child on Outings	23.6	**6.9***	24.5	0.6	29.8	0.7
Percentage Who Frequently Play Board/Card Games with Child	40.0	1.6	36.4	-0.8	33.1	-2.7
Percentage Who Frequently Play Guessing Games with Child	12.2	-0.6	12.3	-2.2	8.9	1.9
Percentage Who Frequently Do Puzzles with Child	17.7	-1.2	17.7	-1.7	15.4	-2.3
Percentage Who Read to Child Daily	25.7	**-7.5***	17.3	-1.5	17.4	**4.6***
Percentage with Ten or More Books in Home	55.9	4.4	59.3	**-6.7***	61.1	-2.4
Percentage Who Read a Newspaper Daily	37.6	3.1	40.5	-3.7	43.8	0.0
Percentage Who Frequently Practice Academic Skills with Child	55.9	-0.8	54.0	3.1	59.0	-1.6
Percentage Very Active in Child's School Activities	18.5	4.9	20.7	-4.8	18.2	1.3
Percentage Very Active with Child in Religious Activities	18.9	**6.8****	20.3	-3.6	23.3	-0.2
Television Viewing						
Percentage with Television on More than Seven Hours Per Day	50.7	-2.7	46.4	2.6	43.2	6.0'
Percentage of Children Watching More than Four Hours Per Day	36.0	-2.8	30.8	2.7	28.14	-1.4

SOURCE: Child assessments administered an average of 81 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

2. Parenting Activities and Television Viewing

More than half the mothers in the sample reported that they frequently practiced academic skills (reading, writing, or mathematics) with their children. Many reported that they frequently played board or card games with their child (33 to 40 percent), read to their children daily (17 to 26 percent), and frequently did puzzles with their child (15 to 18 percent) (Table VI.3). More than half the mothers reported that they had 10 or more books in their home, and 3 8 to 44 percent reported that they read a newspaper daily. Approximately one-fifth of the mothers reported that they were very active in their child's school activities, and a similar proportion reported that they were very active with their child in religious activities.

For the most part, the demonstration programs had no significant impact on the extent to which mothers engaged in these activities with their first-born child. In Camden, however, enhanced-services group members were significantly more likely than mothers in the regular-services group to report taking their child on outings frequently (3 1 versus 24 percent) and participating actively in religious activities with their child (26 versus 19 percent). On the other hand, they were significantly less likely to read to their children every day (18 versus 26 percent). In Newark, mothers in the enhanced-services group were significantly less likely than those in the regular-services group to report that they had 10 or more books in their home (53 versus 59 percent). In Chicago, mothers in the enhanced-services group members were more likely than mothers in the regular-services group to report reading to their children every day (22 versus 17 percent).

Approximately half of the mothers reported that their television is on for more than seven hours each day (Table VI.3). In Chicago, mothers in the enhanced-services group were significantly more likely to report that the television was on in their homes for more than seven hours per day (50

versus 43 percent). In all three sites, a substantial proportion of mothers reported that their children watched television for more than four hours each day (28 to 36 percent).

3. Quality of the Neighborhood

Overall, mothers of children in the sample reported that their neighborhoods were not very cohesive (neighbors were not likely to be close to, have similar views to, or to help each other) and that their neighborhoods had many problems. More than half the mothers were afraid to walk around their neighborhoods at night (Table VI.4). In Camden, more enhanced-services group mothers than regular-services group mothers reported that many of their neighbors received welfare (38 versus 30 percent). Enhanced-services group members were also more likely to report that they were afraid to walk around their neighborhood during the day (19 versus 13 percent), and that they had been burglarized in the past year (14 versus 8 percent).

E. CHILD CARE HISTORY

Early experiences in child care are potentially important. The first-born children of mothers in the enhanced-services group entered child care earlier than children of mothers in the regular-services group, but their experiences as preschoolers did not differ from those of their counterparts.

Mothers' reports in the second follow-up survey about the child care experiences of their first-born child at particular ages revealed the same pattern of child care observed in earlier phases of the evaluation (Table VI.5). Early in their lives, the first-born children of enhanced-services group mothers were more likely than those of regular-services group mothers to be cared for in all types of care. Mothers in the enhanced-services group also reported using centers more than other types of care. However, fewer of the differences estimated at the time of the second follow-up survey are statistically significant, compared with the earlier survey estimates; this is probably due to the

TABLE VI.4

ESTIMATED IMPACTS ON NEIGHBORHOOD QUALITY

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular: Services Group	Estimated Impact
Indicator of Neighborhood Quality						
Mean Neighborhood Cohesiveness Score	11.2	-0.1	10.7	0.2	11.7	-0.1
Mean Social Control Score	14.0	0.1	13.7	-0.0	14.7	0.2
Mean Student Chances Score	10.9	-0.0	10.4	0.2	11.3	0.1
Mean Total Neighborhood Problems Score	10.1	0.2	10.3	-0.3	9.4	0.1
Percentage Living in a Well-Kept Building	37.9	1.0	23.6	1.0	52.1	-3.3
Percentage Living in a Well-Kept Neighborhood	31.5	-4.3	23.0	-2.8	52.3	-5.7
Percentage with Many Neighbors Receiving Welfare	30.1	**8.3***	30.5	2.2	21.7	1.7
Percentage with Many Young Neighbors Using Drugs	29.6	2.2	37.7	-2.6	22.0	3.2
Percentage Afraid to Walk Around During the Night	57.2	-2.2	57.6	-0.9	52.2	4.4
Percentage Afraid to Walk Around During the Day	13.4	**5.5***	21.8	0.4	18.7	0.8
Percentage Feel Safe in Home at Night	85.6	-4.0	88.4	-1.0	90.3	1.5
Percentage Burglarized in Past Year	8.3	**5.7****	11.6	-2.0	6.3	1.6

SOURCE: Follow-up surveys conducted an average of 78 months after intake, and child assessments administered an average of 81 months after intake.

NOTE: Estimated impacts are measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and AS.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE VI.5

TYPES OF CHILD CARE ARRANGEMENTS USED FOR FIRST-BORN CHILD SINCE BIRTH
(CHILD SAMPLE)

	Age 0 to 1		Age 1 to 2		Age 2 to 3		Age 3 to 4		Age 4 to School Age	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Camden										
Type of Main Arrangement										
Relative	6.9	4.0++	4.7	3.1++	4.7	1.4	5.4	-0.6	6.9	-0.8
Nonrelative	1.8	2.1++	1.1	2.5++	1.8	0.0	2.2	-0.4	0.0	1.5
Center	3.6	4.5++	7.3	5.3++	18.4	7.0	38.6	2.0	58.8	-2.2
Other	0.4	0.8++	0.4	-0.4++	0.7	-0.1	1.8	-0.9	2.2	-0.4
None	87.4	-11.4++	86.6	-9.5++	74.4	-8.2	52.0	-0.2	32.1	1.9
Newark										
Type of Main Arrangement										
Relative	5.0	1.6	4.7	2.2	6.6	-0.9	4.4	2.5	6.0	0.6
Nonrelative	1.3	-0.4	0.9	0.6	1.3	0.2	1.6	-0.4	0.3	0.3
Center	5.3	2.1	8.8	-0.1	17.9	2.4	46.4	-1.6	66.1	-2.7
Other	0.3	-0.3	0.3	0.0	0.6	-0.6	0.9	0.3	2.2	0.2
None	88.1	-3.0	85.3	-2.6	73.7	-1.1	46.7	-0.1	25.4	1.6
Chicago										
Type of Main Arrangement										
Relative	7.6	0.5++	6.9	0.4	8.4	0.5	9.5	0.4	10.2	2.5
Nonrelative	2.6	2.5++	2.8	1.0	2.6	1.3	2.8	0.5	3.3	-0.5
Center	1.4	2.9++	3.5	1.9	13.7	1.5	43.3	-0.3	59.2	-1.1
Other	0.7	-0.4++	0.2	0.0	0.5	0.3	0.2	0.3	1.6	0.6
None	87.7	-5.5++	86.6	-3.3	74.9	-3.6	44.2	-1.0	25.8	-0.3
Sample Size										
Camden	277	610	276	610	277	608	277	607	277	609
Newark	319	654	319	653	319	654	319	654	319	653
Chicago	432	826	432	826	430	824	432	825	431	824

SOURCE: Follow-up surveys conducted an average of 78 months after intake.

NOTE: Estimated impacts are measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

smaller child assessment sample size and to recall problems.[9] We found evidence of significant impacts on child care use in Camden when the children were between birth and age one and one to two years old, and in Chicago when the children were between birth and age one (mothers in the enhanced-services group reported using more child care than did mothers in the regular-services group). Once the children were older and the demonstration programs had ended, however, the differences in child care use faded.

In both groups, child care use increased steadily as the children grew older. Across the sites, mothers in the regular-services group reported a substantial increase in child care use from the time their children were age two to three until the time their children were age four and up. Mothers reported that they used centers more than any other type of care (at age four and up, from 59 to 66 percent of the regular-services group mothers enrolled their first-born child in center care). Relative care was used far less (at age four and up, from 7 to 10 percent relied mainly on relatives to care for their first-born children). Nonrelative family child care was used the least (at age four and up, from zero to three percent of mothers placed their first-born child in nonrelative family child care).

In Camden, program participation led mothers to place their first-born children in child care at a significantly younger age than they would have otherwise (Table VI.6). Enhanced-services group mothers were significantly more likely than regular-services group mothers to report that their first-born children first entered child care from birth to age two, and they were less likely to report that their child first entered care after age three or that their child never entered care. In Newark and

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'Recall error may account for inconsistencies between the data reported here and the data reported for child care use in the first follow-up study. Mothers who participated in the second follow-up survey may have forgotten about child care arrangements they used only briefly five to eight years earlier.

TABLE VI.6

CHILD CARE HISTORY OF FIRST-BORN CHILD
(CHILD SAMPLE)

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated impact	Regular-Services Croup	Estimated Impact
Percent Who First Entered Child Care at:						
0 to 5 months old	6.6	5.0++	6.3	1.5	6.6	4.4
6 to 11 months old	6.2	6.9++	5.7	1.6	5.9	1.0
1 to 2 years old	18.9	4.1++	18.2	4.4	19.5	-1.6
3 years old to school age	48.7	-10.6++	56.6	-6.0	55.2	-2.4
Never in care before school age	19.6	-5.4++	13.2	-1.5	12.9	-1.4
Average Hours per Week in Child Care at:						
Under 1 year old	3.7	4.6**	4.2	0.4	4.7	0.9
1 to 2 years old	5.2	3.0**	5.5	0.8	4.1	1.8*
2 to 3 years old	10.0	2.4	9.5	-0.1	8.8	1.7
3 to 4 years old	17.6	3.8	17.5	-1.3	16.3	0.7
4 years old to school age	22.9	-3.7	22.7	-1.9	21.2	0.8
Percent Who Were Ever Enrolled in Head Start	32.0	7.3*	54.3	1.7	54.4	4.4
Sample Size	**275-276**	**605-609**	**316-319**	**642-651**	**426-430**	**816-823**

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

**Statistically significant at the 5 percent level.

++Difference in distribution between the enhanced- and regular-services groups is statistically significant at the 5 percent level.

Chicago, estimated program impacts on the age of children's entry into child care are not statistically significant.

In Camden, the first-born children of mothers in the enhanced-services group spent more time, on average, in child care during the first two years of life than did the first-born children of regular-services group mothers (five hours more per week when the children were under one year old and three hours more per week when the children were one to two years old). In Chicago, children of mothers in the enhanced-services group spent significantly more time in child care from the time they were one to two years old.

Many of the children in both groups had been enrolled in Head Start. Between 32 and 54 percent of the regular-services group mothers reported that their first-born children had attended Head Start. In Camden, mothers in the enhanced-services group were more likely than those in the regular-services group to place their children in Head Start (39 versus 32 percent). In Newark and Chicago, the programs did not significantly affect whether children went to Head Start. Overall, rates of Head Start participation in Newark and Chicago were higher than in Camden (54 versus 32 percent for children in the regular-services group).

Consistent with diminishing program impacts on mothers' out-of-home activities in the long run, program impacts on child care use, type of care used, and average number of hours in care also diminished. By the time the first-born children of enhanced-services group mothers reached preschool age, generally after the demonstration programs ended, their experiences in child care were very similar to those of the first-born children of regular-services group mothers.

F. CHILD DEVELOPMENT OUTCOMES

By the time they reached early elementary school age, the first-born children of mothers in the enhanced- and regular-services groups received similar scores on tests of their cognitive and social and emotional development and on mothers' ratings of their physical health Because the children's early development sets the stage for their later cognitive and social-emotional well-being, we also compared measures of their development with those of children nationally. According to several of the indicators of development and well-being that we examined, children in both groups are doing less well than children nationally.

1. Cognitive Development and Achievement

The first-born children of mothers in the sample received lower scores than children nationally on a test of receptive vocabulary. When they were seven years old, on average, the first-born children of mothers in the sample received mean Peabody Picture Vocabulary Test-Revised (PPVT-R) receptive vocabulary scores that were more than one standard deviation (15 points) below the national norming sample mean of 100 (Table VI.7). Mean PPVT-R scores ranged from 77 to 82.

The low PPVT-R scores received by children in the TPD sample probably reflect, at least in part, racial biases in the PPVT-R test. The PPVT-R has been found to be biased against minority children. In a national sample of children participating in the National Longitudinal Survey of Youth (NLSY-Child Sample), African American and Hispanic children consistently received lower PPVT-R scores than white children, even after controlling for income. Because research suggests that the PPVT-R is a good predictor of scholastic achievement for both African American and white children, however, the PPVT-R remains a useful measure of cognitive well-being when comparisons are made within racial groups (Halpin, Simpson, and Martin 1990) and when the racial and ethnic composition of the groups being compared is the same (such as in comparisons between the regular- and enhanced-services groups).

TABLE VI.7

ESTIMATED IMPACTS ON COGNITIVE WELL-BEING OF FIRST-BORN CHILD

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Receptive Vocabulary						
Mean PPVT-R Standard Score	77.1	0.3	78.8	-1.0	82.3	-0.9
Reading Achievement						
Mean WJ-R Standard Score Letter-Word Identification Test	92.6	1.6	100.9	**-2.4***	98.0	-0.2
Passage Comprehension Test	91.7	-0.3	99.1	-2.0	98.4	0.6
Math Achievement						
Mean WJ-R Standard Score Calculation Test	101.4	-2.3	108.8	**-2.8***	106.5	-1.5
Applied Problems Test	93.9	-0.4	97.0	-1.2	98.9	-0.7
Transition to School - Child Report						
Percentage Who Like School a lot	78.0	2.6	80.9	-2.2	82.4	1.0
Percentage Who Do School Work Well	61.4	0.5	63.9	3.9	63.2	5.5
Percentage Who Think It Is Very Important to Do Well	80.7	-1.5	81.3	4.0	84.7	2.3
Percentage Who Try Hard at School	84.3	-0.2	77.6	-1.4	84.2	3.0
Percentage Whose Parents Think School Is Important	83.3	-2.1	84.2	2.2	90.3	-1.3
Percentage Who Get Along Great with Teacher	77.8	-1.7	71.6	-2.1	77.0	1.2
Percentage Who Get Along Great with Peers	60.6	2.7	54.9	6.0	63.4	-1.6
Percentage Whose Teacher Is Very Good	82.2	1.8	84.9	**-7.2***	87.6	3.0
Transition to School - Parent Report						
Mean School Transition Score	24.2	-0.1	23.7	-0.5	23.9	0.2
Mean Parent Involvement Score	9.1	0.0	9.2	0.1	9.0	0.1
Percentage Very Pleased with Child's Basic Skills	33.8	0.2	22.7	-3.3	30.6	-1.0
Percentage Very Pleased with Child's Needs Being Met	24.6	-2.6	14.5	1.5	22.0	-2.0
Percentage Who Discuss School Day Daily with Child	80.0	3.4	77.6	-1.8	78.7	0.8
Percentage Whose Children Like School a Lot	42.5	0.6	43.5	-2.2	43.1	-0.4
Percentage Whose Children Try Very Hard	49.8	-6.8	38.0	1.6	42.1	0.2
Percentage Whose Children Do Very Well	28.8	4.1	24.7	-0.5	25.4	**6.7****
Percentage Whose Children Get Along Well with Teacher	41.9	-3.5	-33.5	2.6	40.8	-0.9

TABLE VI.7 *(continued)*

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Percentage Whose Children Get Along Well with Peers	27.2	-0.7	22.0	-1.6	23.2	4.5
Percentage Children Very Well-Adjusted to School	33.4	2.2	27.6	-1.2	35.9	-1.6
Percentage Wbo Participate Monthly in School Activities	43.2	-3.5	43.5	-3.6	48.7	-0.8
Percentage Who Volunteer Monthly at School	42.3	-4.1	44.9	-3.1	45.7	2.7
Percentage Who Are In Touch with Teacher Daily	42.3	-4.2	21.4	-0.8	19.2	-2.1

SOURCE: Child assessments administered an average of 81 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables included in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

The PPVT-R scores of children in the TPD sample are significantly lower than scores received by children in the NLSY and somewhat lower than the scores received by African American and Hispanic children in the NLSY. In 1992, the average PPVT-R score for the children tested in the NLSY was 95, and the average scores for seven- to nine-year-old African American and Hispanic children were 83 and 89, respectively (Mott et al. 1995).

On average, children of mothers in the regular-services group received WJ-R reading and math achievement scores that were close to the WJ-R norming sample mean of 100 (Table VI.7). Mean reading achievement scores ranged from 92 to 10 1, and mean math achievement scores ranged from 94 to 109. These scores are closer to the means for the norming sample than might be expected for the children in the TPD sample. This reflects a floor effect, particularly for the younger children." Although the average standard test scores are close to the means for the norming sample, a higher percentage of children in the sample than expected received scores that were more than two standard deviations below and two standard deviations above the mean of 100.

In Newark, children whose mothers were in the enhanced-services group received significantly lower scores than children of regular-services group mothers on one of the two reading achievement tests and one of the two math achievement tests. These differences are small; the 2.4 and 2.8 point differences (reading and math, respectively) are less than one-fifth of a standard deviation in magnitude. Although the differences are small, they indicate that, in Newark, maternal program participation may have put children at slight risk for achievement problems.

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[10]For two of the tests, the test items are difficult, and many children either cannot answer any of the items correctly, or they can answer only a few items correctly. When such low scores are normative, the raw score corresponds to a standard score of 100. Similar floor effects have been found using the WJ-R tests in the fall kindergarten assessments done as part of the National Head Start/Public School Early Childhood Transition Study (Scott Snyder, personal communication 5/29/97).

2. **School Transition**

The smoothness of children's transition to school may influence later school performance. According to children in the sample, most had experienced a smooth transition to school (Table VI.7). Most children's reports of how much they enjoy school, do their work well, value doing well, try hard at school, and get along with peers and teachers were positive. For example, across the three sites, 78 to 82 percent of the children of mothers in the regular-services group reported that they liked school a lot.

In contrast to how the children reported they were getting along in school, parents were less positive about how their children were doing in school. For example, less than one-third of the mothers reported that their children were doing very well in school, whereas almost two-thirds of their children reported that they did their schoolwork well.

Mothers in Newark were less likely than mothers in the other two sites to report that their children were doing well in school. They were less likely to be very pleased with their children's basic skills, less likely to be very pleased with the extent to which their children's needs were being met, less likely to report that their children got along well with their teachers, and less likely to report that their children were well adjusted to school, than mothers in Camden or Chicago. They were also less likely than mothers in Camden to report that they were in touch with their children's teachers daily. However, these differences across sites in mothers' assessments of their children's transitions to school were not reflected in differences in their children's performance on the cognitive and achievement tests.

3. **Child Social and, Emotional Well-Being**

On average, mothers reported that their children displayed 9 to 10 problem behaviors out of a possible 22 (Table VI.8). This is slightly higher than the number of behavior problems reported by

TABLE VI.8

ESTIMATED IMPACTS ON SOCIAL AND EMOTIONAL WELL-BEING OF FIRST-BORN CHILD

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Behavior Problems						
Mean Behavior Problems Index* (BPI) Score	9.6	0.6	9.7	0.1	9.4	0.4
Positive Social Behavior						
Mean Adaptive Social Behavior Inventory (ASBI) Total Score	61.3	0.4	61.9	-0.6	60.6	0.7
Mean ASBI Expressiveness Subscale	33.9	0.3	34.3	-0.5*	33.4	0.4
Mean ASBI Compliance Subscale	27.4	0.0	27.7	-0.1	27.1	0.3

SOURCE: Child assessments administered an average of 81 months after intake.

NOTE: Estimated impacts are measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the variables include in the regressions are presented in Tables A.4 and A.5.

*Some of the BPI items were dropped to make the measure more appropriate for the age of the children assessed.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

parents of a nationally representative sample of children, who were asked about a somewhat greater number of problems (9 out of 26 or 28 items, depending on whether or not the child was in school; [Mott 1995]).

Mothers in the sample, rated their children high on prosocial behavior, as measured by the Adaptive Social Behavior Inventory (ASBI), with a mean total score of 61 to 62 out of 72 (Table VI.8). ASBI Expressiveness scores, which indicate how well the child can communicate feelings with others, and ASBI Compliance scores, which indicate how obedient and easy to get along with the child is, were similar and high across all three sites for the regular-services group. For the most part, the demonstration programs do not appear to have affected children's prosocial behavior. However, in Newark, mothers in the enhanced-services group rated their children as slightly less expressive than the mothers in the regular-services group.

4. Child Health

Across all three sites, seven to eight percent of the children of mothers in the regular-services group were rated by their mothers as being in fair or poor health (Table VI.9). Eight to 12 percent of mothers indicated that their child was often seriously ill. A large majority reported that their child received a checkup in the past year (94 to 97 percent). Compared with children of JOBS participants, children in the sample were twice as likely to be rated by their mothers as being in fair or poor health (seven to eight percent, compared with four percent).[11]

[11] This difference in the proportion of children rated in fair or poor health may be caused by the difference in the age of the children at the time of the assessment. Most of the children of JOBS participants were three to five years old, whereas most of the children in our sample were six to eight.

TABLE VI.9

ESTIMATED IMPACTS ON PHYSICAL HEALTH OF FIRST-BORN CHILD

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Child Physical Health						
Percentage in Fair or Poor Health	6.5	-0.5	6.8	2.3	8.0	-0.1
Percentage Less Healthy than Peers	9.5	-0.6	8.1	3.4	6.2	2.0
Percentage Deathly 111 Since Birth	10.2	-0.4	12.0	-0.4	14.5	0.4
Percentage Often Seriously Ill	8.2	0.1	11.6	-2.0	9.8	-0.9
Percentage Susceptible to Illness	9.9	1.2	9.4	1.5	10.0	-1.4
Percentage Who Received Checkup in Past Year	91.4	-0.9	96.2	1.1	94.4	0.0

SOURCE: Follow-up surveys conducted an average of 78 months after intake.

NOTE: Estimated impacts are measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted. Means and standard deviations for the control variables are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

G. SUMMARY

Because early development sets the stage for later well-being, it is important to note that, when they were in elementary school, the first-born children of the young mothers in both the regular- and enhanced-services groups performed poorly, compared with children nationally, on several measures of development and well-being. They received PPVT-R receptive vocabulary scores that were more than one standard deviation below the national mean, reflecting, at least in part, racial biases in the PPVT-R test. However, their PPVT-R scores were also somewhat lower than the scores received by nationally representative samples of minority children in the NLSY. Moreover, compared with the parents of a nationally representative sample of children, the mothers in the TPD sample reported that their children displayed a slightly higher number of behavior problems. These findings are consistent with other studies showing that the children of teenage mothers experience less favorable cognitive development and educational progress than children born to older mothers (Maynard 1996).

Requiring mothers in the enhanced-services group to participate in activities and increasing their use of child care when their children were very young did not cause the first-born children of the mothers lasting harm. We found no significant differences between the regular- and enhanced-services groups in children's cognitive and social-emotional well-being and physical health when they were in early elementary school, except in Newark, where a few very small differences were significant.

The TPD programs, which offered brief workshops on parenting, produced no lasting impacts on the young mothers' parenting or the quality of the home environments they provided for their first-born children. In Camden and Chicago, the differences between the regular- and enhanced-services groups in key measures of parenting and home environments were not significant. In Newark, the analyses suggest that the children of mothers in the enhanced-services group had

mothers who were slightly less responsive and accepting. These differences are small, however, and not very meaningful in terms of their likely implications for children's development.

Taken together, these findings reflect a pattern of results that is increasingly prominent in the early intervention literature: programs that do not provide intensive, purposeful, child-oriented interventions are less likely to show substantial influences on children's development. Family support programs, for example, now appear to be less effective in promoting significant changes in children's cognitive, social, and emotional growth (Layzer and St. Pierre 1997) than intensive child-focused interventions like the Infant Health and Development Program (Brooks-Gunn et al. 1994). Furthermore, even intervention programs with strong immediate impacts have difficulty demonstrating effects that last as long as first or second grade (Barnett 1995; and Devaney, Ellwood, and Love 1997).

VII. LOOKING FORWARD: LESSONS FROM THE TEENAGE PARENT DEMONSTRATION

Since the Teenage Parent Demonstration (TPD) was conducted, welfare rules have 'changed. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) reformed federal welfare policy and gave states more autonomy and responsibility for setting and administering welfare policy. Some of the clear expectations set forth by the new federal policy for families receiving welfare include:

- ***Cash assistance is temporary assistance for needy families, not an entitlement.*** Families that include an adult may receive a maximum of 60 months of cash assistance over their lifetime, and states may set stricter time limits.

- ***After a short time, families receiving cash assistance must work.*** After two years of receiving cash assistance (or less time, at state option), many families will have to meet work requirements to continue receiving cash assistance. States have to meet significant and increasing work participation rates or face fiscal penalties.

- ***Parents are responsible for their children.*** Under the PRWORA, states may not spend federal funds on minor, unmarried, custodial parents who do not live in an adult-supervised setting unless the state determines that an exception is appropriate. The 60-month time limit on federal cash assistance does not apply to minor teenage parents (unless they are heads of households or are married to heads of households), but it takes effect once they reach the age of majority (Levin-Epstein 1996).

- ***Children are expected to be in school at least through high school.*** Under the PRWORA, states may not spend federal funds on minor, unmarried, custodial parents who do not participate in education (if their child is age 12 weeks or older).

- ***Both mothers andfathers are responsible for the welfare of their children.*** States must reduce or terminate families' cash assistance grants if a custodial parent fails to cooperate in establishing paternity or in establishing, modifying, or enforcing a support order, unless they qualify for a good-cause exemption. As a condition for receiving assistance, families must assign child support rights to the state.

The PRWORA also consolidated federal funding for child care into a new Child Care and Development Fund (CCDF). The CCDF provides increased funding for child'care for low-income

families and allows states to design comprehensive, integrated child care delivery systems. Eligibility for Medicaid coverage is no longer tied to welfare receipt; if families meet the income and other eligibility criteria, regardless of their welfare status, states must guarantee Medicaid coverage. The new law continues transitional Medicaid coverage for 12 months for families that would lose eligibility due to increased earnings and for 4 months when eligibility is lost because of increased child support payments. Finally, major changes were made to the Child Support Enforcement System that could affect the well-being of these young mothers and their children.

The TPD (which began nearly 10 years before the passage of the PRWORA) was a planned experiment testing the effects of changes in welfare policy that were consistent with new directions taken by states following passage of the Family Support Act in 1988. Like the PRWORA, the demonstration programs set clear expectations for participation in activities geared toward self-sufficiency and imposed financial sanctions for failure to participate in them. The programs also provided a moderate level of support services, which states might consider providing to all teenage parents on welfare. The demonstration was implemented in three sites over four years. On average, the demonstration intervened in the first two and a half years after teenage parents started receiving welfare for the first time for themselves and their child. The demonstration was evaluated using an experimental design with large samples of young mothers, and longitudinal data were collected on key outcomes over a follow-up period of approximately six and a half years.

The TPD evaluation offers support for setting clearer expectations for teenage parents on welfare and provides guidance in the design and administration of services for teenage parents. When the demonstration was implemented, the concept of making participation in activities mandatory and imposing financial penalties for noncompliance with activity requirements was relatively new, not universally accepted, and strongly resisted by many. The TPD showed that it is

feasible to implement mandatory participation requirements on a large scale in a way that both program staff and the young mothers who are required to participate perceive as fair (Maynard 1993). If support services are available, the education requirements, work requirements, and time limit on welfare benefits that the new law imposes may serve as useful program tools for engaging young parents in education and employment-related activities.

The TPD programs demonstrated that it is possible to hasten welfare-dependent teenage mothers' progress toward economic self-sufficiency, but the combination of participation requirements and support services they provided was not enough to lift young mothers out of poverty or end welfare dependency, and the impacts faded after the programs ended. Although welfare policies and attitudes toward welfare have changed, programs and policymakers may find useful lessons in the following experiences of the TPD programs and evaluation.

1. Teenage mothers respond positively to clear expectations when financial consequences and support services accompany those expectations

As long as the demonstration programs were operating, participation requirements were in effect, and support services were available, mothers in the enhanced-services group were more likely than those in the regular-services group to participate in school, work, or training (79 percent compared with 66 percent during the first two years after program intake). Mothers in the enhanced-services group were 12 percentage points more likely to attend school, 4 percentage points more likely to attend job training, and 5 percentage points more likely to work.

Sanctions appear to have played an important role in encouraging participation in activities geared toward self-sufficiency. Financial sanctions were imposed for not meeting expectations for participation in education or employment-related activities. Staff had to initiate the sanction process at least once for the majority of mothers in their program, and for many of the mothers, they had to

follow all of the steps in the long sanctioning process. At some point during the demonstration, 62 percent of the mothers in the enhanced-services group were warned of a possible sanction because they failed to fulfill requirements for ongoing program participation, and more than one-third had their grants reduced at least once for not meeting the program expectations for participation (Gleason et al. 1993).

The early impacts of the demonstration programs faded after the programs ended, perhaps because clear expectations for participation in school or work no longer existed, and special support services were no longer universally available. After the programs ended, mothers in the enhanced-services group probably encountered barriers to continuing work or education activities similar to those that mothers in the regular-services group faced, and, without the motivation and support services the programs provided, were no longer able to overcome those barriers.

2. **Most teenage parents are capable of employment but need encouragement and some support services**

Approximately three-fourths of mothers in both the regular- and enhanced-services groups were employed at some time during the six-and-a-half-year follow-up period. Few of the jobs the young mothers obtained paid good wages, however, and many did not offer benefits such as health insurance. In their most recent job, two-thirds of the young mothers who had been employed earned $7 per hour or less, and only about half were offered health insurance benefits. The average tenure in jobs increased from nearly eight months to about a year as the young mothers grew older, but for about half of those who had recently been employed, the most recent job lasted six months or less.

Support service needs vary. For example, not all of the teenage mothers in the enhanced-services group needed child care assistance to participate in education or employment. The programs encouraged the young mothers to use child care sources that they could access on their

own without additional financial assistance, but helped them find providers and pay for care when necessary. Nearly two-thirds of all teenage mothers required to participate in program activities used child care provided by relatives at some time during the first two years after program intake, while one-fifth used nonrelative care and one-sixth used center-based child care arrangements. Among those who used child care, one-third received help paying for care, mostly from the TPD programs (Schochet and Kisker 1992). The proportion of teenage mothers needing child care assistance may be different under the new welfare policies, if the type or amount of child care assistance offered is different or ifrelatives who would otherwise provide child care must seek employment themselves.

3. Requiring teenage mothers of young children to participate in out-of-home activities is not harmful to children if child care support is available

The TPD evaluation suggests that requiring teenage mothers in the enhanced-services group to participate in employment-related activities for an average of two and a half years when their children were very young, and providing child care assistance when necessary, did not adversely affect children's well-being when they were in early elementary school. When the first-born children of mothers in the enhanced-services group were five to eight years old, their cognitive and social-emotional well-being and physical health were very similar to that of the first-born children of mothers in the regular-services group. These findings do not indicate what the consequences for children of teenage mothers might be if the mothers are subject to education or work requirements over a longer period, as might be the case under the new welfare policies.

If helping children overcome the disadvantages that come with being born to a teenage mother is an important goal, then programs may need to adopt a two-generation approach and offer high-quality developmental child care or other child-focused services such as intensive parenting education (or help mothers secure access to such services). Previous studies showed that children

born to teenage mothers are more likely than those born to older mothers to experience poorer cognitive development and to perform poorly in school (see, for example, Maynard 1996). Consistent with these findings, the TPD evaluation shows that the first-born children of mothers in both the regular- and enhanced-services groups received lower scores on a measure of cognitive development and higher scores on a measure of behavior problems (indicating less positive social-emotional development) than children their age nationally. Research on early intervention programs shows that programs that include intensive, purposeful, child-focused services are more likely than those that provide primarily parent-focused services to promote significant changes in children's cognitive, social, and emotional youth (Layzer and St. Pierre 1997; Brooke-Gunn et al. 1994; Barnett 1996; and Devaney, Ellwood, and Love 1997).

4. **It is important to help teenagers reduce their fertility, but different strategies than those tried in this demonstration are needed**

The information about contraception and sources of birth control that the TPD programs provided was not sufficient to enable the teenage mothers to reduce their fertility. Over one-third of the young mothers in both the regular- and enhanced-services groups gave birth to a second child within two years after enrolling in the demonstration, and more than three-quarters had at least one more child during the six and a half years after they enrolled in the demonstration. It is likely that the deferrals of activity requirements for pregnancies and births in the TPD programs reduced the benefits of the enhanced services. Once subsequent children were born, having multiple young children to care for probably made ongoing self-sufficiency-oriented activities more difficult to maintain (especially after program support services ended).

The experiences of the TPD programs and other voluntary programs for teenage parents show that helping young mothers delay subsequent pregnancies is very difficult (Quint, Bos, and Polit

1997; Cave and Doolittle 1991; and Polit, Kahn, and Stevens 1985). Other studies of teenage pregnancy prevention interventions suggest that more intensive, focused strategies might work better. For example, frequent home visits by nurses starting when mothers are pregnant with their first child until the child is two years of age-during which the nurses show women and their partners birth control devices, discuss the advantages of different methods of family planning in the context of the women's goals, and make referrals as needed--have been shown to reduce subsequent pregnancies and births (Olds, Henderson, Tatelbaum, and Chamberlin 1988). Another program that significantly reduced subsequent pregnancies provided family planning services to young mothers during visits to a well-baby clinic--social workers and health care professionals provided family planning counseling, referrals to birth control clinics when appropriate, and follow-up discussions about experiences using birth control (O'Sullivan and Jacobsen 1992).

5. **The demonstration underscores the difficulty of changing the life courses of poor teenage parents by intervening after they become parents**

The consequences of teenage parenthood for both mothers and children are serious, and many of the teenage mothers who enrolled in the TPD demonstration were still living in difficult circumstances as young adults. Substantial proportions of the young mothers in both the regular- and enhanced-services groups remained poor six and a half years later, and nearly three-quarters were receiving public assistance. Only about one-third were employed, and many of those with jobs received low wages and few benefits. About half of the mothers were living alone with their children, with no other adult in the household to share parenting responsibilities or provide child care. More than one-third of the mothers had experienced difficulty finding housing during the past year. About half of the mothers reported that they were afraid to walk around their neighborhood alone at night, potentially limiting their ability to work evening or night shifts. Approximately one-

fourth of the mothers in both groups lived in neighborhoods where most of their neighbors received welfare, so role models for successful employment were scarce. More than 10 percent of mothers reported that their general health was fair or poor, and 8 to 16 percent reported that physical health problems caused them to limit work or daily activities during the previous month.

The TPD programs did not substantially alter the life courses of the disadvantaged young mothers they served. The short-term impacts of the TPD programs on mothers' self-sufficiency-oriented activities were modest. If the programs had continued indefinitely, longer-term impacts on employment and self-sufficiency probably would have been equally modest, given the continued child-bearing and other substantial barriers faced by the young mothers.

These findings are consistent with those of numerous other evaluations of interventions targeting teenage parents. The New Chance Demonstration, a voluntary comprehensive program serving poor teenage parents who had dropped out of high school, also failed to help participants become more economically self-sufficient (Quint, Bos, and Polit 1997). Project Redirection, another voluntary comprehensive program for poor pregnant or parenting teenagers under age 17 who lacked a high school diploma, had modest impacts on employment and welfare receipt five years later; however, half of the participants still relied on public assistance, and their average monthly income was under $800 (Polit 1989).

The serious consequences of teenage parenthood and the difficulty of improving the lives of mothers who give birth as teenagers highlights the importance of developing strategies for preventing teenage pregnancies in the first place. For welfare-dependent teenage parents, strategies that build on the TPD programs' promising early experiences and follow through by continuing to hold expectations for participation in employment-related activities and to provide needed support

services over a longer period may be more successful in improving the life courses of teenage parents.

6. **The noncustodial fathers of children born to poor teenage mothers provide little'social or economic support**

A very small proportion of noncustodial fathers provided regular financial child support to the young mothers in the TPD demonstration when their first-born children were still very young, and even fewer noncustodial fathers provided regular financial child support when the children were older and in early elementary school. Relatively few noncustodial fathers provided in-kind support, and most did not have regular contact with their child(ren).[1]

The demonstration programs attempted, with only limited success, to promote fathers' financial and social support for their children by using the state child support enforcement systems, counseling mothers, and providing services to the young fathers. For the most part, however, the programs were not able to engage fathers in services, nor did they increase the likelihood that fathers would provide support. Stronger measures, such as those included in the new welfare law and those being tested in other programs to increase father involvement in children's lives, may increase the amount of child support that young mothers receive from the fathers of their children, as well as the likelihood that they will receive it.

'We do not know if fathers were not interested in participating in their children's lives or able to provide financial support or if mothers made it difficult for the fathers to participate in their children's lives.

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APPENDIX A:

SUPPLEMENTAL TABLES
RELATED TO CHAPTER II

TABLE A.1

INTERVIEW RESPONSE RATES, BY PERIOD OF ENROLLMENT

Enrollment Date	Mother Sample: Enhanced-Services Group	Mother Sample: Regular-Services Group	Child Assessment Sample: Enhanced-Services Group	Child Assessment Sample: Regular-Services Group
Camden				
1987	91.0	84.9	76.8	67.3
January 1988 to June 1988	88.8	79.6	71.8	70.1
July 1988 to December 1988	86.7	91.0	73.2	79.6
January 1989 to June 1989	87.6	82.5	74.7	73.1
July 1989 to December 1989	89.5	85.8	82.3	83.1
1990	90.3	84.0	76.5	81.2
Total	89.0	84.4	76.3	76.3
Newark				
1987	83.0	72.2	83.9	87.1
January 1988 to June 1988	90.1	85.8	81.8	75.0
July 1988 to December 1988	85.5	86.5	80.9	74.2
January 1989 to June 1989	82.1	83.7	82.6	82.5
July 1989 to December 1989	91.0	77.9	94.1	88.1
1990	89.3	80.3	85.2	83.5
Total	87.8	81.5	85.9	81.7
Chicago				
1987	83.3	86.3	69.6	76.9
January 1988 to June 1988	81.4	86.2	76.2	79.0
July 1988 to December 1988	84.1	85.8	73.5	72.1
January 1989 to June 1989	88.9	84.8	75.0	82.0
July 1989 to December 1989	88.1	83.3	68.4	72.1
1990	76.9	90.9	85.7	77.8
Total	83.4	85.8	74.2	77.1
Total				
1987	87.0	81.5	77.3	75.5
January 1988 to June 1988	84.1	85.1	76.5	77.0
July 1988 to December 1988	85.0	87.1	74.9	74.2
January 1989 to June 1989	86.5	83.6	76.7	79.5
July 1989 to December 1989	89.9	82.0	84.0	82.8
1990	89.1	82.3	81.1	82.2
Total	86.4	84.1	78.3	78.2

TABLE A.2

PERCENTAGE OF SAMPLE MEMBERS ACCORDING TO MONTHS BETWEEN BASELINE AND FOLLOW-UP DATA COLLECTION

Months Since Intake	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular Services Group	Enhanced-Services Group	Regular Services Group	Enhanced-Services Group	Regular Services Group
Follow-Up Survey						
Less than 61	0.2	0.2	0.4	0.4	0.0	0.0
61 to 66	4.5	4.1	4.4	4.8	0.3	0.4
67 to 72	25.7	25.9	30.4	25.9	6.3	4.2
73 to 78	27.3	30.3	28.8	33.5	20.7	22.1
79 to 84	19.4	20.0	19.2	20.0	48.3	44.0
85 to 90	14.6	14.5	10.9	9.6	15.1	17.5
More than 90	8.3	5.1	6.0	5.8	9.4	11.7
(Average Number of Months)	(77.1)	(76.5)	(75.9)	(75.9)	(80.7)	(81.2)
Welfare Records Data						
Less than 61	1.6	2.6	3.1	2.8	0.0	0.0
61 to 66	19.3	18.5	21.6	23.1	0.1	0.1
67 to 72	21.6	20.3	21.6	19.3	1.6	1.5
73 to 78	15.0	15.6	13.7	16.4	5.9	5.9
79 to 84	14.2	15.7	14.3	14.8	22.0	20.4
85 to 90	17.7	17.4	20.2	18.9	26.7	27.0
More than 90	10.6	9.9	5.6	4.7	44.1	45.0
(Average Number of Months)	(76.9)	(76.8)	(75.7)	(75.4)	(89.2)	(89.4)
Wage Records Data						
Less than 61	1.6	2.6	3.1	2.8	0.3	0.3
61 to 66	19.3	18.5	21.6	23.1	2.2	2.4
67 to 72	21.6	20.3	21.6	19.3	14.9	14.0
73 to 78	15.0	15.6	13.7	16.4	24.0	22.1
79 to 84	14.2	15.7	14.3	14.8	27.7	29.7
85 to 90	17.7	17.4	20.2	18.9	27.0	27.0
More than 90	10.6	9.9	5.6	4.7	3.8	4.4
(Average Number of Months)	(76.9)	(76.8)	(75.7)	(75.4)	(80.2)	(80.4)
Child Assessment Data						
Less than 61	0.9	0.4	0.9	0.0	0.3	0.0
61 to 66	0.6	1.4	1.5	2.2	0.3	0.0
67 to 72	20.8	18.8	21.6	19.1	2.5	3.0
73 to 78	23.8	24.3	29.3	32.6	14.5	14.2
79 to 84	23.5	25.7	20.7	20.1	38.1	32.6
85 to 90	11.4	13.0	10.8	10.0	27.7	30.5
91 to 96	9.0	10.9	10.8	11.6	12.7	15.9
More than 96	9.9	5.4	4.5	4.4	4.1	3.7
(Average Number of Months)	(77.9)	(79.5)	(77.5)	(79.1)	(83.6)	(84.2)

TABLE A.3

CHARACTERISTICS OF THE FULL SAMPLE
(Percents)

	Camden		Newark		Chicago	
	Enhanced-services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
Age						
Under 17 years old	24.2	25.8	11.9	13.5	9.7	9.5
17 years old	22.7	18.2	17.5	16.3	11.2	12.6
18 years old	27.5	28.5	30.2	32.5	39.0	39.2
19 years or older	23.6	27.5	40.4	37.7	40.0	38.7
(Average age)	(17.9)	(18.0)	(18.5)	(18.5)	(18.6)	(18.6)
Race/Ethnicity						
Black, non-Hispanic	56.7	55.8	74.3	69.5	84.5	85.6
Hispanic origin	37.2	37.8	22.7	28.0	5.4	4.7
White or other non-Hispanic	6.1	6.4	3.0	2.5	10.0	9.8
Lived with Father as Child	14.8	16.7	14.7	16.7	21.6	19.8
Welfare Household as Child	53.7	52.9	55.6	55.7	38.5	39.7
Lived in Housing Project as Child	18.8	18.5	23.9	20.7	13.1	12.6
Child of Teenage Mother	70.9	72.3	70.3	70.4	70.5	68.3
(Mean Number of Older Siblings)	(1.8)	(1.6 *)	(1.7)	(1.7)	(1.7)	(1.7)
(Mean Number of Younger Siblings)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)
Mother Completed High School	53.2	53.0	55.3	55.5	72.8	73.1
Mother Employed at Intake	38.5	39.7	37.6	39.3	42.9	43.4
Health Barriers to Employment	21.2	20.6	20.7	21.0	18.4	14.4
Limited English Proficiency	17.8	18.5	13.6	14.3	0.2	0.5
Low-Birthweight Baby	9.0	10.0	10.8	11.1	7.4	8.6
Regular Contact with Noncustodial Father	48.1	42.8 *	53.2	51.7	44.5	43.3
Age of Child						
Unborn	5.2	5.8	2.6	3.2	18.3	18.1
l-6 months old	66.0	62.2	38.9	43.2	48.5	48.6
7-12 months old	8.9	12.6	23.9	21.4	12.8	12.7
Older than 1 year	20.0	19.4	34.5	32.2	20.5	20.6
Lives with Parent at Intake	45.2	49.9	55.8	52.0	48.3	45.1 *
Plan to Attend Postsecondary Education	57.0	58.0	66.8	66.6	67.6	67.5
Completed High School or GED	20.0	22.5	27.7	25.2	40.9	39.2
School status						
Not attending	55.2	51.7	63.3	63.1	53.2	56.1
In regular school	35.0	38.3	24.0	21.8	31.5	30.7
In postsecondary school	5.7	6.3	8.2	9.8	8.5	7.0
In GED or ESL	4.1	3.7	4.8	5.3	6.8	6.2

TABLE A.3 (continued)

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Gmup
Ever Dropped Gut of School	67.5	68.1	61.8	66.7 *	49.8	50.3
Reading Skills		*				
Below 6th grade	46.2	42.4	41.6	40.3	28.1	30.3
6th through 8th grade	25.3	31.1	31.5	33.1	33.6	33.1
Above 8th grade	28.3	26.5	27.0	26.6	38.3	36.7
Math Skills						
Below 6th grade	35.3	32.4	27.5	26.8	23.7	26.1
6th through 8th grade	42.0	46.4	45.1	46.3	52.8	50.5
Above 8th grade	22.8	21.2	27.3	26.8	23.5	23.4
Ever Employed	50.0	48.7	56.0	54.8	54.1	47.7 **
JOBS Mandatory Status						*
Mandatory	36.5	34.9	37.9	39.7	24.2	28.0
High risk	41.6	39.8	29.3	29.5	32.6	30.7
Low risk	21.9	25.3	32.9	30.8	43.2	41.3
Sample Size	630	582	572	600	1,439	1,448

SOURCE: **Program Intake** Forms.

NOTE: Chi-square tests were used to test the significance of differences between the regular- and enhanced-services groups in distributional characteristics. Significant differences are noted by asterisks centered above the distributions for each group. T-tests were used to test the significance of differences between the two groups in other characteristics. Significant differences are noted by asterisks following the characteristic for the regular-services group.

*Differences between enhanced- and regular-services groups are statistically significant at the 10 percent level, two-tailed test.
**Differences between enhanced- and regular-services groups are statistically significant at the 5 percent level. two-tailed test.

TABLE A.4

MEANS OF CONTROL VARIABLES

	Full Sample			Follow-Up Survey Sample			Child Assessment Sample		
	Camden	Newark	Chicago	Camden	Newark	Chicago	Camden	Newark	Chicago
Age 17	0.206	0.169	0.119	0.202	0.171	0.114	0.193	0.162	0.107
Age 18	0.278	0.313	0.391	0.279	0.295	0.388	0.292	0.306	0.391
Age 19 or Older	0.256	0.391	0.393	0.258	0.399	0.404	0.261	0.384	0.409
Hispanic Origin	0.375	0.254	0.051	0.348	0.235	0.051	0.329	0.233	0.058
White or Other Non-Hispanic	0.062	0.027	0.099	0.063	0.030	0.097	0.057	0.023	0.069
Always Lived with Father as Child	0.157	0.157	0.207	0.155	0.152	0.212	0.141	0.156	0.216
In Welfare Household at Least Half the Time as Child	0.533	0.566	0.391	0.546	0.555	0.378	0.561	0.577	0.387
Lived in Housing Project as Least Half the Time as Child	0.187	0.223	0.128	0.191	0.234	0.126	0.190	0.236	0.127
Child of Teenage Mother	0.651	0.634	0.654	0.658	0.638	0.652	0.652	0.639	0.642
Missing Data on Child of Teenage Mother	0.090	0.099	0.058	0.087	0.096	0.065	0.092	0.102	0.065
Number of Older Siblings	1.669	1.683	1.695	1.652	0.692	1.667	1.757	1.682	1.723
Number of Younger Siblings	1.514	1.479	1.492	1.504	1.498	1.465	1.534	1.518	1.475
Mother Completed High School	0.530	0.548	0.730	0.529	0.555	0.718	0.529	0.555	0.703
Missing Data on Mother's Education	0.131	0.117	0.057	0.128	0.113	0.055	0.124	0.111	0.064
Lives with Employed Mother	0.130	0.177	0.151	0.131	0.189	0.141	0.147	0.209	0.160
Lives with Nonemployed Mother	0.279	0.305	0.273	0.291	0.314	0.270	0.312	0.341	0.281
Missing Data on Living Arrangement or Mother's Employment Status	0.094	0.076	0.051	0.091	0.07s	0.059	0.080	0.079	0.063
Health Barriers to Employment	0.209	0.208	0.169	0.207	0.215	0.175	0.219	0.216	0.166
Limited English Proficiency	0.181	0.139	0.003	0.154	0.125	0.004	0.123	0.112	0.002
Regular Contact with Noncustodial Father	0.455	0.524	0.439	0.491	0.594	0.395	0.510	0.618	0.421
Low-Birthweight Baby	0.094	0.109	0.080	0.091	0.103	0.086	0.07s	0.099	0.089
Pregnant with No Child	0.054	0.029	0.182	0.056	0.029	0.173	0.053	0.020	0.171
Child 1 to 6 Months Old	0.642	0.411	0.485	0.644	0.406	0.491	0.684	0.426	0.526
Child 7 to 12 Months Old	0.107	0.226	0.127	0.107	0.230	0.124	0.113	0.256	0.129

TABLE A.4 *(continued)*

	Full Sample			Follow-Up Survey Sample			Child Assessment Sample		
	Camden	Newark	Chicago	Camden	Newark	Chicago	Camden	Newark	Chicago
Plans to Attend Postsecondary Education	0.575	0.667	0.675	0.564	0.650	0.664	0.570	0.636	0.665
	0.212	0.264	0.400.	0.215	0.268	0.407	0.224	0.265	0.413
Completed High School or GED									
In Regular School	0.366	0.229	0.3 I I	0.372	0.245	0.329	0.357	0.255	0.359
In Postsecondary School	0.060	0.090	0.078	0.065	0.095	0.067	0.072	0.09 I	0.066
In GED or ESL Program	0.039	0.049	0.065	0.039	0.049	0.067	0.042	0.047	0.065
Ever Dropped Out of School	0.678	0.643	0.501	0.645	0.61 I	0.465	0.624	0.617	0.439
Reading Skills below 6th Grade	0.445	0.409	0.292	0.429	0.396	0.279	0.403	0.399	0.303
Reading Skills 7th Through 8th Grade	0.28 I	0.323	0.333	0.289	0.32 I	0.343	0.305	0.336	0.338
Math Skills below 6th Grade	0.339	0.272	0.249	0.318	0.258	0.241	0.293	0.245	0.253
Math Skills 7th Through 8th Grade	0.441	0.458	0.516	0.453	0.458	0.530	0.466	0.470	0.534
Ever Employed	0.494	0.554	0.509	0.456	0.545	0.498	0.454	0547	0.497
Enrolled July 1987 Through June 1988	0.310	0.272	0.362	0.308	0.273	0.570	0.284	0.255	0.565
Enrolled July 1988 Through June 1989	0.300	0.287	0.48 I	0.299	0.287	0.342	0.284	0.265	0.351
Enhanced-Services Group	0.520	0.483	0.498	0.533	0.50 I	0.488	0.547	0.5 I I	0.476
Sample Size	1.218	1.190	2.889	1.052	1.005	1.442	612	656	829

SOURCE: Program Intake Forms.

TABLE A.5

STANDARD DEVIATIONS OF CONTROL VARIABLES

	Full Sample			Follow-Up Survey Sample			Child Assessment Sample		
	Camden	Newark	Chicago	Camden	Newark	Chicago	Camden	Newark	Chicago
Age 17	0.405	0.375	0.324	0.402	0.377	0.318	0.395	0.368	0.310
Age 18	0.448	0.464	0.488	0.449	0.456	0.487	0.455	0.461	0.488
Age 19 or Older	0.437	0.488	0.489	0.438	0.490	0.491	0.440	0.487	0.492
Hispanic Origin	0.481	0.431	0.219	0.474	0.421	0.219	0.469	0.419	0.234
White or Other Non-Hispanic	0.240	0.162	0.298	0.243	0.170	0.296	0.232	0.150	0.253
Always Lived with Father as Child	0.361	0.359	0.405	0.360	0.356	0.408	0.346	0.361	0.412
In Welfare Household at Least Half the Time as Child	0.488	0.486	0.482	0.488	0.488	0.479	0.485	0.486	0.481
Lived in Housing Project as Least Half the Time as Child	0.385	0.408	0.332	0.389	0.417	0.329	0.389	0.420	0.330
Child of Teenage Mother	0.477	0.482	0.476	0.475	0.481	0.477	0.477	0.481	0.480
Missing Data on Child of Teenage Mother	0.287	0.299	0.234	0.281	0.294	0.247	0.289	0.303	0.247
Number of Older Siblings	1.695	1.668	I.731	1.679	1.690	1.706	1.725	1.694	1.727
Number of Younger Siblings	1.484	1.429	1.474	1.469	1.426	1.469	1.473	1.436	1.457
Mother Completed High School	0.499	0.498	0.444	0.499	0.497	0.450	0.500	0.497	0.457
Missing Data on Mother's Education	0.338	0.321	0.231	0.335	0.317	0.229	0.330	0.315	0.245
Lives with Employed Mother	0.336	0.382	0.358	0.338	0.392	0.349	0.354	0.407	0.367
Lives with Nonemployed Mother	0.449	0.461	0.446	0.454	0.465	0.444	0.464	0.475	0.450
Missing Data on Living Arrangement or Mother's Employment Status	0.293	0.266	0.219	0.288	0.263	0.236	0.272	0.270	0.243
Health Barriers to Employment	0.395	0.400	0.371	0.394	0.404	0.375	0.404	0.405	0.367
Limited English Proficiency	0.382	0.342	0.059	0.358	0.329	0.064	0.324	0.313	0.049
Regular Contact with Noncustodial Father	0.488	0.491	0.486	0.492	0.483	0.475	0.492	0.478	0.476
Low-Birthweight Baby	0.290	0.308	0.267	0.285	0.299	0.276	0.261	0.294	0.279
Pregnant with No Child	0.225	0.167	0.382	0.228	0.167	0.375	0.223	0.139	0.372
Child I to 6 Months Old	0.475	0.486	0.495	0.474	0.486	0.495	0.460	0.489	0.493
Child 7to 12 Months Old	0.305	0.414	0.330	0.306	0.417	0.327	0.314	0.432	0.331

TABLE A.5 *(continued)*

	Full Sample			Follow-Up Survey Sample			Child Assessment Sample		
	Camden	Newark	Chicago	Camden	Newark	Chicago	Camden	Newark	Chicago
Plans to Attend Postsecondary Education	0.485	0.464	0.467	0.496	0.477	0.472	0.495	0.482	0.472
Completed High School or GED	0.405	0.435	0.490	0.408	0.437	0.49 l	0.414	0.434	0.493
In Regular School	0.474	0.41 l	0.463	0.477	0.42 l	0.470	0.471	0.426	0.480
In Postsecondary School	0.234	0.281	0.267	0.244	0.286	0.25 l	0.255	0.28 l	0.249
In GED or ESL Program	0.191	0.212	0.247	0.191	0.21 l	0.25 l	0.198	0.205	0.247
Ever Dropped Out of School	0.459	0.473	0.496	0.479	0.488	0.499	0.485	0.486	0.497
Reading Skills below 6th Grade	0.486	0.485	0.450	0.485	0.483	0.445	0.482	0.484	0.456
Reading Skills Between 6th and 8th Grade Level	0.439	0.461	0.467	0.444	0.461	0.471	0.453	0.467	0.469
Math Skills below 6th Grade	0.465	0.439	0.428	0.458	0.432	0.424	0.449	0.424	0.43 l
Math Skills Between 6th and 8th Grade Level	0.488	0.491	0.495	0.490	0.492	0.495	0.493	0.493	0.495
Ever Employed	0.477	0.487	0.500	0.498	0.498	0.500	0.498	0.498	0.500
Enrolled July 1987 Through June 1988	0.463	0.445	0.48 l	0.462	0.446	0.495	0.45 l	0.436	0.496
Enrolled July 1988 Through June 1989	0.458	0.453	0.500	0.458	0.452	0.475	0.45 l	0.442	0.478
Enhanced-Services Group	0.500	0.500	0.500	0.499	0.500	0.500	0.498	0.500	0.500
Sample Size	1,218	1,190	2,889	1,052	1,005	1,442	612	656	829

SOURCE: Program Intake Forms.

TABLE A.6

COMPARISON OF IMPACT ESTIMATES BASED ON UNADJUSTED MEANS, OLS REGRESSIONS, AND LOGIT OR TOBIT MODELS

	Unadjusted Mean Impact Estimates	OLS Regression Impact Estimates*	Logit Impact Estimates*	Tobit Impact Estimates'
Camden				
Percent Received AFDC				
Month 30	-5.5*	-7.0**	-7.1**	--
Month 60	0.1	-0.4	-0.4	--
Benefit Amount (S)				
Month 30	-27**	-32**	--	-35**
Month 60	-4	-7		-7
Percent Employed				
Quarter 12	1.7	2.4	2.4	--
Quarter 24	0.9	0.8	0.6	--
Quarterly Earnings (S)				
Quarter 12	-17	5	--	48
Quarter 24	130	127	--	59
Newark				
Percent Received AFDC				
Month 30	1.9	1.8	1.8	
Month 60	-2.4	-2.3	-2.2	--
Benefit Amount (S)				
Month 30	6	6	--	8
Month 60	-8	-7	--	-9
Percent Employed				
Quarter 12	0.1	0.1	-0.4	--
Quarter 24	-5.5	-5.7	-6.2*	--
Quarterly Earnings (S)				
Quarter 12	30	10	--	2
Quarter 24	-22 1	-223	--	-214*
Chicago				
Percent Received AFDC				
Month 30	-2.2	-2.0	-1.9	--
Month 60	0.9	1.0	1.1	--
Benefit Amount				
Month 30	-3	-3	--	-5
Month 60	5	7	--	7
Percent Employed				
Quarter 12	3.4	3.2	3.1	--
Quarter 24	0.3	-0.6	-0.6	--
Quarterly Earnings				
Quarter 12	79	73	--	76
Quarter 24	-53	-60	--	-33

TABLE A.6 *(continued)*

	Unadjusted Mean Impact Estimates	OLS Regression Impact Estimates'	Logit Impact Estimates'	Tobit Impact Estimates'
Sample Size				
Camden	689-l ,047	689-1,047	689-l ,047	689-1,047
Newark	599-1,005	599-1,005	599-1,005	599-1,005
Chicago	1,356-1,438	1,356-1,438	1,356-1,438	1,356-1,438

SOURCE: Administrative records data on employment and earnings.

*Means of control variables used in the regressions are presented in Table A.4.

'Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE A.7

SIZE OF SAMPLE SUBGROUPS

	Data Source		
	Second Followup Survey	Administrative Data	Child Assessment
Camden	1,052	1,218	612
Newark	1,005	1,190	656
Chicago	1,442	2,889	829
Enrolled June 1987 Through June 1988	1,420	1,748	809
Enrolled July 1988 Through June 1989	1,096	2,097	639
Enrolled after June 1989	1,097	1,449	648
Reading Skills below 6th Grade	1,215	1,817	671
Reading Skills 6th through 8th Grade Level	1,093	1,644	634
Reading Skills 9th Grade Level or Above	1,097	1,690	536
Low Risk of Becoming JOBS Mandatory	1,073	1,622	622
JOBS Mandatory	1,193	1,730	728
High Risk of Becoming JOBS Mandatory	1,165	1,862	698
Under Age 17	545	746	329
Age 17	550	796	313
Age 18	1,149	1,842	704
Age 19 or Older	1,255	1,913	751
Hispanic Origin	666	893	397
Black. Non-Hispanic	2,559	3,964	1,570
White or Other Non-Hispanic	236	392	107
Lives with Employed Mother	532	805	360
Lives with Nonemployed Mother	1,012	1,492	648
Does Not Live with Mother	1,955	3,000	1,089
In High or Middle School	1,090	1,591	669
In Postsecondary School	255	398	155
In GED Program	184	290	108
Not in School	1,896	2,931	1,113
On Welfare as Child	1,616	2,357	1,004
Not on Welfare as Child	1,883	2,940	1,093
Pregnant at Baseline	332	615	
Child 1 to 6 Months Old at Baseline	1,755	2,618	
Child 7 to 12 Months Old at Baseline	513	751	
Child Older than 12 Months at Baseline	824	1,204	
Child Male			1,008
Child Female			1,074
Child Age 6 or Younger at Followup			810
Child Age 7 at Followup			771
Child Ape 8 or Older at Followup			513

TABLE A.8

CHARACTERISTICS OF SAMPLE MEMBERS WITH A SECOND FOLLOW-UP SURVEY ATTEMPTED, BY SITE AND STATUS

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
Age (in Years)						
Under 17	26.2	25.8	11.9	13.5	10.2	9.2
17	22.5	18.2	17.6	16.3	10.4	11.9
18	27.5	28.5	30.5	32.2	37.4	39.8
19 or older	23.8	27.5	40.1	38.1	41.9	39.2
(Mean age)	(-17.9)	(-18.0)	(-18.5)	(-18.5)	(-18.6)	(-18.6)
Race/Ethnicity						
Black, non-Hispanic	56.8	55.9	74.5*	69.6	84.3	85.2
Hispanic origin	37.1	37.7	22.5	27.9	5.0	5.5
White or other non-Hispanic	6.1	6.4	3.0	2.5	10.7	9.3
Lived with Father as Child	14.8	16.8	14.9	16.7	21.1	19.9
Welfare Household as Child	53.7	53.2	55.4	55.5	37.6	38.6
Living in Housing project as Child	18.8	18.6	23.9	20.6	12.2	12.6
Child of Teenage Mother	70.8	72.2	70.3	70.0	72.8	68.6*
(Mean Number of Older Siblings)	1.8	1.6	1.7	1.7	1.7	1.6
(Mean Number of Younger Siblings)	1.5	1.5	1.5	1.5	1.5	1.4*
Mother Completed High School	53.5	52.9	55.4	55.5	71.8	72.7
Mother Employed at Intake	387	39.8	37.7	39.3	40.5	42.8
Health Barriers to Employment	21.1	20.6	20.5	21.0	19.0	15.5'
Limited English Proficiency	17.7	18.4	13.4	14.2	0.2	0.6
Low-Birthweight Baby	9.0	10.0	10.7	11.1	7.2	9.1
Regular Contact with Noncustodial Father	47.9	42.7*	53.3	51.7	44.0	43.4
Age of Child						
Unborn	5.2	5.8	2.7	3.2	17.9	17.7
1 to 6 months	66.1	62.2	39.0	43.3	48.4	48.4
7 to 12 months	8.7	12.5	23.9	21.2	12.2	14.1
Older than 1 year	20.6	19.5	34.4	32.3	21.5	19.7
Lives with Parents at Intake	45.2	50.0	55.8	52.0	45.8	44.9
Plan to Attend Postsecondary Education	57.0	58.0	66.7	66.7	64.7	68.9*
Completed High School or GED	20.1	22.4	27.5	25.3	39.6	41.5

TABLE A.8 *(continued)*

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
School Status						
Not attending	55.2	51.8	63.3	63.1	51.7	56.3
In regular school	35.1	38.4	24.0	21.8	33.4	31.9
In postsecondary school	5.8	6.3	8.2	9.8	6.9	6.4
In GED or ESL	4	3.5	4.5	5.3	8.1	5.5
Ever Dropped Out of School	67.2	68.0	61.8	66.2	48.1	47.3
Reading Skills						
Below 7th grade	46.5	42.4	41.4	40.3	27.6	29.4
7th through 8th grade	25.1	31.1	31.5	33.1	34.2	34.3
Above 8th grade	28.4	26.5	27.0	26.6	38.2	36.3
Math Skills						
Below 7th grade	35.3	32.4	27.6	26.8	23.2	26.9
7th through 8th grade	41.9	46.4	45.1	46.3	53.5	51.3
Above 8th grade	22.9	21.2	27.4	26.8	23.3	21.8
Ever Employed	49.9	48.8	56.2	55.3	52.1	47.0**
JOBS Mandatory Status						
Mandatory	36.5	34.9	37.9	39.7	24.4	27.6
High risk	41.6	39.9	29.3	29.5	34.0	29.8
Low risk	22.0	25.2	32.7	30.8	41.6	42.7
Months Between Intake and Follow-Up Interview (Follow-Up Interview Sample Only)	77.1	76.5	75.9	75.9	80.7	81.2*
Sample Size	533-630	491-582	504-574	542-615	701-844	724-860

SOURCE: Program intake forms.

*Differences between the enhanced- and regular-services group are statistically significant at the 10 percent level, two-tailed test.
**Differences between the enhanced- and regular-services group are statistically significant at the 5 percent level, two-tailed test.

TABLE A.9

CHARACTERISTICS OF SAMPLE MEMBERS WITH A CHILD ASSESSMENT ATTEMPTED, BY SITE AND STATUS

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
Age (in Years)						
Under 17	25.5	26.2	13.6	13.7	10.0	7.8
17	21.4	18.5	17.4	16.3	11.5	10.8
18	28.5	27.6	30.0	30.0	37.0	40.9
19 or older	24.6	27.8	39.0	40.0	41.5	40.5
(Mean age)	(18.0)	(18.0)	(18.5)	(18.5)	(18.6)	(18.6)
Race/Ethnicity						
Black, non-Hispanic	59.8	60.5	77.2	72.0	85.3	86.5
Hispanic origin	34.5	33.9	20.2	25.4	6.0	5.2
White or other non-Hispanic	5.8	6.6	2.6	2.6	8.7	8.4
Lived with Father as Child	13.7	17.3	15.4	14.7	21.3	22.1
Welfare Household as Child	56.6	52.1	55.2	56.9	36.3	37.4
Living in Housing project as Child	19.3	17.7	25.1	22.3	13.2	11.6
Child of Teenage Mother	72.3	71.4	69.6	71.0	71.2	65.8”
(Mean Number of Older Siblings)	1.8	1.7	1.7	1.7	1.7	1.6
(Mean Number of Younger Siblings)	1.6	1.5	1.5	1.5	1.5	1.4*
Mother Completed High School	53.1	52.6	55.6	56.5	70.3	72.3
Mother Employed at Intake	37.7	38.7	39.4	40.4	43.7	45.1
Health Barriers to Employment	21.3	21.6	21.2	21.4	20.7	14.8**
Limited English Proficiency	12.6	13.3	10.2	11.4	0.2	0.4
Low-Birthweight Baby	8.1	9.2	10.0	10.8	7.5	9.7
Regular Contact with Noncustodial Father	52.4	43.3**	55.6	55.8	46.6	46.9
Age of Child						
Unborn	5.6	7.3	2.6	2.9	18.4	17.9
1 to 6 months	69.5	65.4	38.9	44.0	so.3	52.1
7 to 12 months	9.3	12.0	26.0	24.2	12.0	13.6
Older than 1 year	15.6	15.4	32.6	28.6	19.4	16.4
Lives with Parents at Intake	48.2	56.0**	60.6	58.4	49.1	47.0
Plan to Attend Postsecondary Education	60.4	60.1	66.3	69.3	64.7	69.7*
Completed High School or GED	20.9	23.8	27.7	27.7	39.9	44.4
School Status						
Not attending	53.7	SO.8	61.2	59.6	so.4	54.9
ln regular school	34.9	37.1	25.9	24.9	35.5	32.3
In postsecondary school	7.4	7.0	9.0	10.0	5.8	6.9

TABLE A.9 *(continued)*

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
In GED or ESL	4.0	5.1	4.0	5.4	8.3	5.9
Ever Dropped Out of School	64.9	66.3	60.8	63.7	46.2	43.6
Reading Skills						
Below 7th grade	43.1	37.7	33.7	39.0	29.1	28.1
7th through 8th grade	28.2	33.7	34.3	33.3	33.6	35.1
Above 8th grade	28.7	28.6	28.0	27.8	37.3	36.9
Math Skills						
Below 7th grade	31.3	27.9	23.8	23.7	22.9	25.6
7th through 8th grade	46.1	47.6	45.7	46.9	54.8	51.9
Above 8th grade	22.6	24.5	30.6	29.4	22.3	22.5
Ever Employed	52.5	50.5	57.9	59.9	52.1	48.7
JOBS Mandatory Status						
Mandatory	33.7	33.6	36.1	35.8	22.7	25.6
High risk	43.1	40.1	32.1	31.3	35.9	29.1
Low risk	23.2	26.3	31.8	32.9	41.4	45.3
Months Between Intake and Follow-Up Interview (Follow-Up Interview Sample Only)	76.5	76.2	75.3	75.5	80.3	80.5
Sample Size	382-439	318-363	345-390	347-393	467-532	475-563

SOURCE: **Program** intake forms.

*Differences between the enhanced- and regular-services group are statistically significant at the 10 percent level, two-tailed test.
**Differences between the enhanced- and regular-services group are statistically significant at the 5 percent level, two-tailed test.

TABLE A.10

CHARACTERISTICS OF SAMPLE MEMBERS WHO COMPLETED A SECOND FOLLOW-UP SURVEY, BY SITE AND STATUS

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
Age (in Years)						
Under 17	25.8	26.3	12.7	14.4	10.1	8.7
17	22.3	17.9	17.2	17.0	10.8	12.0
18	27.5	28.5	29.4	29.5	37.1	40.4
19 or older	24.4	27.3	40.7	39.1	42.0	38.9
(Mean age)	(17.9)	(18.0)	(18.5)	(18.5)	(18.6)	(18.6)
Race/Ethnicity						
Black, non-Hispanic	59.3	58.5	76.0	70.9	84.8	85.6
Hispanic origin	34.8	34.7	20.8	26.2	5.0	5.2
White or other non-Hispanic	5.9	6.8	3.2	2.9	10.2	9.2
Lived with Father as Child	14.3	17.0	14.9	15.4	21.3	21.0
Welfare Household as Child	54.8	54.5	54.2	56.9	36.3	39.2
Living in Housing Project as Child	19.1	19.1	24.2	22.6	13.2	12.0
Child of Teenage Mother	71.9	72.2	70.3	70.7	71.8	67.7
(Mean Number of Older Siblings)	I.7	1.6	1.7	1.7	1.7	1.6
(Mean Number of Younger Siblings)	1.5	1.5	1.5	1.5	1.5	1.4
Mother Completed High School	53.3	52.3	55.8	55.3	71.3	72.2
Mother Employed at Intake	39.4	39.0	39.1	40.0	42.2	42.3
Health Barriers to Employment	20.7	20.8	21.0	22.0	19.0	16.0
Limited English Proficiency	14.7	16.2	12.3	12.8	0.3	0.5
Low-Birthweight Baby	7.8	10.5	10.2	10.4	7.7	9.5
Regular Contact with Noncustodial Father	48.9	43.6*	52.9	53.1	45.1	44.6
Age of Child						
Unborn	5.3	6.0	2.6	3.3	17.8	16.8
1 to 6 months	66.3	62.2	37.4	43.9	49.1	49.2
7 to 12 months	9.1	12.5	25.3	20.8	11.0	13.8
Older than 1 year	19.3	19.3	34.7	32.0	22.1	20.2
Lives with Parents at lntake	45.6	52.6**	56.7	55.1	46.7	45.8
Plan to Attend Postsecondary Education	57.9	58.8	65.7	68.7	64.7	69.1*
Completed High School or GED	20.1	23.2	27.5	26.1	39.6	41.7
School Status						
Not attending	54.2	50.2	61.8	60.4	51.4	55.8
ln regular school	35.2	39.4	24.9	24.1	33.8	32.0
ln postsecondary school	6.5	6.7	8.8	10.2	6.8	6.6

TABLE A.10 *(continued)*

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
In GED or ESL	4.1	3.7	4.5	5.3	8.0	5.6
Ever Dropped Out of School	66.5	67.6	60.7	64.4	48.3	46.4
Reading Skills						
Below 7th grade	44.5	41.0	39.8	39.4	27.2	28.6
7th through 8th grade	26.8	31.3	31.8	32.4	33.9	34.1
Above 8th grade	28.7	27.7	28.4	28.2	38.9	36.7
Math Skills						
Below 7th grade	33.3	29.9	25.9	25.6	21.9	26.2
7th through 8th grade	44.0	46.9	45.3	46.2	54.4	51.7
Above 8th grade	22.7	23.2	28.8	28.2	23.7	22.1
Ever Employed	50.2	49.3	58.0	56.5	52.4	47.3*
JOBS Mandatory Status						
Mandatory	35.7	33.0	36.5	36.5	23.9	27.1
High risk	42.4	41.1	30.6	31.9	34.4	30.1
Low risk	21.9	25.9	32.9	31.6	41.7	42.8
Months Between Intake and Follow-Up Interview (Follow-Up Interview Sample Only)	77.1	76.5	75.9	75.9	80.7	81.2*
Sample Size	**561**	**491**	**504**	**501**	**704**	**738**

SOURCE: Program intake forms.

*Differences between the enhanced- and regular-services group are statistically significant at the 10 percent level, two-tailed test.
**Differences between the enhanced- and regular-services group are statistically significant at the 5 percent level, two-tailed test.

TABLE A. 11

CHARACTERISTICS OF SAMPLE MEMBERS WITH A CHILD ASSESSMENT, BY SITE AND STATUS

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
Age (In Years)						
Under 17	26.0	24.6	14.3	15.2	10.1	8.5
17	20.3	18.1	16.7	15.6	10.9	10.6
18	29.8	28.5	29.9	31.5	38.2	39.9
19 or older	23.9	28.8	39.1	37.7	40.8	41.0
(Mean age)	(18.0)	(18.0)	(18.4)	(18.5)	(18.6)	(18.6)
Race/Ethnicity						
Black, non-Hispanic	61.6	61.2	77.4	71.3	85.8	88.7
Hispanic origin	32.7	33.0	20.5	26.1	6.6	5.1
White or other non-Hispanic	5.7	5.8	21.1	2.6	7.6	6.2
Lived with Father as Child	12.7	15.9	15.8	15.5	21.8	21.5
Welfare Household as Child	58.5	53.2	54.1	61.6*	37.4	39.8
Living in Housing project as Child	19.4	18.5	23.8	23.4	13.4	12.0
Child of Teenage Mother	71.6	71.9	70.6	71.7	72.5	65.1**
(Mean Number of Older Siblings)	1.7	1.7	1.7	1.7	1.7	1.7
(Mean Number of Younger Siblings)	1.5	1.6	1.6	1.5	1.6	1.4**
Mother Completed High School	53.7	52.0	56.4	54.5	68.6	71.9
Mother Employed at Intake	38.7	37.6	39.4	38.7	42.3	46.3
Health Barriers to Employment	22.7	20.9	20.7	22.7	18.4	15.0
Limited English Proficiency	10.1	14.7*	11.3	11.1	0.3	0.2
Low-Birthweight Baby	6.7	8.4	9.2	10.7	7.2	10.5
Regular Contact with Noncustodial Father	53.3	42.7**	54.4	55.8	47.0	47.8
Age of Child						
Unborn	5.2	5.5	2.5	1.6	18.1	16.1
1 to 6 months	69.4	61.3	39.1	46.3	50.5	54.8
7 to 12 months	10.4	12.5	28.1	23.0	11.7	13.9
Older than 1 year	15.0	14.7	30.3	29.1	19.7	15.2
Lives with Parents at Intake	49.2	55.4	61.8	60.9	51.5	48.3
Plan to Attend Postsecondary Education	59.2	58.5	65.3	66.8	63.6	68.9'
Completed High School or GED	21.3	23.9	26.6	26.3	39.2	43.1
School Status						
Not attending	52.8	52.8	60.5	60.8	50.4	51.4
In regular school	35.0	36.5	26.2	24.9	36.2	35.7
In postsecondary school	7.5	7.0	9.3	9.0	5.8	7.4

TABLE A.11 *(continued)*

	Camden		Newark		Chicago	
	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group	Enhanced-Services Group	Regular-Services Group
In GED or ESL	4.1	3.7	4.0	5.3	7.6	5.5
Ever Dropped Out of School	63.2	67.8	60.9	65.9	46.0	43.7
Reading Skills						
Below 7th grade	42.3	37.5	39.4	40.4	31.3	29.5
7th through 8th grade	27.2	34.8	33.5	33.8	32.5	32.6
Above 8th grade	30.5	27.7	27.1	25.8	36.2	36.2
Math Skills						
Below 7th grade	31.5	26.4	23.7	25.2	23.5	27.0
7th through 8th grade	44.1	49.1	42.1	47.0	55.7	51.4
Above 8th grade	23.8	24.5	29.2	27.8	20.8	21.6
Ever Employed	so.3	48.9	55.6	60.0	51.9	47.7
JOBS Mandatory Status						
Mandatory	32.3	34.6	35.7	38.3	22.8	23.7
High risk	43.8	38.6	33.2	30.4	36.5	32.0
Low risk	23.9	26.8	31.1	31.4	40.7	44.3
Months Between Intake and Follow-Up Interview (Follow-Up Interview Sample Only)	76.5	75.7	75.1	75.2	80.0	80.3
Sample Size	292-335	237-277	296-335	282-321	352-395	363-434

SOURCE: Program intake forms.

*Differences between the enhanced- and regular-services group are statistically significant at the 10 percent level, two-tailed test.
**Differences between the enhanced- and regular-services group are statistically significant at the 5 percent level, two-tailed test.

TABLE A. 12

ESTIMATED IMPACTS ON WELFARE DEPENDENCE AND EMPLOYMENT, BY RESPONSE TO FOLLOW-UP DATA SURVEY

	Camden		Newark		Chicago	
	Survey Respondents	Targeted Sample	Survey Respondents	Targeted Sample	Survey Respondents	Targeted Sample
AFDC						
Percentage Receiving Month 30	-7.2**	-5.8**	1.9	2.2	-1.9	-1.9
Percentage Receiving Month 60	0.1	0.1	-2.7	-2.4	1.7	.0
Benefits Month 30	-34**	-30**	7	5	-2	-4
Benefits Month 60	-4	-4	-9	-9	9	3
Employment						
Percentage Employed Quarter 12	2.9	3.5	-0.2	-0.1	3.2	2.4
Percentage Employed Quarter 24	1.9	1.9	-5.1	-3.5	-0.7	-1.6
Earnings Quarter 12	5	34	27	29	75	32
Earnings Quarter 24	138	101	179	-126	-79	-100
Sample Size						
AFDC						
Month 30	918	1.049	880	1,039	1,409	1.661
Month 60	998	1,142	962	1,133	1,412	1,665
Employment						
Quarter 12	1,004	1,152	979	1,154	1,414	1,667
Quarter 24	673	779	577	683	1,334	1.572

SOURCE: Administrative records data on AFDC receipt and wages.

NOTE: Estimated impacts arc measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted based on models in which we included a variable for response to the survey/retest and response-treatment status interaction, along with the control variables Listed in Table A.4.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE A.13

ESTIMATED IMPACTS ON WELFARE DEPENDENCE AND EMPLOYMENT, BY RESPONSE TO CHILD ASSESSMENT

	Camden		Newark		Chicago	
	Survey Respondents	Targeted Sample	Survey Respondents	Targeted Sample	Survey Respondents	Targeted Sample
AFDC						
Percentage Receiving Month 30	-8.5**	-10.5**	4.8	1.9	-3.6	-3.5
Percentage Receiving Month 60	-3.2	-4.6	0.1	-0.3	2.6	1.2
Benefits Month 30 ($)	-39**	-43**	19	9	-6	-8
Benefits Month 60 ($)	-22	-27*	-1.1	-0	14	7
Employment						
Percentage Employed Quarter 12	1.7	3.4	-3.7	-0.6	1.2	3.8
Percentage Employed Quarter 24	-0.0	0.0	-2.1	-3.3	0.9	0.1
Earnings Quarter 12	16	40	-103	-29	90	125*
Earnings Quarter 24	37	121	-189	-218	-29	-38
Sample Size						
AFDC/Food Stamp Receipt						
Month 30	540	705	580	687	812	1,070
Month 60	585	768	626	749	812	1,070
Employment						
Quarter 12	590	772	638	763	814	1,073
Quarter 24	374	508	353	439	773	1,010

SOURCE: Administrative records data on AFDC receipt and wages.

NOTE: Estimated impacts are measured as the difference between the means for the enhanced- and regular-services group. Estimates are regression-adjusted based on models in which we included a variable for response to the survey/retest and response-treatment status interaction, along with the control variables listed in Table A.4.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE A.14

CHARACTERISTICS OF THE FOLLOW-UP SAMPLE, BY LENGTH OF FOLLOW-UP PERIOD

	Duration of Followup (in Years)								
	Camden			Newark			Chicago		
	Less than6	Between 6 and 7	More than7	Less than6	Between 6 and 7	More than7	Less than6	Between 6 and 7	More than7
Age (in Years)									
Under 17	25.1	27.3	25.0	9.1	15.1	19.9	11.2	8.0	12.6
17	19.9	20.8	19.5	14.1	17.7	23.3	7.5	11.3	13.2
18	27.2	27.0	31.5	29.7	31.4	22.6	35.5	39.8	36.8
19 or older	27.8	24.9	24.0	47.1	35.8	34.2	45.8	40.9	37.4
(Mean age)	(18.0)	(17.9)	(17.9)	(18.8)	(18.4)	(18.1)	(18.8)	(18.66)	(19.0)
Race/Ethnicity									
Black, non-Hispanic	62.6	59.5	50.5	75.7	72.4	70.8	86.0	84.4	87.1
Hispanic origin	31.5	34.2	42.4	20.9	24.6	27.1	1.9	6.3	2.6
White or other non-Hispanic	6.0	6.3	7.1	3.4	3.0	2.1	12.1	9.3	10.2
Lived with Father as Child	14.7	13.9	21.0	15.5	15.9	11.9	26.2	22.1	17.0
Welfare Household as Child	49.9	55.9	60.3	54.8	55.6	57.2	28.0	37.6	41.5
Living in Housing Project as Child	17.8	21.0	16.9	21.6	22.9	29.7	14.1	12.3	13.1
Child of Teenage Mother	72.7	71.3	72.3	72.6	68.2	72.5	67.0	69.3	71.7
(Mean Number of Older Siblings)	1.78	1.63	1.46	1.59	1.85	1.42	1.68	1.68	1.64
(Mean Number of Younger Siblings)	1.49	1.50	1.53	1.60	1.51	1.20	1.61	1.47	1.40
Mother Completed High School	56.1	54.3	43.5	63.3	52.6	44.5	70.1	71.2	74.0
Mother Employed at Intake	18.6	11.4	7.0	21.9	17.9	14.4	20.6	14.8	10.2
Health Barriers to Employment	21.3	21.7	17.2	19.1	22.3	25.5	23.1	17.5	15.7
Limited English Proficiency	14.6	14.5	19.0	10.5	13.1	16.2	0.0	0.5	0.3
Low-Birthweight Baby	10.9	6.8	11.0	10.9	9.0	12.7	6.5	8.9	8.4
Regular Contact with Noncustodial Father	52.4	49.7	41.5	58.9	59.9	59.0	38.1	38.3	43.4
Age of Child									
Unborn	3.6	3.8	13.5	0.3	3.2	8.9	16.8	17.9	15.8
1 to 6 months	69.2	63.8	56.8	35.7	41.5	50.8	46.7	49.6	48.4
7 to 12 months	9.9	11.9	9.2	26.6	22.7	14.8	13.1	12.9	11.0
Older than 1 year	17.3	20.5	20.5	37.4	32.6	25.5	23.4	19.6	24.8
Lives with Parents at Intake	53.2	45.8	48.5	54.8	56.7	56.5	49.5	46.3	45.1

TABLE A. 14 *(continued)*

	Duration of Followup (in Years)								
	Camden			Newark			Chicago		
	Less than6	Between 6 and 7	More than7	Less than6	Between 6 and 7	More than7	Less than6	Between 6 and 7	More than7
Plans to Attend Postsecondary Education	61.9	55.8	57.9	72.8	65.5	58.2	76.3	65.9	67.1
Completed High School or GED	24.2	19.9	20.6	26.2	27.7	25.4	46.7	41.9	35.4
School Status									
Not attending	48.5	50.7	63.1	65.5	59.9	52.6	43.9	56.5	48.5
In regular school	40.4	39.0	26.9	17.4	26.3	37.0	33.6	31.0	38.0
In postsecondary school	6.7	6.4	6.6	10.0	10.1	6.0	12.1	6.4	5.8
In GED or ESL	4.2	3.8	3.5	7.1	3.5	3.7	10.3	6.0	7.6
Ever Dropped Out of School	68.4	70.9	54.9	66.0	63.9	48.8	48.6	47.6	46.2
Reading Skills									
Below 7th grade	41.5	41.7	48.3	36.6	39.1	49.3	18.8	27.4	32.2
7th through 8th grade	29.3	30.2	25.1	34.2	33.1	23.7	41.4	33.9	33.1
Above 8th grade	29.4	28.1	26.6	29.2	27.9	27.0	39.8	38.7	34.6
Math Skills									
Below 7th grade	26.6	34.4	35.0	20.1	25.8	40.7	22.4	23.1	27.6
7th through 8th grade	48.4	43.2	74.7	47.7	46.6	37.9	58.9	52.7	51.8
Above 8th grade	25.2	22.4	20.3	32.2	27.7	21.3	18.4	24.1	20.5
Ever Employed	50.7	50.7	46.0	58.8	56.3	56.3	61.7	49.8	45.9
JOBS Mandatory Status									
Mandatory	28.8	35.5	42.5	37.5	35.3	38.3	11.2	27.0	25.7
High risk	43.0	43.1	36.1	27.1	33.3	34.9	36.4	29.9	37.4
Low risk	28.2	21.3	21.4	35.4	31.4	26.8	52.3	43.1	36.8
Months Between Intake and Second Follow-Up Interview	69.1	77.8	90.0	68.9	77.7	90.0	70.7	79.3	90.1
Enrollment Cohort									
1987	0.0	2.5	65.5	0.0	1.5	52.1	0.0	0.5	21.6
January to July 1988	0.0	27.0	25.5	0.0	29.7	34.3	0.0	55.4	56.4
August to December 1988	0.0	26.4	8.0	0.0	26.5	11.0	0.0	25.7	21.1
January to July 1989	12.7	25.6	1.0	9.7	22.1	2.7	14.0	14.9	0.9
August to December 1989	40.8	14.8	0.0	39.3	66.4	0.0	68.2	3.4	0.0
1990	46.5	3.7	0.0	51.1	3.8	0.0	17.8	0.1	0.0
Sample Size	371	481	200	384	475	146	107	993	342

SOURCE: **Program** intake forms.

APPENDIX B:

SUPPLEMENTAL TABLES RELATED TO CHAPTER III

TABLE B.1

MONTHLY ACTIVITY RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

Month During the Previous Year	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Month 1	38.1	-4.7	38.8	-2.7	45.9	-4.6*
Month 2	38.6	-3.5	40.0	-3.3	46.2	-3.2
Month 3	38.6	-2.4	39.8	-2.2	46.5	-2.5
Month 4	38.1	-1.4	40.1	-2.1	48.2	-4.1
Month 5	41.1	-3.3	42.6	-4.3	49.2	-3.4
Month 6	41.1	-3.2	43.4	-4.8	49.9	-2.7
Month 7	42.0	-3.4	40.9	-1.4	51.4	-2.8
Month 8	41.7	-3.6	41.5	-2.4	50.4	-1.1
Month 9	41.1	-1.6	43.0	-4.1	49.7	0.9
Month 10	40.4	-0.6	43.0	-2.8	so.4	-1.0
Month 11	38.6	0.8	43.7	-4.5	49.9	-0.2
Month 12	38.7	1.2	43.1	-3.6	49.8	0.9
Sample Size	481	1,032	494	989	726	1,416

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and AS.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.2

MONTHLY SCHOOL ENROLLMENT RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

Month During the Previous Year	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Month 1	9.9	-2.3	6.1	1.0	10.1	**-3.6****
Month 2	10.0	-2.3	5.4	2.1	10.3	**-3.5****
Month 3	9.6	-0.7	5.0	2.3	10.0	**-2.9***
Month 4						
Month 5						
Month 6	10.1	-1.0	4.8	2.2	11.1	-2.6
Month 7	10.8	-2.5	4.8	**2.7***	11.2	**-2.7***
Month 8	11.0	-2.7	6.4	0.1	12.1	**-4.1****
Month 9	12.4	**-3.7***	5.8	1.3	11.5	-3.1'
Month 10	11.7	-2.3	6.5	0.7	12.1	**-4.8****
Month 11	11.6	-2.2	6.8	0.3	11.5	**-3.8****
Month 12	12.0	-1.9	7.8	-0.5	11.6	**-2.7***
Sample Size	**488**	1,043	498	1,000	**734**	1,432

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.3

MONTHLY TRAINING PARTICIPATION RATES DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

Month During the Previous Year	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Month 1	5.9	-2.6**	4.1	0.4	5.1	0.9
Month 2	6.4	-3.4**	5.1	-0.0	6.2	-0.2
Month 3	6.8	-4.0**	4.4	-0.1	5.4	0.6
Month 4	6.4	-3.7**	4.0	0.3	5.9	-0.1
Month 5	7.4	-3.9**	4.7	-0.7	4.5	1.6
Month 6	8.5	-5.2**	4.3	-0.1	5.1	0.5
Month 7	7.6	-4.5**	4.3	0.4	6.0	0.7
Month 8	6.9	-3.1**	4.4	0.5	6.3	0.6
Month 9	6.4	-3.1**	5.4	0.7	6.1	0.7
Month 10	5.8	-1.7	5.1	0.9	6.0	-0.2
Month 11	5.9	-1.7	4.8	0.9	5.9	0.8
Month 12	5.7	0.7	3.8	1.7	4.7	2.7**
Sample Size	487	1,038	497	999	732	1,426

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the IO percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.4

EMPLOYMENT RATES, BY QUARTER AFTER INTAKE

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated impact
Percent Employed						
Quarter 2	18.2	1.0	21.0	3.8	21.1	5.1**
Quarter 4	23.4	2.8	20.7	4.2*	25.5	3.9**
Quarter 6	20.8	0.8	21.2	3.4	25.9	4.1**
Quarter 8	19.9	2.1	19.2	4.9**	28.9	0.0
Quarter 10	19.5	1.8	19.9	2.1	27.2	1.2
Quarter 12	18.8	3.0	20.9	-1.1	25.6	3.4**
Quarter 14	19.8	3.7	22.7	-0.3	27.5	0.2
Quarter 16	22.6	1.7	22.7	-1.1	28.0	0.9
Quarter 18	21.1	1.7	24.6	-0.0	29.1	-0.4
Quarter 20	25.0	1.9	26.4	1.4	29.6	-0.2
Cumulative Percent Employed						
Quarter 2	25.6	-0.5	28.7	3.4	25.6	5.7**
Quarter 4	40.6	3.1	43.9	4.0	41.2	7.1**
Quarter 6	46.6	5.3*	50.2	6.0**	so.4	7.2**
Quarter 8	50.5	7.1**	53.2	8.9**	57.9	5.4**
Quarter 10	55.0	7.3**	56.9	7.4**	63.5	4.3**
Quarter 12	57.7	8.4**	59.2	8.2**	66.3	4.6**
Quarter 14	60.4	8.5**	62.8	7.1**	69.3	3.7**
Quarter 16	63.1	7.2**	65.7	5.6**	71.8	2.9'
Ouarter 18	65.2	7.2**	67.5	5.9**	74.0	2.7*
Quarter 20	68.5	6.1**	69.8	5.0*	75.5	2.9*
Sample Size	565-585	1,173-1,218	607-615	1,178-1,189	1,449	2,883

SOURCE: Administrative records data on wages.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.S.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.5

EARNINGS, BY QUARTER AFTER INTAKE

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Quarterly Earnings (Dollars)						
Quarter 2	173	-10	155	55*	172	32*
Quarter 4	265	24	229	55	291	44
Quarter 6	297	-5	308	21	342	58'
Quarter 8	284	28	335	46	418	32
Quarter 10	293	41	347	30	459	23
Quarter 12	319	23	392	2	460	77*
Quarter 14	370	44	465	11	523	36
Quarter 16	385	75	517	-78	576	-9
Quarter 18	419	13	544	-14	614	-8
Quarter 20	449	39	642	-45	665	22
Sample Size	565-585	1,173-1,218	607-615	1,1781,189	1,447-1,449	2,879-2,883

SOURCE: Administrative records data on wages.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.6

MONTHLY EMPLOYMENT RATES AND EARNINGS DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY (APPROXIMATELY SIX TO SEVEN YEARS AFTER INTAKE)

	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	-Estimated Impact	Regular-Services Group	Estimated impact
Percent Employed During the Year Prior to Survey						
Month 1	25.8	-0.0	31.9	-2.9	36.4	-3.0
Month 2	26.5	1.1	33.3	-4.1	36.7	-1.7
Month 3	27.1	0.9	33.6	-3.6	37.6	-2.0
Month 4	28.3	1.5	34.8	-3.9	38.5	-2.2
Month 5	28.1	1.1	36.5	-5.0*	39.9	-3.5
Month 6	28.7	0.9	37.4	-5.1*	39.8	-1.4
Month 7	28.7	3.1	35.4	-3.9	42.0	-2.8
Month 8	29.5	1.9	34.8	-3.3	40.8	-0.9
Month 9	27.4	5.1'	37.0	-6.4**	39.1	1.7
Month 10	27.4	4.2	36.4	-5.9**	40.0	0.8
Month 11	25.9	4.6	36.6	-6.4**	39.9	0.9
Month 12	25.5	4.3	35.6	-4.7	39.8	1.1
Average Monthly Earnings During the Year Prior to Survey (Dollars)						
Month 1	255	17	337	-29	394	-14
Month 2	266	18	343	-35	400	-6
Month 3	271	21	353	-41	406	-11
Month 4	278	19	362	-47	415	-21
Month 5	283	20	382	-54	424	-31
Month 6	288	23	386	-49	422	-9
Month 7	291	27	379	-38	425	-1
Month 8	289	32	370	-32	418	12
Month 9	285	43	375	-46	403	23
Month 10	277	50	380	-56	410	13
Month 11	261	50	373	-53	405	18
Month 12	253	49	366	-36	396	33
Sample Size	485	1,039	497	995	733	1,430

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.7

IMPACTS ON PARTICIPATION IN EMPLOYMENT-RELATED ACTIVITIES, EDUCATION, AND TRAINING DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

Sample Subgroup	Any Major Activity in Past Year (Percents). Regular-Services Group	Any Major Activity in Past Year (Percents). Estimated Impact	Any Schooling in Past Year (Percents) Regular-Services Group	Any Schooling in Past Year (Percents) Estimated Impact	Any Training in Past Year (Percents) Regular-Services Group	Any Training in Past Year (Percents) Estimated Impact
Full Sample	69.3	-2.9*	20.2	-1.8	17.8	-0.4
Enrolled June 1987- June 1988	69.2	-1.6	21.9	-5.3**	16.7	2.3
Enrolled July 1988 -June 1989	70.3	-7.5**	19.5	-1.4	17.6	-2.3
Enrolled after June 1989	68.3	0.5	18.3	2.8	19.6	-2.0
Reading Skills below 6th Grade	62.4	-2.1	17.0	0.9	12.6	2.9
Reading Skills 6th through 8th Grade Level	72.4	-4.9*	21.6	-1.5	19.7	-3.2
Reading Skills 9th Grade Level and above	73.2	-1.7	22.3	-5.2**	21.8	-1.1
JOBS Mandatory	65.6	-1.9	19.2	0.3	15.8	-0.3
Low Risk of Becoming JOBS Mandatory	73.9	-10.1**	18.5	-3.5	18.4	-1.4
High Risk of Becoming JOBS Mandatory	67.9	3.2	22.7	-2.0	19.0	0.1
Under Age 17	74.1	-1.9	26.9	-4.9	22.5	-0.8
Age 17	71.3	-1.0	20.4	1.3	21.7	-3.4
Age 18	66.4	0.2	19.1	-2.5	15.7	1.1
Age 19 or Older	68.8	-6.9*	18.1	-1.2	16.0	0.1
Hispanic Origin	67.9	-4.2	17.2	-3.1	19.3	-1.3
Black Non-Hispanic	69.8	-2.4	20.7	-1.1	17.6	-0.2
White or Other Non-Hispanic	67.2	-4.0	22.7	-5.4	15.7	0.2
Lives with Employed Mother	70.8	-6.8*	21.0	-4.7	14.2	-1.5
Lives with Nonemployed Mother	66.1	-0.7	19.2	-1.8	17.9	-2.2
Does Not Live with Mother	71.5	-3.4	20.4	-0.6	19.8	-0.3
In High or Middle School	68.7	2.7	18.9	0.8	19.3	-0.5
In Postsecondary School	71.9	-0.4	20.6	-1.7	16.5	-1.5
In GED School	72.1	-8.4	28.6	-12.0**	19.3	3.6
Not in School	69.0	-5.8**	20.1	-2.3	17.0	-0.5
High School Dropout	67.1	-4.2	20.6	-1.0	15.9	-0.3
Not a High School Dropout	70.4	-2.3	19.9	-2.1	18.8	-0.4
Limited English	62.2	-1.9	19.9	1.4	12.7	-4.7
English not Limited	69.9	-2.9*	20.2	-2.1	18.3	0
On Welfare as Child	69.2	-4.2*	20.6	-3.3*	18.3	-2.6
Not on Welfare as Child	69.3	-1.7	19.8	-0.4	17.3	1.7
Child Unborn	70.6	-5.1	25.0	-5.4	17.2	-0.1
Child 1 to 6 Months Old	68.1	-0.9	19.8	-0.7	16.4	1.1
Child 7 to 12 Months Old	73.8	-9.3**	21.5	-6.0*	21.6	-2.3
Child over 12 Months Old	68.3	-2.1	18.2	0.0	18.8	-2.4
Mean of Outcome Measure		67.8		19.3		17.7
$\bar{R}^2$		.088		.011		.027
Number in Sample		3,497		3,497		3,494

SOURCE: Program intake forms and follow-up surveys conducted an average of 78 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.8. In addition, these models included the site interactions listed in Table A.14 and status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.10.

Major activities include school, job training, and employment.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.8

IMPACTS ON EMPLOYMENT AND EARNINGS DURING THE YEAR PRIOR TO THE SECOND FOLLOW-UP SURVEY

Sample Subgroup	Any Employment (Percents)		Average Monthly Earnings (Dollars)	
	Regular-Services Group	Estimated Impact	Regular- Services Group	Estimated impact
Full Sample	52.1	-2.0	$495	-18
Enrolled June 1987 - June 1988	51.7	-1.2	500	-18
Enrolled July 1988 - June 1989	53.5	-6.1**	485	-48
Enrolled after June 1989	51.3	1.3	500	14
Reading Skills below 6th Grade	49.0	-5.0*	440	-21
Reading Skills 6th through 8th Grade Level	53.2	-3.5	524	-68*
Reading Skills 9th Grade Level and above	54.6	2.1	521	35
JOBS Mandatory	49.6	-4.6	495	-56
Low Risk of Becoming JOBS Mandatory	57.3	-8.5**	512	-84**
High Risk of Becoming JOBS Mandatory	49.3	6.3**	478	79**
Under Age 17	52.1	0.6	477	14
Age 17	55.4	-3.1	509	24
Age 18	50.6	0.4	492	-31
Age 19 or Older	52.2	-5.0*	500	-39
Hispanic Origin	49.9	0.4	483	16
Black, Non-Hispanic	53.0	-2.6	499	-20
White or Other Non-Hispanic	49.1	-3.4	481	-90
Lives with Employed Mother	55.2	-6.4	524	-37
Lives with Nonemployed Mother	48.0	2.3	433	36
Does Not Live with Mother	54.8	-3.5	527	-39
In High or Middle School	51.8	5.9*	486	58
In Postsecondary School	58.0	-5.9	583	-74
In GED Program	50.0	-5.3	480	-38
Not in School	51.8	-5.7**	490	-52*
High School Dropout	50.3	-6.0**	466	-61*
Not a High School Dropout	53.2	-0.2	511	1
Limited English	50.2	-8.0	425	-51
English Not Limited	52.3	-1.5	502	-15
On Welfare as Child	52.3	-4.3*	495	-36
Not on Welfare as Child	52.0	0.0	496	-3
Child Unborn	52.2	-5.3	435	18
Child 1 to 6 Months Old	50.8	0.4	483	15
Child 7 to 12 Months Old	56.3	-9.5**	558	-106**
Child over 12 Months Old	52.4	-1.3	508	-48
Mean of Outcome Measure	—	51.1	--	$486
R-2	--	.999		.103
Sample Size	1,683	3,470	1,627	3,498

SOURCE: Program intake forms and follow-up surveys conducted an average of 78 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. In addition, these models included the site interactions listed in Table A.14 and status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A. 10.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE B.9

CHILD CARE USED DURING MOST RECENT ACTIVITY WITHIN PAST YEAR FOR ALL CHILDREN, BY AGE OF YOUNGEST CHILD
CAMDEN

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Youngest Child Under 3				
Percent Who Used Any Child Care[a]	57.3	1.1	--	--
Relative care	30.6	0.7	52.3	2.1
Nonrelative family child care	12.1	1.7	21.4	1.9
Center-based care	13.5	1.3	23.9	1.1
School	20.9	1.4	37.0	0.6
Other	4.8	-0.1	8.3	-0.1
Average Duration of Activity for Which Care was Used (Months)	5.7	0.8	9.9	1.5
Average Hours Per Week in Care During Most Recent Main Activity	16.3	1.6	28.5	2.2
Youngest Child 3 to 4				
Percent Who Used Any Child Care"	64.6	-5.6	--	--
Relative care	27.6	2.1	43.4	6.2
Nonrelative family child care	8.3	0.2	12.4	2.2
Center-based care	26.2	-0.1	40.3	4.4
School	35.4	-8.2	56.5	-11.6
Other	5.9	-1.5	9.8	-2.8
Average Duration of Activity for which Care was Used (Months)	7.7	-0.5	12.1	-0.0
Average Hours Per Week in Care During Most Recent Main Activity	17.6	0.2	27.3	2.8
Youngest Child 5 or Older				
Percent Who Used Any Child Care"	79.9	-11.7**	--	
Relative care	35.1	5.1	44.6	-1.3
Nonrelative family child care	9.4	-7.3**	11.8	-8.8**
Center-based care	13.6	-3.4	16.0	-0.2
School	46.2	-1.1	58.7	6.4
Other	4.9	-1.2	6.1	-0.5
Average Duration of Activity for Which Care was Used (Months)	10.9	-1.2	13.4	1.5
Average Hours Per Week in Care During Most Recent Main Activity	27.4	-6.2**	33.4	-1.9

TABLE B.9 *(continued)*

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated impact	Regular-Services Group	Estimated Impact
Sample Sizes				
Youngest child under 3	229-234	476-485	128-133	272-28 1
Youngest child 3 to 4	123-124	272-275	78-79	166-169
Youngest child 5 or older	112-117	249-257	90-94	180-189

SOURCE: Follow-up survey conducted an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

'Sample members may have used multiple forms of care.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE B. 10

CHILD CARE USED DURING MOST RECENT ACTIVITY WITHIN PAST YEAR FOR ALL CHILDREN, BY AGE OF YOUNGEST CHILD
NEWARK

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Youngest Child Under 3				
Percent Who Used Any Child Care'	55.9	-3.3		--
Relative care	31.4	3.5	57.1	8.2
Nonrelative family child care	10.4	-1.9	17.9	-0.9
Center-based care	11.1	-0.6	18.2	3.6
School	26.5	-1.3	46.0	3.6
Other	8.1	-4.1	14.9	-7.7
Average Duration of Activity for Which Care was Used (Months)	6.1	2.8*	11.0	6.1**
Average Hours Per Week in Care During Most Recent Main Activity	17.2	-0.2	31.1	0.6
Youngest Child 3 to 4				
Percent Who Used Any Child Care[a]	69.0	-12.6*		--
Relative care	35.6	0.1	54.4	6.2
Nonrelative family child care	8.9	0.7	14.3	1.1
Center-based care	22.9	-7.3	29.1	2.9
School	35.0	-3.6	50.3	5.9
Other	6.1	-3.9	8.3	-3.9
Average Duration of Activity for which Care was Used (Months)	9.7	-4.1*	15.1	-6.0
Average Hours Per Week in Care During Most Recent Main Activity	23.1	-7.0**	33.8	-5.3
Youngest Child 5 or Older				
Percent Who Used Any Child Care[a]	78.0	-8.3*		--
Relative care	36.7	0.1	47.6	4.7
Nonrelative family child care	11.6	-5.0	14.6	-4.6
Center-based care	6.7	0.8	8.2	3.1
School	48.1	-1.7	61.4	5.6
Other	8.0	-4.5*	10.0	-4.9
Average Duration of Activity for Which Care was Used (Months)	10.8	1.5	13.9	4.1*
Average Hours Per Week in Care During Most Recent Main Activity	25.3	-2.6	32.5	0.5

TABLE B. 10 *(continued)*

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Sample Sizes				
Youngest child under 3	201-206	380-390	110-115	203-212
Youngest child 3 to 4	102-104	223-22 7	69-7 1	137-141
Youngest child 5 or older	170-174	341-351	132-136	249-259

SOURCE: Follow-up survey conducted an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

'Sample members may have used multiple forms of care.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE B. 11

CHILD CARE USED DURING MOST RECENT ACTIVITY WITHIN PAST YEAR FOR ALL CHILDREN, BY AGE OF YOUNGEST CHILD
CHICAGO

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Youngest Child Under 3				
Percent Who Used Any Child Care[a]	65.4	-0.4		
Relative care	37.6	0.0	**56.8**	1.7
Nonrelative family child care	17.3	-0.7	**27.2**	-2.8
Center-based care	8.9	-2.0	**13.4**	-2.6
School	22.0	-0.9	**33.8**	-1.7
Other	6.7	1.9	**9.6**	4.4
Average Duration of Activity for Which Care was Used (Months)	9.5	-2.0	**14.1**	-1.9
Average Hours Per Week in Care During Most Recent Main Activity	20.3	-1.0	**31.1**	-1.2
Youngest Child 3 to 4				
Percent Who Used Any Child Care[a]	71.5	1.3	--	--
Relative care	45.0	-4.2	**64.6**	-10.0
Nonrelative family child care	12.9	-1.4	**18.2**	-2.4
Center-based care	12.5	6.4	**16.2**	**11.0***
School	25.4	7.0	**35.8**	8.4
Other	4.4	0.5	**5.6**	1.8
Average Duration of Activity for which Care was Used (Months)	8.9	**3.6***	**13.0**	3.4
Average Hours Per Week in Care During Most Recent Main Activity	23.1	0.9	**32.4**	0.2
Youngest Child 5 or Older				
Percent Who Used Any Child Care'	80.1	-0.9		
Relative care	31.8	4.7	**46.9**	7.2
Nonrelative family child care	13.6	0.6	**17.3**	0.2
Center-based care	11.2	-0.8	**13.4**	0.3
School	40.6	3.1	**51.0**	3.8
Other	2.3	0.6	**3.0**	0.6
Average Duration of Activity for Which Care was Used (Months)	13.9	0.4	**17.0**	1.6
Average Hours Per Week in Care During Most Recent Main Activity	25.7	1.6	**32.1**	2.5

TABLE B. **11** *(continued)*

	Full Sample		Child Care Users	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Sample Sizes				
Youngest child under 3	342-351	653-668	221-229	421-436
Youngest child 3 to 4	160-163	314-319	112-114	225-230
Youngest child 5 or older	203-209	408-418	164-170	323-333

SOURCE: Follow-up survey conducted an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

'Sample members may have used multiple forms of care.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

APPENDIX C:

DISCUSSION OF ADMINISTRATIVE WELFARE RECORDS DATA AND SUPPLEMENTAL TABLES RELATED TO CHAPTER IV

ADMINISTRATIVE WELFARE RECORDS DATA

For purposes of evaluation, we requested and received administrative welfare records data for the Teenage Parent Demonstration sample members from the states of Illinois and New Jersey. These data primarily include information on sample members' AFDC and food stamp receipt and benefit amounts by month over a five- to six-year follow-up period. For both states, we sent a list of Demonstration enrollees to state staff, who then matched these individuals' social security numbers (SSN) against their case files to determine whether each sample member was active in a case in a given month, and if so, the benefit amount she received. This appendix documents some issues related to welfare data for Chicago and Newark.

Chicago. During our analysis, we discovered an error in the Chicago welfare data that related to how sample members were matched to the welfare case data to obtain the relevant AFDC participation variables. After the first few months of data extraction (from December 1988 onward), the computer program to determine whether the sample member was active in a case (which matched our sample members' SSN against all the SSN's in all welfare cases) mistakenly checked only the first SSN in each welfare case. Consequently, for these months, if the sample member's SSN was listed first in the case, we obtained their AFDC information. However, we did not get any data for those individuals who, in a given month, were still receiving AFDC but whose SSN was not listed first in a case. Thus, for those individuals for whom we did not receive any data, we do not know if a match was not found because the sample member had left welfare and her name was taken off the welfare rolls, or because the sample member was not listed first in the case.[1,2]

'Note that it is possible for a match to be found which indicates that the person is not currently receiving welfare. However, over time, after several months (or years) of nonreceipt, a case may be (continued...)

Upon discovering this error, we requested corrected versions of welfare data for all sample members. While we received updated data from June 1993 on, full data for most months from December 1988 to May 1993 could not be retrieved. For this period, the state could provide only welfare receipt and benefit amounts for snapshots of months scattered over this period. However, for most of the months during this period, we received AFDC eligibility data, that is, an indicator of whether or not the person was eligible to receive any AFDC benefits,

We reconstructedthe AFDC and food stamp series as best as we could with the data we had for the analysis. In reconstructing these series, we also assigned a value to indicate the degree of confidence we had in our imputation for each person-month of observation, so we could test the sensitivity of our impact estimates to these imputations. The reconstruction process for months when we had to impute values for some individuals proceeded as follows:

- Step I: Individuals with at least 12 months of no AFDC receipt prior to the start of the missing values (that is, where no match was found), and for whom no AFDC receipt was observed during all of the remaining months of valid data, were assumed to have exited welfare and were assigned values of $0 for AFDC benefit amounts. Those with very short periods of missing data (one or two months), who either had no benefit receipt in both the month preceding and the month following the missing period, or had positive values in both the month preceding and the month following the missing period, were assigned the mean value of the benefit amounts in these months for the missing months. These imputations were made with a high degree of confidence (level 1). Similar imputations were made for food stamps.

- Step 2: Individuals with at least three months of nonreceipt (not already corrected in step 1) who did not receive AFDC through the end of the follow-up period were also assumed to have exited welfare and were assigned values of $0 for the AFDC benefit amounts for the missing months. Those with three, four, or five missing months of data,

[1](...continued)
purged from the system, in which case a match will not be found.

[2]The number of cases with no matches increases over time as individuals in our sample actually leave welfare. However, changes in the family composition (such as additions to the family) could also have led to no match being found.

and who either had no benefit receipt in both the month preceding and the month following the missing period or had positive values in both the month preceding and the month following the missing period, were assigned the mean value for the missing months. Since these were longer periods of imputation, they were made with a slightly lower degree of confidence (level 2). Similar imputations were made for food stamps.

- ***Step 3:*** Imputations for longer periods of missing values (or where the month preceding and the month following the missing values showed different statuses of receipt) were made based on eligibility status. If an individual was not eligible for AFDC, we assumed that they received $0 in that month. If someone was eligible for AFDC, the amount of AFDC benefit amount received was set equal to the value of AFDC benefit amount from the adjacent months. These imputations were assigned a lower degree of confidence (level 3). Since we did not have eligibility information for food stamps, such imputations were not made for food stamps.[3]

- ***Step 4:*** For four months, April 1989 to July 1989, we received no eligibility data. For these months, for cases with missing data we simply assigned half the months to the value of AFDC benefits in the month preceding the string of missing values, and the remaining half to the value of the later month. Because these imputations were more ad hoc, we assigned them the lowest degree of confidence (level 4).

Despite these imputations, we believe that these are reasonably accurate series of AFDC benefits.4 Over 96 percent of person-months of data over the **five-year** period needed no imputation, and 3 .5 percent of the person-months required a level 2 or level 3 imputation. To test the sensitivity of the impact estimates to the imputations, we estimated the impacts using only those with no imputations compared with the impacts of the full sample, including those with some imputations. We found that the results were substantially similar and the patterns of estimated impacts remained largely the same.

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[3]We explored the possibility of using AFDC eligibility indicators to attempt to impute the food stamp series for the missing months. However, we found that such imputations were not very accurate (for example, many individuals who were not eligible for AFDC were receiving food stamps). Consequently, we chose to treat these values as missing.

[4]Because we did not receive food stamp eligibility data, this series has larger numbers of individuals with missing values.

Newark During our analysis, we also noticed a discrepancy between the Newark and Camden data in the coding of eligible individuals who were sanctioned. New Jersey officials told us that individuals who were sanctioned (that is, those whose benefits were excluded from the grant calculation because of noncompliance) would still be coded in the state welfare system as eligible to receive AFDC; but they would have lower benefit amounts since their own needs were not included in the grant calculation. While this seems to have been the coding practice in Camden, the data suggest that Newark participants who were sanctioned were coded as ineligible to receive AFDC, even though their child was still receiving AFDC. We observe a huge increase in the number of eligible participants in Newark who suddenly "went back on" AFDC right around the time the program ended (spring 1991). This corresponds to the period reflecting 21 to 27 months after program intake (Table C.l).

Using a "broader" definition of eligibility, which considers an individual to be on AFDC if ***either*** she or her child was receiving AFDC, we find that the patterns of AFDC receipt in Newark are more stable and do not show the sharp jump around the time the program ended.[5] We believe this to be the appropriate measure of AFDC participation; consequently, for Newark, we use the broader definition of eligibility in calculating AFDC impacts. There are two consequences of this decision. First, as a result of this assumption, we might include some children who were actually living with someone else (for example, with grandparents) in our calculations of levels and impacts

[5]Tables C. 1 through C.3 include data on regular-services group means and estimated impacts calculated using two definitions of AFDC: one where the mother herself was coded as eligible for AFDC, and a second where the eligibility of either the mother or her child were coded as AFDC eligibility. While the series is fairly consistent for regular-services group members, we observe a big "drop" in impact estimates for Newark sample members when we use the first definition.

of AFDC receipt among teenage mothers.[6] Second, the impact results for the first two years for the Newark sample will be different from what was reported in the earlier report which used our standard definition of AFDC receipt.

[6]However, since the program did not cause large shifts in household living arrangements, we do not expect that this will affect the magnitude of the estimated program impacts.

TABLE C.1

IMPACTS ON PERCENT RECEIVING AFDC
NEWARK

Percent Receiving AFDC	Sample Member Receiving AFDC			Sample Member or Child Receiving AFDC		
	Enhanced-Services Group Mean	Regular-Services Group Mean	Impact	Enhanced-Services Group Mean	Regular-Services Group Mean	impact
Month						
3	78.3	85.4	**-7.2****	85.4	88.2	-2.8
6	71.9	86.0	**-14.2****	82.4	87.3	**-4.9****
9	68.4	84.7	**-16.3****	81.6	86.0	**-4.3***
12	62.8	82.3	**-19.5****	74.7	83.0	**-8.3****
15	66.4	78.9	**-12.6****	76.9	79.4	-2.5
18	66.0	77.1	**-11.1****	75.1	77.7	-2.5
21	66.4	75.0	**-8.6****	74.9	75.5	-0.6
24	67.2	72.1	**-4.9***	75.4	74.7	0.7
27	68.2	70.1	-2.0	75.6	76.2	-0.5
30	69.3	69.7	-0.3	74.6	72.3	1.7
33	69.1	70.8	-1.8	73.3	73.2	0.2
36	67.4	68.1	-0.7	70.0	69.7	0.3
39	68.4	67.3	1.0	70.4	69.3	1.2
42	67.3	65.7	1.6	68.5	67.3	1.2
45	64.2	64.3	-0.1	65.4	65.7	-0.4
48	63.9	63.8	0.1	64.8	65.1	-0.3
51	64.1	63.3	0.8	65.3	64.4	0.9
54	63.4	62.5	0.9	64.8	64.0	0.8
57	63.2	60.3	2.8	64.0	62.3	1.7
60	60.2	61.0	-0.8	61.3	63.0	-1.7
Sample	575	615	1,190	575	615	1,190

SOURCE: Administrative records data.

*Statistically significantly at the 10 percent level, two-tailed test.
**Statistically significantly at the 5 percent level, two-tailed test.

TABLE C.2

IMPACTS ON PERCENT RECEIVING AFDC
CHICAGO

Percent Receiving AFDC	Sample Member Receiving AFDC			Sample Member or Child Receiving AFDC		
	Enhanced-Services Group Mean	Regular-Services Group Mean	Impact	Enhanced-Services Group Mean	Regular-Services Group Mean	Impact
Month						
3	80.7	83.6	-3.0**	84.7	87.0	-2.2*
6	75.5	79.7	-4.3***	79.1	83.6	-4.6**
9	71.1	78.3	-7.2**	75.1	80.9	-5.8**
12	67.9	74.5	-6.6**	70.8	76.5	-5.9**
15	68.0	71.5	-3.6**	69.7	73.0	-3.3*
18	66.3	68.9	-2.4	67.4	70.2	-2.7
21	64.9	67.7	-2.9	66.1	69.2	-3.0*
24	64.0	66.2	-2.2	65.0	67.5	-2.5
27	62.6	64.8	-2.2	63.6	66.5	-2.9
30	62.8	64.3	-1.5	64.3	65.9	-1.6
33	62.1	64.7	-2.6	63.9	65.9	-1.9
36	61.9	65.5	-3.6**	65.6	67.0	-3.4*
39	61.0	63.6	-2.7	62.3	65.5	-3.2*
42	61.2	63.3	-2.1	62.5	65.2	-2.7
45	60.0	62.1	-2.1	61.7	63.8	-2.1
48	61.1	61.3	-0.2	62.3	62.9	-0.6
51	60.0	59.7	0.3	62.1	62.0	0.1
54	57.7	58.3	-0.6	59.7	60.3	-0.6
57	57.8	58.8	-1.0	59.7	60.5	-0.8
60	57.5	58.0	-0.5	59.3	59.9	-0.6
Sample	**1,439**	**1,450**	**2,889**	**1,439**	**1,450**	**2,889**

SOURCE: Administrative records data.

*Statistically significantly at the 10 percent level, two-tailed test.
**Statistically significantly at the 5 percent level, two-tailed test.

TABLE C.3

IMPACTS ON PERCENT RECEIVING AFDC
CAMDEN

Percent Receiving AFDC	Sample Member Receiving AFDC			Sample Member or Child Receiving AFDC		
	Enhanced-Services Group Mean	Regular-Services Group Mean	Impact	Enhanced-Services Group Mean	Regular-Services Group Mean	Impact
Month						
3	82.2	81.3	0.9	83.0	81.4	1.6
6	74.6	75.1	-0.5	76.5	75.3	1.2
9	69.7	76.0	-6.3**	71.0	76.2	-5.2*
12	68.6	70.6	-2.0	69.6	71.2	-1.6
15	66.6	69.3	-2.7	67.7	69.9	-2.3
18	65.8	70.1	-4.4	67.0	70.9	-3.9
21	66.2	68.6	-2.5	66.8	69.0	-2.1
24	67.1	66.7	0.4	67.9	67.8	0.1
27	66.6	67.8	-1.2	67.1	68.9	-1.8
30	61.8	65.8	-4.0	63.0	66.9	-3.9
33	65.0	63.8	1.2	65.7	65.2	0.4
36	61.1	64.3	-3.2	61.6	64.9	-3.3
39	61.9	61.7	0.2	62.4	63.3	-0.9
42	60.9	59.8	1.2	61.9	61.5	0.4
45	60.4	59.1	1.3	61.0	60.4	0.6
48	60.1	56.7	3.4	61.0	58.0	3.0
51	60.5	56.5	4.0	62.1	57.9	4.2
54	60.1	55.2	4.9*	61.2	56.8	4.4
57	57.3	55.7	1.7	58.8	56.9	1.9
60	56.8	56.4	0.4	58.5	57.3	1.2
Sample	633	585	1,218	633	585	1,218

SOURCE: Administrative records data.

*Statistically significantly at the 10 percent level, two-tailed test.
**Statistically significantly at the 5 percent level, two-tailed test.

TABLE C.4

IMPACTS ON PERCENT RECEIVING AFDC BY MONTH AFTER INTAKE

Month	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
3	81.3	0.8	88.3	-3.0	83.7	**-3.0****
6	75.2	-0.6	87.4	**-5.0****	79.8	**-4.4****
9	76.2	**-6.7****	85.9	**-4.2***	78.4	**-7.4****
12	71.2	-3.3	83.1	**-8.5****	74.5	**-6.5****
15	69.7	-3.5	79.0	-1.7	71.5	**-3.5****
18	70.9	**-6.0****	77.5	-2.1	68.7	-2.4
21	69.4	-4.0	75.3	-0.1	67.6	-2.6
24	67.6	-1.3	74.5	1.1	66.2	-2.1
27	68.6	-2.7	76.2	-0.5	64.7	-2.0
30	66.7	**-5.7***	72.2	2.1	64.3	-1.4
33	64.4	-0.1	73.3	-0.1	64.5	-2.3
36	65.2	**-4.9***	69.8	0.1	65.2	**-3.1***
39	62.5	-1.2	69.2	1.2	63.3	-2.0
42	60.4	-0.0	67.3	1.3	63.1	-1.7
45	59.5	0.5	65.9	-0.7	62.0	-1.7
48	57.0	2.9	65.2	-0.6	61.1	0.2
51	56.7	3.6	64.5	0.7	59.6	0.6
54	55.7	4.0	64.0	0.7	58.2	-0.4
57	55.9	1.2	62.5	1.2	58.8	-0.8
60	56.6	0.0	63.3	-2.3	58.0	-0.4
Sample Size	521-584	**1,090-1,218**	534-61s	**1,028-1,190**	**1,438-1,449**	**2,860-2,880**

SOURCE: Administrative welfare records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE C.5

IMPACTS ON AMOUNT OF AFDC BENEFITS BY MONTH SINCE INTAKE
(Dollars)

Month	Camden		Newark		Chicago.	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
3	5274	$7	S298	s-22**	S218	$-11
6	258	-14	298	-42**	212	-18
9	259	-37**	293	-46**	210	-27
12	245	-28**	287	-59**	204	-26
15	249	-36**	275	-30**	199	-17
18	252	-39**	269	-26**	197	-13
21	251	-33**	264	-14	199	-15**
24	248	-18*	264	-3	200	-12**
27	254	-20*	265	-3	192	-7
30	249	-28**	262	4	197	-5
33	245	-9	268	-4	202	-7
36	254	-27**	258	2	207	-10*
39	247	-12	256	6	204	-7
42	238	-4	253	4	204	-4
45	239	-2	252	-4	204	-4
48	228	11	249	0	204	2
51	229	12	249	2	204	2
54	226	13	247	3	200	-2
57	230	2	243	6	204	-3
60	234	-6	246	-8	203	0
Sample Size	**521-585**	**1,073-1,218**	**534-615**	**1,028-1,190**	**1,438-1,449**	**2,860-2,881**

SOURCE: Administrative welfare records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE C.6

IMPACTS ON PERCENT RECEIVING FOOD STAMPS. BY MONTH SINCE INTAKE

Month Since Intake	Camden		Newark		Chicago	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	'Estimated Impact
3	78.3	0.2	66.8	-5.6	61.4	0.6
6	76.6	-1.7	67.5	-7.3	65.8	-1.5
9	76.5	-5.1	68.0	-5.9	65.2	-2.5
12	73.3	-3.5	69.3	6.9	64.4	-2.8
15	72.9	-4.0	69.5	-3.7	65.3	-2.3
18	71.9	-3.2	69.8	-4.2	62.6	-1.5
21	72.1	-2.2	69.7	-2.5	62.5	-1.9
24	73.3	-3.4	70.8	0.4	62.0	-2.7
27	72.8	-2.0	72.3	-0.4	63.2	-2.3
30	70.3	-2.5	71.4	1.4	62.9	-2.5
33	68.6	2.2	71.6	3.4	63.5	-1.6
36	68.7	-2.6	71.0	0.4	64.0	-2.9
39	69.2	-2.6	70.7	-0.2	65.5	-3.0
42	68.2	-2.0	70.6	-1.2	64.3	-1.8
45	67.8	-1.5	70.2	2.1	63.2	-1.7
48	65.7	0.7	69.5	-0.5	60.8	2.4
51	65.4	0.9	70.0	0.6	62.1	0.9
54	64.1	1.9	70.5	0.4	61.4	-1.2
57	63.5	1.3	69.0	0.4	59.8	-0.0
60	63.1	0.5	68.9	-1.7	58.3	-0.4
Sample Size	521-585	1,083-1,218	534-615	1,028-1,190	1,342-1,440	2,671-2,856

SOURCE: Administrative records data.

*Statistically significantly at the 10 percent level, two-tailed test.
**Statistically significantly at the 5 percent level, two-tailed test.

TABLE C.7

IMPACTS ON AMOUNT OF FOOD STAMPS BENEFITS BY MONTH SINCE INTAKE
(Dollars)

	Camden		Newark		Chicago	
	Regular-Service Group	Estimated Impact	Regular-Service Group	Estimated Impact	Regular-Service Group	Estimated Impact
Month						
3	$121	$1	$115	$-6	$120	$3
6	118	4	114	-3	121	-3
9	118	-2	119	-2	119	-3
12	121	2	127	-9	119	-5
15	124	-0	132	-6	122	-1
18	129	-4	137	-10	120	-1
21	133	-1	138	1	122	-1
24	139	-4	149	1	124	-3
27	145	-4	155	-6	130	-1
30	145	-6	156	-0	133	-2
33	155	-4	169	-1	137	1
36	167	-12	173	-4	143	-6
39	184	-12	196	-5	149	-5
42	189	-7	206	-8	150	-2
45	195	-8	208	-11	151	-3
48	182	9	203	-10	148	7
51	184	3	190	0	154	4
54	179	4	195	-5	154	-1
57	184	-3	193	1	151	2
60	186	1	195	-2	150	2
Sample Size	521-585	1,083-1,218	543-615	1,028-1,190	1,327-1,440	2,671-2,856

SOURCE: Administrative welfare records data.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE C.8

PROPORTIONAL CONTRIBUTION OF VARIOUS SOURCES TO TOTAL INCOME DURING THE MONTH PRIOR TO THE SECOND FOLLOW-UP SURVEY
(Average Percentage)

Income Sources	Enhanced-Services Croup	Regular-Services Croup	Estimated Impact
Camden			
AFDC	40.9	43.7	-2.9
Food Stamps	28.8	29.0	-0.2
Earnings	21.5	17.4	4.1*
Child Support	2.1	2.0	0.1
Other	6.8	7.9	-1.1
Newark			
AFDC	39.0	38.4	0.6
Food Stamps	28.8	26.8	1.9
Earnings	22.2	25.1	-3.0
Child Support	1.7	1.6	0.1
Other	8.3	8.0	0.3
Chicago			
AFDC	36.5	35.8	0.7
Food Stamps	27.2	26.9	0.3
Earnings	27.5	26.9	0.6
Child Support	1.5	2.3	-0.8
Other	7.2	8.1	-0.9
Sample Size			
Camden	540	465	1,005
Newark	487	489	976
Chicago	668	701	1.369

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTES: Sample sizes are smaller because we exclude those with no income at followup from these calculations. Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE C.9

IMPACTS ON AFDC AND BENEFIT AMOUNTS DURING THE FIRST FIVE YEARS AFTER INTAKE, BY SUBGROUP

Sample Subgroup	Percent of Time Received AFDC		Monthly AFDC Benefits Amount (Dollars)	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Full Sample	68.1	-1.7**	s227	$-10**
Enrolled June 1987- June 1988	65.5	-1.9	216	-11**
Enrolled July 1988 -June 1989	68.8	-2.5*	229	-13**
Enrolled after June 1989	70.3	-0.3	236	-4
Reading Skills below 6th Grade	70.4	-1.7	235	-11*
Reading Skills 6th through 8th Grade Level	67.1	-0.6	224	-8
Reading Skills 9th Grade Level and above	66.6	-2.9'	220	-12**
Under Age 17	66.2	0.8	236	-3
Age 17	63.5	-1.3	214	-8
Age 18	69.1	-1.0	227	-9*
Age 19 or Older	69.9	-3.6**	228	-15**
Hispanic Origin	65.5	-2.2	219	-13
White or Other Non-Hispanic	54.5	1.6	183	1
Black, Non-Hispanic	70.0	-2.0'	233	-11**
JOBS Mandatory	69.9	-3.1*	229	-16**
Low Risk of Becoming JOBS Mandatory	65.1	-1.3	219	-7
High Risk of Becoming JOBS Mandatory	70.0	1.1	233	-9
Lives with Employed Mother	67.6	-0.8	219	-6
Lives with Nonemployed Mother	70.0	-1.0	237	-6
Does Not Live with Mother	67.8	-3.0**	225	-16**
Limited English	58.2	-5.2	188	-20
English Not Limited	68.9	-1.4	230	_g**
In High or Middle School	69.8	-2.3	232	-13**
In Postsecondary School	63.6	-2.1	214	-12
In GED Program	68.2	-0.1	220	1
Not in School	67.8	-1.5	226	-10**
High School Dropout	69.2	-1.6	233	-11**
Not a High School Dropout	67.6	-1.8*	223	-10**
On Welfare as Child	69.5	-1.0	237	-11**
Not on Welfare as Child	66.9	-2.3**	218	_g**
Child Unborn	67.7	-1.9	218	-10
Child 1 to 6 Months Old	68.5	-3.6**	229	-17**
Child 7 to 12 Months Old	66.8	2.1	223	1
Child Over 12 Months Old	68.3	0.2	228	-2
Mean of Outcome Measure		67.3		222
R2		.088		.142
Sample Size		5.296		5,291

SOURCE: Program intake forms and administrative data on welfare.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. These models also included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.7.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE C.10

IMPACTS ON FOOD STAMP RECEIPT AND BENEFIT AMOUNTS DURING THE THE FIRST FIVE YEARS AFTER INTAKE, BY SUBGROUP

Sample Subgroup	Percent of Time Received Food Stamps		Monthly Food Stamp Benefit Amount (Dollars)	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Full Sample	66.3	-1.5*	$142	S-2
Enrolled June 1987- June 1988	61.8	-2.1	124	-2
Enrolled July 1988 - June 1989	67.0	-1.9	144	-2
Enrolled after June 1989	10.1	-0.2	162	-3
Reading Skills below 6th Grade	69.2	-2.4	150	-3
Reading Skills 6th through 8th Grade Level	65.7	-0.8	141	-2
Reading Skills 9th Grade Level and above	63.7	-1.2	135	0
Under Age 17	64.7	-0.1	154	-1
Age 17	61.7	-1.1	132	1
Age 18	67.0	-0.5	142	-1
Age 19 or Older	68.1	-3.1**	143	-4
Hispanic Origin	64.1	-1.7	138	0
White or Other Non-Hispanic	52.3	1.8	116	3
Black, Non-Hispanic	68.1	-1.8*	146	-3
JOBS Mandatory	68.0	-3.7	144	-7*
Low Risk of Becoming JOBS Mandatory	64.5	-1.5	139	-1
High Risk of Becoming JOBS Mandatory	66.7	0.4	144	2
Lives with Employed Mother	62.7	-0.4	129	3
Lives with Nonemployed Mother	66.8	-1.1	152	-2
Does Not Live with Mother	67.8	-2.7**	141	-4
Limited English	55.6	-3.7	118	-9
English Not Limited	67.1	-1.3	144	-1
In High or Middle School	67.0	-1.0	143	0
In Postsecondary School	60.9	0.7	129	1
In GED Program	68.4	-0.9	143	0
Not in School	66.4	-2.1*	143	-3
High School *Dropout*	*67.6*	*-2.2*	*148*	*-5*
Not a High School Dropout	65.6	-1.1	139	0
On Welfare as Child	68.6	-1.4	151	-4
Not on Welfare as Child	64.3	-1.6	135	-0
Child Unborn	65.7	-1.7	136	-6
Child 1 to 6 Months Old	66.9	-2.9**	144	-6*
Child 7 to 12 Months Old	65.0	1.1	139	5
Child Over 12 Months Old	66.0	0.2	143	4
Mean of Outcome Measure		65.6		141
R^2		.095		.138
Sample Size		5,248		5,248

SOURCE: Program intake forms and administrative data on welfare.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. These models also included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A7.

*Statistically significant at the 10 *percent* level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE C.11

IMPACTS ON INCOME AS A PERCENTAGE OF THE POVERTY LEVEL AT THE TIME OF THE SECOND FOLLOW-UP SURVEY

Sample Subgroup	Regular-Services Group	Estimated Impact
Total Sample	59.1	-1.9
Enrolled June 1987- June 1988	60.5	-4.1
Enrolled July 1988 - June 1989	60.1	0.4
Enrolled after June 1989	60.8	-1.4
Reading Skills below 6th Grade	62.3	-0.2
Reading Skills 6th through 8th Grade Level	61.7	-2.0
Reading Skills 9th Grade Level and above	57.2	-4.2
JOBS Mandatory	60.7	1.7
Low Risk of Becoming JOBS Mandatory	60.4	-3.5
High Risk of Becoming JOBS Mandatory	60.3	-3.4
Under Age 17	60.0	-1.0
Age 17	55.8	1.9
Age 18	61.0	-2.9
Age 19 or Older	62.0	-2.6
Hispanic Origin	59.2	-8.2*
White or Other Non-Hispanic	57.3	7.1
Black, Non-Hispanic	61.1	-1.1
Lives with Employed Mother	61.1	-1.3
Live with Nonemployed Mother	62.9	-4.3
Does Not Live with Mother	57.8	-0.7
Limited English	66.3	2.9
English Not Limited	60.0	-2.3
In High or Middle School	59.1	-4.8
In Postsecondary School	57.6	-0.5
In GED Program	56.7	13.1*
Not in School	62.0	-1.8
High School Dropout	61.6	-0.1
Not a High School Dropout	60.0	-2.7
On Welfare as Child	58.4	0.3
Not on Welfare as Child	62.3	-3.9
Child Unborn	61.0	4.7
Child 1 to 6 Months Old	60.8	-2.2
Child 7 to 12 Months Old	57.2	-1.0
Child Over 12 Months Old	61.4	-4.5
Mean of Outcome Measure		59.6
$\bar{R}^2$		.022
Sample Size		3,474

SOURCE: Program intake forms and follow-up surveys conducted an average of 78 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. In addition, these models included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.7.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

APPENDIX D:

SUPPLEMENTAL TABLES
RELATED TO CHAPTER V

TABLE D. 1

ESTIMATED IMPACTS ON CUMULATIVE PREGNANCY AND BIRTH RATES, BY MONTHS AFTER INTAKE
(Percents)

	Any New Pregnancy Through Indicated Month		Any Subsequent Birth Through Indicated Month	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
		Camden		
Month 6	22.9	**-9.9****	1.3	**1.7***
Month 12	39.5	**-10.3****	14.6	-3.2
Month 18	51.8	**-8.7****	30.7	**-6.2****
Month 24	60.4	**-9.5****	42.8	**-4.7***
Month 36	70.5	3.7	59.4	-2.1
Month 48	75.6	-2.8	68.1	-1.6
Month 60	82.2	-1.9	76.7	-1.7
		Newark		
Month 6	16.6	3.5	1 . 6	**2.2****
Month 12	32.4	**6.5***	10.2	1.2
Month 18	45.0	**6.6***	21.3	2.5
Month 24	53.4	**6.5***	-30.7	3.2
Month 36	67.3	2.7	45.4	4.9
Month 48	74.7	1.8	56.2	3.7
Month 60	79.6	1.1	63.2	4.8
		Chicago		
Month 6	15.2	2.3	‘3.1	1.6
Month 12	26.9	2.7	10.2	2.7
Month 18	38.8	2.4	2 2 . 4	2.9
Month 24	46.6	2.5	32.3	**5.3****
Month 36	59.4	2.2	49.7	2.7
Month 48	67.3	3.3	5 9 . 4	2.8
Month 60	74.1	2.4	68.0	0.0
Sample Sizes				
Camden	533	996	490	1,051
Newark	448	903	500	1,001
Chicago	657	1,349	737	1,439

TABLE D.1 *(continued)*

SOURCE: Follow-up survey administered an average of 78 months after intake.

NOTE: Estimated impacts are measured as the differences between the means for the enhanced- and regular-services groups. All estimates are regression-adjusted. Means and standard deviations for the control variables used in the regressions are presented in Tables A.4 and A.5.

*Significantly different from zero at the 10 percent level, two-tailed test.
**Significantly different from zero at the 5 percent level, two-tailed test.

TABLE D.2

IMPACTS ON REGULAR CONTACT BY FATHER WITH THE OLDEST CHILD, BY SUBGROUP

	Regular-Services Group	Estimated Impact
Total Sample	19.4	-0.3
Enrolled June 1987-June 1988	16.2	1.8
Enrolled July 1988-June 1989	20.6	-2.2
Enrolled After June 1989	22.7	-1.4
Reading Skills below 6th Grade Level	21.1	-0.6
Reading Skills 6th through 8th Grade Level	19.4	-0.3
Reading Skills 9th Grade Level and Above	17.4	0.1
Under Age 17	16.0	2.1
Age 17	23.1	-2.1
Age 18	18.3	-1.0
Age 19 or Older	20.3	0.0
Hispanic Origin	19.0	4.1
Black, Non-Hispanic	19.7	-1.8
White or Other Non-Hispanic	17.4	2.5
JOBS Mandatory	18.1	0.7
High Risk of Becoming JOBS Mandatory	20.2	0.5
Low Risk of Becoming JOBS Mandatory	19.6	-2.1
Lives with Employed Mother	20.9	-0.1
Lives with Nonemployed Mother	18.0	-1.0
Does Not Live with Mother	19.9	-0.3
English Limited	16.4	-5.8
English Not Limited	19.6	0.2
In High or Middle School	20.7	1.2
In Postsecondary School	18.4	-2.3
In GED Program	26.6	-11.1*
Not in School	18.1	0.1

TABLE D.2 ***(continued)***

	Regular-Services Group	Estimated Impact
High School Dropout	16.5	1.6
Not a High School Dropout	20.8	-1.3
On Welfare as Child	19.5	-1.7
Not on Welfare as Child	19.3	1.0
Child Unborn	28.8	**-8.4***
Child 1 to 6 Months Old	19.1	0.2
Child 7 to 12 Months Old	17.4	2.9
Child Over 12 Months Old	17.4	-0.3
Mean of **Outcome Measure**		19.2
R^2		**.014**
Sample Size		**3.096**

SOURCE: Child support administrative data through August 1991 in Chicago and April 1992 in Camden and Newark, and follow-up surveys administered an average of 28 months after sample intake.

NOTE: These estimates are regression-adjusted. Means for control variables included in the regression models are presented in Table A.8. In addition, these models include the site interactions listed in Table A.14 and status interaction variables for the subgroups. Sample sizes for each subgroup are listed in Table A. 10.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE D.3

IMPACTS ON THE NUMBER OF PREGNANCIES, BIRTHS. AND EFFECTIVE CONTRACEPTIVE METHODS USE. BY SUBGROUP

	Number of Pregnancies		Number of Births		Use of an Effective Contraceptive Method (Percents)	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Total Sample	1.76	-0.06	1.37	-0.01	73.5	1.1
Enrolled June 1987-June 1988	1.87	-0.03	1.50	0.04	72.0	2.8
Enrolled July 1988-June 1989	1.75	-0.07	1.36	-0.04	74.2	0.9
Enrolled after June 1989	1.60	-0.1	1.21	-0.06	74.6	-1.0
Reading Skills below 6th Grade Level	1.79	-0.06	1.45	-0.02	71.8	I.1
Reading Skills through 6th • 8th Grade Level	1.72	-0.07	1.36	-0.04	76.5	-0.1
Reading Skills 9th Grade Level and Above	1.75	-0.06	1.30	0.02	72.3	2.3
JOBS Mandatory	1.91	-0.10	1.50	-0.01	73.4	2.4
High Risk of Becoming JOBS Mandatory	1.81	-0.03	1.49	-0.02	73.5	1.3
Low Risk of Becoming JOBS Mandatory	1.56	-0.13	1.12	-0.02	73.5	-0.4
Under Age 17	1.98	-0.11	1.53	-0.06	66.4	8.2**
Age 17	1.87	0.00	1.51	0.00	74.6	-2.5
Age 18	1.71	-0.03	1.34	0.01	73.1	1.6
Age 19 or Older	1.65	-0.10	1.28	-0.02	76.3	-0.9
Hispanic Origin	1.65	-0.16	1.38	-0.09	71.0	3.4
Black, Non-Hispanic	1.78	-0.04	1.37	0.01	74.7	0.2
White or Other Non-Hispanic	1.77	-0.07	1.38	-0.05	66.8	5.0
Lives with Employed Mother	1.73	-0.13	1.31	-0.03	73.1	-0.6
Lives with Nonemployed Mother	1.76	-0.03	1.39	0.00	73.6	-0.8
Does Not Live with Mother	1.78	-0.01	1.39	-0.04	73.3	2.6
Limited English	1.65	-0.14	1.37	-0.01	76.8	-3.9
English Not Limited	1.77	-0.06	1.37	-0.01	73.1	1.6
In High or Middle School	1.65	0.02	1.35	-0.05	75.7	-6.7
In Postsecondary School	1.71	0.02	1.25	0.25*	66.6	12.0**
In GED Program	1.43	0.17	1.12	0.22	71.2	-1.1
Not in School	1.86	0.15*	1.43	-0.05	73.3	-0.9
High School Dropout	1.86	-0.11	1.43	-0.04	71.9	3.8
Not a High School Dropout	1.70	-0.04	1.34	0.00	74.3	-0.3
On Welfare as Child	1.82	-0.12*	1.44	-0.03	74.0	2.2
Not on Welfare as Child	1.69	-0.01	1.32	0.01	72.9	0.2
Child Unborn	1.27	-0.08	1.47	0.01	71.9	5.9
Child 1 to 6 Months Old	1.91	-0.09	1.37	0.01	73.8	-0.8
Child 7 to 12 Months Old	1.69	0.06	1.38	-0.01	75.4	0.5
Child Over 12 Months Old	1.66	-0.07	1.34	-0.04	72.1	3.7
Mean of Outcome Measure	—	0.07 1.71	—	1.36	—	0.74
$\bar{R}^2$				0.08		-0.00
Sample Size	—	3,300	—	3,491	—	3,433

SOURCE: Follow-up surveys administered an average of 78 months after intake.

NOTE: These estimates are regression-adjusted. Means of control variables included in the regression models are presented in Table A.4. In addition, these models included the site interactions listed in Table A.14 and status interaction variables for the subgroups. Sample sizes for each subgroup are listed in Table A. 10.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

APPENDIX E:

CHILD ASSESSMENT MEASURES

The following sections discuss the child development and related measures constructed for study of the mother's oldest children (who were 5 to 10 years old), presented in Chapter VI. In particular, the sections that follow provide details about the scores we constructed and their reliability. Most researchers use an internal consistency reliability score of 0.7 and above as an indicator that a scale has acceptable reliability; we discuss each scale score in reference to this widely accepted standard. Appendix Tables E. 1 to ES summarize the descriptive information for each measure.

A. DEPRESSION

Mothers completed the 20-item Center for Epidemiologic Studies of Depression (CES-D) questionnaire (Radloff 1977). We created a CES-D total score and categorical variables defining three categories of risk for depression--Not At Risk for Depression (scores from 0 to 15), Possibly Depressed (scores from 16 to 22), and Probably Depressed (scores from 23 to 60). Internal consistency reliability for the CES-D total score was high ($\alpha = .89$).

B. LOCUS OF CONTROL

We used the seven-item Pearlin Mastery Scale (Pearlin et al. 1981) to measure the mother's locus of control. High mastery scores indicate an internal locus of control, low scores indicate an external locus of control. Mothers with an internal locus of control feel they are in control of what happens to them in life, while those with an external locus of control feel that they have little control over what happens to them. The mastery scores had acceptable internal consistency reliability ($\alpha = .74$).

C. STRESS

We used two measures of stress, one that taps everyday sources of stress and another that taps more major sources. The first measure of stress (from the Adolescent Pathways Project, Seidman

TABLE E. 1

MATERNAL WELL-BEING MEASURES:
DESCRIPTIVE INFORMATION

Questionnaire (N)	Possible Range	Range	Mean (SD)	Internal Consistency Reliability
CES - D (2084)	0-60	0-47	14.6 (9.4)	0.89'
Pearlin Mastery (2089)	7-28	11-28	22.1 (3.7)	0.74'
Daily Hassles (1936)	5-20	5-20	9.4 (3.2)	0.71'
Difficult Life Circumstances (2088)	0-14	0-13	3.2 (2.4)	0.67[b]
Perceived Support Available (2090)	0-10	0-10	5.8 (2.1)	None computed

'Reliability was estimated using Cronbach's coefficient alpha formula.

[b]Reliability was estimated using Kuder-Richardson formula 20.

TABLE E.2

HOME ENVIRONMENT AND PARENTING MEASURES:
DESCRIPTIVE INFORMATION

Scale (N)	Possible Range	Range	Mean (SD)	Internal Consistency Reliability
HOME Total Score (1979)	o-42	4-42	30.6 (5.9)	0.82'
HOME Maternal Responsivity (1980)	O-8	O-8	6.4 (1.7)	0.66'
HOME Maternal Acceptance (198 1)	o-7	o-7	5.0 (1.5)	0.55'
HOME Physical Environment (1982)	o-7	o-7	6.1 (1.5)	0.77'
FES Cohesion Score (2092)	o-9	o-9	7.0 (2.19)	0.73'
Parent's Verbal Aggression (1339)	O-36	O-36	9.7 (7.6)	0.81[b]
Partner's Verbal Aggression (1333)	O-36	o-35	8.1 (7.2)	0.81[b]
Parent's Violence (1340)	o-54	o-45	3.3 (6.4)	0.88[b]
Partner's Violence (1336)	o-54	o-43	1.7 (4.5)	0.87[b]

'Reliability was estimated using Kuder-Richardson formula 20.

[b]Reliability was estimated using Cronbach's coefficient alpha formula.

TABLE E.3

NEIGHBORHOOD QUALITY MEASURES:
DESCRIPTIVE INFORMATION

Questionnaire (N)	Possible Range	Range	Mean (SD)	Reliability
Neighborhood Cohesiveness (208 1)	4-20	4-20	11.2 (3.5)	0.77'
Neighborhood Social Control (1460)	5-20	5-20	14.2 (4.4)	0.90"
Neighborhood Student Chances (2077)	4-20	4-20	11.0 (3.4)	0.84"
Neighborhood Problems (202 1)	5-15	5-15	9.9 (3.2)	0.84'

'Reliability was estimated using Cronbach's coeffkient alpha formula.

TABLE E.4

CHILD COGNITIVE WELL-BEING MEASURES:
DESCRIPTIVE INFORMATION

Measure (N)	Possible Range	Range	Mean (SD)	Reliability
PPVT-R (1792)	Standard Scores M= 100 SD= 15	40-127	79.5 (14.1)	None computed
WJ-R Letter-Word (1904)	Standard Scores M= 100 SD= 15	36-166	97.3 (16.8)	None computed
WJ-R Passage Comprehension (1965)	Standard Scores M= 100 SD=15	29-158	96.5 (17.5)	None computed
WJ-R Calculation (2003)	Standard Scores M= 100 SD=15	33-179	104.6 (18.9)	None computed
WJ-R Applied Problems (1959)	Standard Scores M= 100 SD= 15	20-165	96.5 (19.4)	None computed
School Transition (2080)	6-30	8-30	23.9 (4.4)	0.86'
School Involvement (2078)	3-12	3-12	9.1 (2.1)	0.69"

"Reliability was estimated using Cronbach's coefficient alpha formula.

TABLE E.5

CHILD SOCIAL AND EMOTIONAL WELL-BEING MEASURES:
DESCRIPTIVE INFORMATION

Questionnaire (N)	Possible Range	Range	Mean (SD)	Reliability
BPI (2088)	o-22	o-22	9.7 (5.3)	0.88'
ASBI Total (2094)	24-72	25-72	61.3 (6.1)	0.85'
ASBI Expressiveness (2092)	13-39	14-39	33.9 (3.3)	0.73'
ASBI Compliance (2094)	11-33	11-33	27.4 (3.6	0.82'

'Reliability was estimated using Cronbach's coefficient alpha formula.

et al. 1990) is constructed from mothers' responses to questions about how much they were hassled on a day-to-day basis by their children, other family members, people from state or federal agencies, friends and neighbors, and the person who usually takes care of their children. From these items we created a daily hassles score, with higher scores indicating that mothers were more stressed by these daily events. The daily hassles scores have acceptable internal consistency reliability (a = 0.71).

The second measure of stress is based on 14 items from the Difficult Life Circumstances scale (these items were adapted from scales created by Kathryn Barnard and used in the JOBS evaluation; Child Trends and Manpower Demonstration Research Corporation 1992). Mothers reported whether they had experienced various potentially stressful events in the past year (for example, being robbed or mugged, being bothered by bill collectors, losing a loved one, being abused). Higher Difficult Life Circumstances scores indicate that mothers report that more of these stressful events had occurred in their lives. The internal consistency reliability for the scale score created from the Difficult Life Circumstances items was 0.67, which is marginally acceptable.

D. SOCIAL SUPPORT

We examined three measures of social support, including one scale, a perceived social, support scale constructed from mothers' responses to five social support vignettes (modified from the work of Cohen and Lazarus 1977 and used in the Central Harlem Study, McCormick et al. 1989). For the social support vignettes, mothers were asked whether they could name someone they could count on in five different situations--when they are upset, when they need to borrow 100 dollars, when they need help with children after surgery, when they need someone to babysit for a few hours on short notice, and when they need to borrow cooking ingredients. If mothers reported that they had someone who could help them in a particular situation, they were then asked to name each person who could help, and interviewers recorded whether the mother named more than three people. To

assess a mother's perception of the support available to her, we created a score that is the sum of the number of items out of five for which mothers reported they had someone who could help them, and the number of items for which they named more than three people. We did not compute an internal consistency reliability score for this measure because the vignettes tap a wide variety of circumstances and therefore are unlikely to be interrelated.

E. QUALITY OF THE HOME ENVIRONMENT FOR CHILDREN

We examined three measures of home environment quality, including the Home Observation for Measurement of the Environment (HOME; Caldwell and Bradley 1984), the family cohesion subscale of the Family Environment Scale (Moos 1974), and the Conflict Tactics Scales (Straus 1979). We administered42 of the Middle Childhood HOME items, including 25 questions for the mothers and 17 observational items. During the course of their visit, interviewers observed the mother with the child and other dimensions of the home environment; they completed the 17 HOME observational items at the end of their assessment visit to the home. Each item is scored as a 0 (no) or 1 (yes). We created a HOME total score by summing all the items, and three subscale scores based on the HOME Responsivity, Acceptance, and Physical Environment subscale items. Higher HOME scores indicate a higher-quality environment. The internal consistency reliability for the HOME total score and the HOME physical environment score was acceptable, but the reliability for the HOME maternal sensitivity and maternal acceptance scores was under 0.7. According to the scales creator, the rationale for testing reliability for the HOME scales is weak because the HOME is a risk index, and the items sample from a wide range of behavior that may indicate problems in the home environment (Bradley, personal correspondence, January 29, 1997).

Mothers completed the nine-item cohesion subscale from the Family Environment Scale (Moos 1974). The items are true/false questions about how close the family is, including items about

whether family members help and support each other, have a feeling of togetherness, and get along well. We created a scale score by summing the positive responses. Higher scores indicate more family cohesiveness. Internal consistency reliability for the cohesion scale was good (a = .73).

Mothers who reported that they were married, lived with a male partner, or had a relationship with a male friend with whom they spent a lot of time were asked items from the Conflict Tactics Scales. More than half of the sample members had a male partner or close friend and completed the scales. Mothers were asked about how their partners responded when disagreements occurred in the past year. They were asked how frequently they and their partner responded in particular ways, ranging from reasoning to verbal abuse to violence. We created four summary scores, one for the mother's verbal aggression directed toward her partner/friend and one for her violence directed toward her partner/friend,and the comparable scores for the partner's verbal aggression and violence toward the mother. Internal consistency reliability for the four scores was good (a = .81 to .87).

F. QUALITY OF THE NEIGHBORHOOD

Mothers responded to five questions adapted from the General Social Survey about perceived adversity in the neighborhood. Mothers indicated how much of a problemhigh unemployment,drug users and pushers, crime, run-down buildings, and noise, odors, and traffic were in their neighborhoods. A single scale score was created, with higher scores indicating greater neighborhood problems. Internal consistency reliability was high (a = .84).

Mothers completed questionnaires about neighborhood cohesiveness, social control, and the probability of success for students in the neighborhood. These items are from scales developed by Furstenberg and colleagues (1990) and included in the Head Start Transition Study. We created neighborhood cohesiveness (higher scores indicate greater cohesiveness), social control (higher

scores indicate greater social control), and student chances (higher scores indicate greater student chances) scale scores. The three scores have high internal consistency reliability (a = .77 to .90).

G. COGNITIVE DEVELOPMENT AND ACHIEVEMENT

The Peabody Picture Vocabulary Test--Revised (PPVT-R, Dunn and Dunn 198 1) is a receptive (hearing) vocabulary test that requires comprehension of Standard English. In 1979, the PPVT-R was standardizedon a nationallyrepresentativesample of 4,200 children and youth from age 2 years, 6 months to 18 years, 11 months. For each item, the children were asked to point to one of four pictures that best described a word's meaning. There are 175 items, but not all items are administered. The entry point into the test is determined by the child's age. The PPVT-R raw score is computed by adding the number of correct responses. A standardized score (mean of 100, standard deviation of 15) is derived by using the national norms provided in the PPVT-R manual. Higher scores indicate a greater receptive vocabulary. The *PPVT-R Manual* (Dunn and Dunn 198 1) provides detailed information on the norming procedures, reliability and validity, and linkage between raw and standard scores.

The Woodcock-Johnson Psycho-Educational Battery--Revised: Letter-Word Identification and Passage Comprehension Tests of Achievement are widely used standardized tests of reading achievement. The Woodcock-Johnson Psycho-Educational Battery--Revised: Calculation and Applied Problems Tests of Achievement are widely used standardized tests of mathematics achievement (WJ-R, Woodcock and Johnson 1989, 1990). The WJ-R was standardized on 6,359 subjects ranging in age from 2 to 90 years, in more than 100 diverse U.S. communities. Like the PPVT-R, WJ-R standard scores have a mean of *100* and a standard deviation of 15. Higher scores indicate greater reading and math achievement. The WJ-R examiner's manual provides extensive

information on the norming procedures, reliability and validity, and linkage between raw and standard scores for the tests.

H. SCHOOL TRANSITION

Children rated their school experiences by answering questions from the Head Start Transition evaluation (Reid and Landesman 1988; Reid et al. 1990), about various aspects of school, such as how much they enjoyed school, made an effort to do well in school, and got along well with teachers and peers. Because most of the children were between six and eight at the time of the assessments, these measures serve as a way to determine how well the children are making the transition to school. We created scale scores from these items, but none had sufficiently high reliability; therefore, we analyzed the transition items administered to the children at the item level.

Parents also reported on their child's school experiences by answering similar questions, also from the Head Start Transition evaluation (Reid and Landesman 1988; Reid et al. 1990). An overall school transition score and a school involvement score were created from the item-level data. Higher school transition scores indicate a more positive transition, and higher school involvement scores indicate that mothers are more involved in their child's school activities. Internal consistency reliability was high for the school transition score and was acceptable for the school involvement score.

I. CHILD SOCIAL AND EMOTIONAL WELL-BEING

Mothers completed 22 items from the Behavior Problems Index (BPI, Zill and Peterson 1982), a measure of children's maladaptive behaviors. Mothers rated how true statements were about their child in the past three months, such as, "Your child is too fearful or anxious." We followed Zill's practice of reducing the three-point response categories (never true; sometimes true; often true) to

two points (we combined "sometimes true" and "often true"). A total score was created from the 22 items, with a higher score indicating greater behavior problems. The internal consistency reliability for the total score was high (α = .88).

Mothers completed 24 items from the Adaptive Social Behavior Inventory (ASBI, Scott and Hogan 1987), a measure of children's prosocial behavior. On the ASBI, parents rated how true statements were about their child, such as, "Your child shares toys or other possessions." We created a total score and two subscale scores, one a measure of expressiveness (this includes such things as how communicativethe child is about her needs and how willing the child is to interact with peers and strangers) and the other a measure of compliance (this includes such things as how helpful and obedient the child is and how mannerly the child is with others). Higher ASBI scores indicate more prosocial behavior (total score), expressiveness (expressivenessscore), and compliance (compliance score). The ASBI scores had high reliability (α = .73 to .85).

APPENDIX F:

SUPPLEMENTAL TABLES
RELATED TO CHAPTER VI

TABLE F. 1

IMPACTS ON PPVT-R AND BEHAVIOR PROBLEMS INDEX. BY SUBGROUP

	PPVT-R		Behavior Problems Index	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Total Sample	80.0	-0.9	9.6	0.2
Enrolled July 1987 Through June 1988	79.4	-1.3	9.7	0.1
Enrolled July 1988 Through June 1989	80.7	-1.4	9.7	0.1
Enrolled After June 1989	79.4	0.2	9.3	0.5
Reading Skills below 6th Grade Level	77.2	-0.7	10.4	-0.3
Reading Skills 6th Through 8th Grade Level	80.3	-0.4	9.2	0.6
Reading Skills 9th Grade Level and Above	82.8	-1.6	9.0	0.4
Under Age 17	78.5	1.2	9.8	-0.7
Age 17	80.9	-1.8	8.8	0.5
Age 18	79.3	0.0	9.5	0.6
Age 19 or Older	80.9	-2.2**	9.5	0.2
Hispanic Origin	80.0	-1.8	9.6	0.0
White or Other Non-Hispanic	88.2	-5.2*	10.3	0.9
Black. Non-Hispanic	79.4	-0.3	9.6	0.2
High Risk of Becoming JOBS Mandatory	80.3	-0.9	8.9	0.9**
JOBS Mandatory	78.9	-0.6	9.9	-0.4
Low Risk of Becoming JOBS Mandatory	80.7	-1.2	10.1	0.1
Lives with Employed Mother	81.5	-1.7	9.2	0.8
Lives with Nonemployed Mother	80.7	-1.8	9.8	-0.3
Does Not Live with Mother	79.1	-0.1	9.4	0.6
Limited English Proficiency	70.7	6.0**	10.0	0.1
English Not Limited	80.7	-1.4**	9.6	0.2
In High or Middle School	81.0	-1.7	9.3	1.0**
In Postsecondary School	81.3	-3.0	9.7	-0.5
In GED or ESL Program	79.4	1.0	8.6	0.7
Not in School	79.2	-0.3	9.8	-0.2
On Welfare as a Child	79.3	-0.2	9.7	0.1
Not on Welfare as a Child	80.7	-0.9	9.6	0.5
Child Under Age 7	79.5	-0.2	9.9	-0.2
Child Age 7	79.0	0.4	9.6	0.5
Child 8 and Older	82.1	-4.0**	9.1	0.6
Child is a Boy	79.4	-0.4	10.4	-0.3
Child is a Girl	80.5	-1.3	8.9	0.7**
High School Dropout	78.5	0.4	10.1	-0.3
Not High School Dropout	80.8	-1.2	9.3	0.5*
Mean of Outcome Measure		79.5	—	9.7
R^2		0.120	—	0.052
Sample Size		1.791	—	2,087

SOURCE: Program intake forms and child assessments administered an average of 81 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. These models also included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.7.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE F.2

IMPACTS ON WJ-R LETTER WORD AND APPLIED PROBLEMS TESTS. BY SAMPLE SUBGROUPS

	WJ-R Letter-Word Test		WJ-R Applied Problems Test	
	Regular-Services Group	Estimated Impact	Regular-Services Group	Estimated Impact
Total Sample	97.3	-0.3	97.0	-1.0
Enrolled July 1987 Through June 1988	97.1	0.0	97.9	-1.7
Enrolled July 1988 Through June 1989	97.1	-0.2	97.2	-1.3
Enrolled After June 1989	97.6	-0.8	95.7	0.4
Reading Skills below 6th Grade Level	95.5	-0.3	97.5	-3.5**
Reading Skills 6th Through 8th Grade Level	96.9	-0.5	95.1	0.7
Reading Skills 9th Grade Level and Above	99.6	-0.4	98.3	0.3
Under Age 17	95.4	0.3	95.7	0.1
Age 17	97.9	-1.6	97.7	-0.6
Age 18	98.0	-1.0	97.0	-1.3
Age 19 or Older	97.1	0.7	97.4	-1.2
Hispanic Origin	97.3	1.7	97.4	-1.8
White or Other Non-Hispanic	100.6	-3.6	99.5	-1.3
Black, Non- Hispanic	97.0	-0.6	96.7	-0.7
High Risk of Becoming JOBS Mandatory	98.3	-2.6**	97.5	-2.2
JOBS Mandatory	96.4	1.2	93.7	0.5
Low Risk of Becoming JOBS Mandatory	97.0	0.7	99.6	-1.1
Lives with Employed Mother	97.0	-0.7	96.6	0.2
Lives with Nonemployed Mother	96.4	0.0	96.5	0.0
Does Not Live with Mother	97.9	-0.6	97.4	-2.1
Limited English Proficiency	97.0	0.6	94.3	6.2
English Not Limited	97.3	-0.4	97.2	-1.5*
In High or Middle School	98.5	-2.2	99.2	-2.1
In Postsecondary School	99.5	-4.6*	95.9	1.2
In GED or ESL Program	95.9	2.4	98.2	-1.9
Not in School	96.3	1.2	95.7	-0.5
On Welfare as a Child	96.8	-1.1	96.8	-1.0
Not on Welfare as a Child	97.7	0.5	97.2	-0.8
Child Under Age 7	94.3	0.7	93.4	-1.3
Child Age 7	99.1	-1.0	97.8	0.8
Child 8 and Older	99.2	-0.8	101.8	-3.1*
Child is a Boy	95.0	1.1	95.6	0.5
Child is a Girl	99.4	-1.6	98.3	-2.3**
High School Dropout	96.1	1.2	94.7	0.0
Not a High School Dropout	97.8	-1.1	98.2	-1.6
Mean of Outcome Measure		**97.3**		**96.5**
R^2		**0,089**		**0.077**
Sample Size		**1,903**		**1,958**

SOURCE: Program intake forms and child assessments administered an average of 81 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. These models also included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.7.

*Statistically significant at the 10 percent level. two-tailed test.

TABLE F.3

IMPACTS ON CES-D AND HOME MEASURES, BY SAMPLE SUBGROUP

	Percentage of Mothers with CES-D of 16 or Above		HOME Total Score	
	Regular-Services Group	Impact	Regular-Services Group	Impact
Total Sample	58.6	0.0	31.0	-0.6**
Enrolled July 1987 Through June 1988	59.7	0.6	29.9	-0.4
Enrolled July 1988 Through June 1989	56.9	1.2	31.7	-1.2**
Enrolled After June 1989	58.7	-2.0	31.5	-0.5
Under Age 17	58.1	-4.7	30.8	-0.2
Age 17	61.1	-3.0	30.9	-1.4*
Age 18	58.4	4.5	30.9	-0.6
Age 19 or Older	58.0	-1.0	31.1	-0.5
Reading Skills below 6th Grade Level	53.9	-4.8	30.6	-0.6
Reading Skills 6th Through 8th Grade Level	57.9	5.1	30.7	-0.4
Reading Skills 9th Grade Level and Above	64.6	0.1	31.5	-0.9**
Hispanic Origin	50.7	12.9**	31.7	-0.6
White or Other Non-Hispanic	53.7	4.3	30.3	-0.4
Black, Non-Hispanic	60.8	-3.6	30.8	-0.7**
High Risk of Becoming JOBS Mandatory	58.7	-5.2	31.1	-0.7
JOBS Mandatory	61.3	5.0	30.6	-0.9
Low Risk of Becoming JOBS Mandatory	55.7	1.4	31.1	-0.4
Lives with Employed Mother	63.3	0.5	31.5	-1.3**
Lives with Nonemployed Mother	58.6	3.0	30.9	-0.8'
Does Not Live with Mother	58.4	-3.5	30.9	-0.3
Limited English Proficiency	64.1	-13.2	29.9	-0.5**
English Not Limited	58.1	1.0	31.0	-0.7**
In High or Middle School	54.7	0.9	31.3	-0.7
In Postsecondary School	62.8	-7.6	31.4	-0.0
In GED or ESL Program	61.4	-18.0*	31.3	-0.4
Not in School	60.0	2.2	30.7	-0.7**
On Welfare as a Child	56.1	1.6	31.0	-1.1**
Not on Welfare as a Child	61.0	-1.7	30.9	-0.2
Child Under Age 7	57.0	6.0	30.0	-0.8*
Child Age 7	62.0	-8.2**	30.9	-0.4
Child 8 and Older	55.7	2.9	32.6	-0.7
Boy	53.9	7.4*	30.2	-0.4
Girl	62.8	-7.0**	31.6	-0.9**
High School Dropout	60.0	2.4	30.4	-0.7
Not a High School Dropout	57.8	-1.2	31.2	-0.6**
Mean of Outcome Measure		**0.59**	—	**30.63**
R^2		**0.038**	—	**0.11**
Sample Size		**2,083**	—	**1,978**

SOURCE: Program intake forms and child assessments administered an average of 81 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. These models also included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.7.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TABLE F.4

IMPACTS ON CHILD HEALTH AND DIFFICULT LIFE CIRCUMSTANCES, BY SUBGROUP

Sample Subgroup	Percent of Children in Fair or Poor Health	Estimated Impact	Difficult Life Circumstances Score	Estimated Impact
Total Sample	7.2	0.3	3.2	0.0
Enrolled July 1987 Through June 1988	7.3	0.1	3.3	0.1
Enrolled July 1988 Through June 1989	7.7	0.5	3.0	-0.1
Enrolled After June 1989	6.6	0.3	3.1	0.1
Under Age 17	7.9	-1.6	3.5	-0.2
Ape 17	9.3	0.0	3.0	0.3
Age 18	7.3	-1.2	3.1	0.0
Age 19 or Older	5.8	2.8	3.1	0.1
Reading Skills below 6th Grade Level	7.8	0.4	3.0	0.0
Reading Skills 6th Through 8th Grade Level	7.5	-1.2	3.2	-0.1
Reading Skills 9th Grade Level and Above	6.1	2.1	3.3	0.3
Hispanic Origin	10.2	1.0	3.2	0.3
Black, Non- Hispanic	6.2	0.5	3.1	0.1
White or Other Non-Hispanic	9.8	-4.1	3.7	-1.2**
High Risk of Becoming JOBS Mandatory	7.9	-3.3*	2.9	0.3
JOBS Mandatory	9.8	0.5	2.8	0.1
Low Risk of Becoming JOBS Mandatory	4.0	4.3**	3.8	-0.3
Lives with Employed Mother	9.0	0.0	3.4	-0.1
Lives with Nonemployed Mother	6.6	0.2	2.9	0.2
Does Not Live with Mother	6.7	-0.5	3.2	-0.0
Limited English Proficiency	5.8	1.2	3.0	-0.7
English Not Limited	7.3	0.3	3.2	0.1
In High or Middle School	6.9	-1.5	3.1	0.2
In Postsecondary School	4.8	-0.9	3.6	0.0
In GED or ESL Program	1.8	3.1	3.1	0.2
Not in School	8.2	1.35	3.1	-0.1
On Welfare as a Child	5.6	2.3	3.3	-0.1
Not on Welfare as a Child	8.7	-1.7	3.0	0.2
Child Under Age 7	6.0	1.4	3.2	0.0
Child Age 7	7.4	0.9	3.1	0.1
Child 8 and Older	8.8	-2.3	3.2	-0.1
Child Is a Boy	7.1	2.6	3.2	-0.1
Child Is a Girl	7.3	-1.8	3.1	0.1
High School Dropout	9.6	-1.0	3.1	0.0
Not a High School Dropout	6.0	1.0	3.2	0.0
M e a .2 n				
R^2		0.001		0.029
Sample Size		2,090		2,087

SOURCE: Program intake forms and child assessments administered an average of 8 1 months after intake.

NOTE: Estimates are regression-adjusted using data pooled across the sites. Means of control variables included in the regression model are presented in Table A.4. These models also included status interaction variables for each of the subgroups. Sample sizes for each subgroup are presented in Table A.7.

*Statistically significant at the 10 percent level, two-tailed test.
**Statistically significant at the 5 percent level, two-tailed test.

TEENAGE PARENT DEMONSTRATION
SELECTED PROJECT REPORTS AND RELATED PUBLICATIONS

Gleason, Philip, Rebecca Maynard, Walter Nicholson, Denise Polit, and Anu Rangarajan. ***Service Needs and Use of We&e-Dependent Teenage Parents.*** Princeton, NJ: Mathematica Policy Research, Inc., 1993. (TPD# 263312634)

Gleason, Philip, Anu Rangarajan, and Peter Schochet. ***The Dynamics of AFDC Spells Among Teenage Parents.*** Princeton, NJ: Mathematica Policy Research, Inc., 1994. (TPD# 2895)

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[a]Not supported under contract funds.

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Jan Watterworth, Librarian
Mathematica Policy Research, Inc.
P.O. Box 2393
Princeton, NJ 08543-2393
(609) 799-3535
jwatterworth@mathematica-mpr.com