

The Effects of Welfare Policy on Child Care Decisions:

Evidence from Ten Experimental Welfare-to-Work Programs

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The author welcomes comments and discussion.

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- Connecticut's *Jobs First* program, evaluated by MDRC under contract to the Connecticut Department of Social Services
- Florida's *Family Transition Program*, evaluated by MDRC under contract to the Florida Department of Children and Families
- The *Minnesota Family Investment Program*, evaluated by MDRC under contract to the Minnesota Department of Human Services
- The National Evaluation of Welfare-to-Work Strategies, conducted by MDRC under contract to the U.S. Department of Health and Human Services. The Child Outcomes Study, which examined program impacts on young children, was conducted by Child Trends under subcontract to MDRC.

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Introduction

When President Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) on August 22, 1996, the structure of the welfare system in the United States was altered dramatically. Among other things, PRWORA replaced the Aid to Families with Dependent Children (AFDC) program, a federal entitlement, with the Temporary Aid to Needy Families (TANF) program, a system of block grants to states. The TANF block grants were authorized for \$16.5 billion annually until 2002, at which time they come up for reauthorization.

One of the primary goals of PRWORA is to move welfare recipients into work and economic self-sufficiency. Attaining economic self-sufficiency is critical because PRWORA established a lifetime limit of five years on welfare receipt.¹ It is well known that child care costs often create a significant barrier to employment, particularly among low-income families receiving welfare or among families having a previous welfare history. In recognition of the importance of subsidized child care in facilitating employment, PRWORA created the Child Care and Development Fund (CCDF), which combined four major federal child care programs for low-income families into a single block grant to states.² Total spending under the CCDF is authorized at more than \$20 billion between fiscal years 1997 and 2002, which is significantly greater than the spending that occurred under the four programs it replaced.³ States may subsidize child care using either CCDF or TANF funds and it may transfer up to 30 percent of its current year TANF funds into its CCDF fund.⁴

¹States have the option to impose a lower lifetime limit, and 20 states have chosen to do so (see http://www.spdp.org/tanf/timelimits).

²CCDF combined the AFDC Child care Program, the Transitional Child care Program, the At-Risk Child care Program, and the Child Care and Development Block Grant (CCDBG). For details on these four earlier programs, see Blau and Tekin (2001).

³United States General Accounting Office (2001) reports child care spending by state under both TANF and CCDF for fiscal years 1997-1999. For all states, total spending (in \$1999 dollars) was \$4.3 billion in 1997, \$5.6 billion in 1998, and \$8.3 billion in 1999.

⁴Up to 10 percent of current year TANF funds may also be transferred to the state's program under the Title XX Social Services Block Grant (SSBG), but these funds count against the 30 percent maximum transfer from TANF. Both TANF funds and CCDF funds can be used to subsidize child care for low-income families. Up to 4 percent of states' CCDF funds must be used to improve the quality and availability of child care.

PRWORA gave states considerable flexibility in designing child care subsidy mechanisms. All states provide subsidies for employment related child care and many also subsidize child care while in education and training activities. Some states provide child care vouchers to families, some contract directly with child care providers, and some use both mechanisms. Some states emphasize subsidies for particular forms of child care (such as child care centers), while others subsidize a broader range of child care arrangements. Some states continue to provide child care to families that leave welfare because of the time limit, while others do not. According to United States General Accounting Office (2001), about half of the children subsidized using CCDF funds are cared for in centers. Subsidies for all types are provided mainly through vouchers. The State Policy Demonstration Project (www.spdp.org) indicates that as of October 1999, 27 states had continued to extend child care assistance to families after they leave welfare (transitional child care). It is not known what types of child care are being subsidized under direct TANF funds or the extent to which vouchers and contracts are used to pay for this care, because states are not required to collect this information.

In designing child care subsidy mechanisms, states need to be sensitive to the child care needs (and preferences) of families subject to the welfare reform provisions. If families prefer informal child care rather than more structured formal child care (perhaps because of convenience or trust in the provider), it may be preferable to have a subsidy system with a more broadly-based set of eligibility criteria. On the other hand, restricting eligibility to formal care may cause some families that would otherwise have selected informal care to switch to formal care, perhaps increasing the quality of child care provided.

The main objective of this study is to examine the effect of welfare reform on the child care choices of families subjected to welfare reform policies. This is an important topic because some critics of welfare reform have argued that because of welfare reform, children are being placed into substandard care (Fuller et al. 2000). In this study, the focus is on the preferences of both families induced to leave welfare because of welfare reform as well as families that respond to welfare reform but remain on welfare.⁶ For both groups, the primary mechanism through which child care patterns are affected is through increased employment.

In a summary of earlier studies on this topic, Shumacher and Greenberg (1999) report that parents who left welfare for work most commonly relied on relatives to care for both their

⁵CCDF regulations stipulate that a parent who receives or is offered child care services shall have access to a variety of child care categories including centers, group homes, family child care, and in-home care. While States may limit access to in-home care, they may not expressly or effectively exclude any category of care or type of provider or have the effect of limiting parent access or choice (98.30 Parent Choice). I am grateful to officials at the Administration for Children and Families for pointing this out to me.

⁶Gennetian, Crosby, and Huston (2001) and Crosby, Gennetian, and Huston (2001) undertake a similar analysis, but do not distinguish the effects of welfare reform on welfare leavers and stayers.

preschool and school-aged children, especially grandparents and great-grandparents. Center-based care was the next most common form of child care arrangement used by welfare leavers.

While informative, previous studies of the child care utilization patterns of persons leaving welfare are deficient because it is not known whether these parents made their child care choices because of welfare reform or whether they would have made the same child care choices had they left welfare for reasons other than welfare reform. While one could argue that it does not really matter whether welfare reform changes child care choices, it is certainly of policy interest to know whether welfare reform is causing people to alter their child care choices in a socially undesirable way. For example, welfare reform may be inducing families leaving welfare to use lower quality child care than families staying on welfare. Of course, it is possible that even though welfare leavers use lower quality child care, the quality may still be higher than if welfare reform had not occurred.

This study exploits the random assignment research design of several studies of welfare reform undertaken in recent years by MDRC to provide a more credible means of understanding the child care choices of families subject to welfare reform policies. Although the MDRC studies all began prior to the 1996 welfare legislation, several of the programs tested were similar to the programs eventually adopted by the states in which the tests took place. In some cases the experimental welfare reform policies included a child care component in addition to traditional employment and training services. Thus, while not a direct test of current TANF or CCDF policies, the results from the MDRC studies are suggestive of the types of responses families might be making in the current welfare reform environment.

The remainder of this paper is organized as follows. In the next section, the MDRC studies and the employment and child care policies they tested are described. Section III discusses the empirical strategy used to assess the effects of welfare reform on child care utilization patterns on welfare leavers and stayers is discussed. Section IV presents the results. Section V gives the conclusions.

The MDRC Studies

At the national level, knowledge of the child care patterns of current and former welfare recipients (and of lower and higher income families more generally) are available in a number of recent surveys, including the 1990 National Child Care Survey (Hofferth, et al., 1991) and the 1997 and 1999 National Survey of America's Families (Brick et al., 1999; Capizzano et al., 2000a,b). Information from these surveys is useful, but the surveys were not designed explic-

⁷Using the National Survey of America's Children, Capizzano et al. (2000) report that among low income children between the ages of 6 and 9 with employed mothers (below 200 percent of the federal (continued)

itly to address issues pertaining to the child care utilization patterns of families subjected to welfare reform policies.

This study uses data from four MDRC random assignment studies that tested ten different welfare reform programs in six states. The studies are the Florida Family Transition Program (FTP), the Minnesota Family Investment Program (MFIP), the National Evaluation of Welfare to Work Strategies (NEWWS), and the Connecticut Jobs-First Program (CTJF).⁸ Because all of the studies utilized random assignment, it is possible to attribute changes in employment and child care choices to the reforms being tested. A portion of the study samples was assigned to a "program group" that was subjected to the welfare reform policies. The remaining study members were assigned to a "control group" that was not subject to the welfare reform policies, but instead was subject to the rules of the existing welfare environment at the time the studies were undertaken, the Aid to Families With Dependent Children (AFDC) program.⁹ Differences in behavior over time between the program and control groups can be confidently attributed to the welfare reform policies tested in each study.¹⁰

The studies and the policies they tested are described in Table 1. Each study tested a participation mandate similar to the one under TANF that requires welfare recipients to engage in activities to facilitate employment. Three of the studies (FTP, MFIP, and CTJF) tested financial incentives, similar to the enhanced disregards adopted by most states under TANF. Two of the studies (FTP and CTJF) tested time limits, similar to those adopted by the states under TANF. One of the studies (NEWWS) tested two distinct programs in each site to promote economic self-sufficiency (labor force attachment and human capital development).

Three of the studies tested child care policies that differed from the control environment under AFDC. The child care policies are similar to those under TANF and CCDF. FTP ex-

poverty level), 19 percent were in a before- or after-school child care program, 8 percent were in family child care, 3 percent were with a nanny or babysitter, 23 percent were with a relative, 4 percent took care of themselves, and 44 percent were taken care of either by a parent or by some other form of care.

⁸For details on these studies, see Bloom et al. (2000, FTP), Miller et al. (2000, MFIP), Hamilton et al. (2001, NEWWS), and Bloom et al. (2002, CTJF). FTP tested one program, MFIP tested two programs, NEWWS tested eleven programs, but only six are analyzed here, and CTJF tested one program.

⁹All of the experimental programs continued to operate after welfare reform in 1996, but the families were not subject to the provisions of PRWORA until after the studies officially ended.

¹⁰Because each program tested several components, it is not possible to attribute the program-control differences to any specific component of the programs. Rather, the program-control differences measure the impact of the entire package of policies tested in the programs.

¹¹There were two versions of MFIP, one that tested financial incentives only and another that tested financial incentives plus comprehensive employment services.

¹²In FTP, control group members were required to participate in a welfare-reform program called Project Independence (PI) rather than the traditional AFDC program, so program impacts are for FTP relative to PI and not relative to AFDC. For a description of PI, see Kemple, Friedlander, and Fellerath (1995).

tended transitional child care to two years, compared to one year for the control group (AFDC) and provided resource and referral services directly from the welfare office. MFIP made all child care payments directly to the child care provider, in contrast to reimbursements to the families under AFDC (as part of the AFDC grant). CTJF extended child care assistance indefinitely to families leaving welfare, so long as income is below 75 percent of the state median, in contrast to one year of transitional child care under AFDC. NEWWS had no explicit policy for child care that differed from the general policy under AFDC, which consisted of reimbursing up to \$175 per month as part of the AFDC grant, providing additional reimbursement separately depending on the recipient's eligibility for other programs, and providing transitional child care for up to one year after leaving AFDC.

The last row of Table 1 gives a numerical rating of the child care policies tested in each of the studies. These ratings were developed by Gennetian, Crosby, and Huston (2001) and Gennetian et al. (2001) and provide a means for assessing the degree to which the child care policies tested in the studies differed from the control environment. The ratings varied between zero and nine, with nine representing the greatest difference from the control environment. The ratings were based on scores along six child care policy dimensions. Two of the programs, FTP and MFIP had fairly substantial child care components (ratings of five and six, respectively), while NEWWS and CTJF did not include any additional child care policies beyond those available to the control groups.¹³

The full study samples included almost thirty five thousand families (4,803 in CTJF, 23,584 in the three NEWWS sites, 2,815 in FTP, and 3,554 in MFIP). Each study collected data over time (the follow-up period) on the families' economic and demographic circumstances. Surveys were conducted at various times during the follow-up period for families with children in a particular age range, as part of a special study of child outcomes (the "focal child survey"). In FTP, the focal child survey covered children between the ages of 1 and 8 at the time the study began. In MFIP, the focal child survey covered children between the ages of 2 and 9 at the time the study began. In NEWWS, the focal child survey covered children between the ages of 3 and 5 and the time the study began. Finally, in CTJF, the focal child survey covered children between the ages of 2 and 11 at the study began.

The analysis in this paper is restricted to families that responded to the focal child surveys. ¹⁴ These samples were much smaller than the full study samples. Table 2 gives the sample

¹³Even though CTJF had a child care "treatment," Gennetian, Crosby and Huston assigned CTJF a treatment difference rating of zero, because, in practice, there was not a large difference in child care assistance provided for CTJF program group members and control group members. However, because people leaving welfare didn't have to apply for another program, CTJF, in effect, "streamlined." eligibility. Hence, the "hassle" factor might have been less under Jobs First than under AFDC.

¹⁴Every family surveyed having a child in the relevant age range was included in the focal child survey. (continued)

sizes for the full focal child samples. Overall, there are 7,127 focal children surveyed in the ten programs, with 4,093 in the program group families and 3,034 in the control group families.¹⁵

Because the focal child surveys were conducted after the studies began, the age range of the children was different than the age range at study entry. In FTP, the focal child survey was conducted four years after study entry, so the children were between the ages of 5 and 12 at the time of the survey. In CTJF and MFIP, the focal child survey was conducted three years after study entry, so at the time of the survey the children were between the ages of 5 and 14 in CTJF, and 5 and 12 in MFIP. For NEWWS, the focal child survey was conducted two years after study entry, so the children were between the ages of 5 and 7 at the time of the survey.

The age ranges of the children at the time of the focal child survey should be kept in mind when interpreting the results presented below. Child care needs are different for infants and toddlers than for pre-school and school-aged children, and because of the way the focal child samples were selected, they include only school-aged children (and a few pre-schoolers). Infants and toddlers, two important groups for policymaking purposes, are excluded from the analyses. Since all surveys include children between the ages of 5 and 7, some of the analysis focuses on this more narrowly defined age category.

Empirical Strategy

Experimental Impacts for the Full Focal Child Survey Samples

The first set of estimates to be presented are simple program-control group differences (or "impacts") for several child care outcomes, measured at the time of the focal child survey. Impacts on welfare receipt and employment are also presented. The impacts are broken down by age of the focal child (at the time of the followup surveys) and are adjusted for baseline characteristics. ¹⁶

If there was more than one child in the relevant age range, one of the children was selected at random.

¹⁵Appendix Tables A-1, A-2, and A-3 give the sample sizes broken down by ages of the focal child and by welfare status.

¹⁶Because these impacts are "experimental," simple unadjusted program-control group differences are "unbiased," so it is not necessary to adjust for baseline characteristics. However, adjusting for baseline characteristics usually increases the precision of the estimated impacts. The baseline characteristics adjusted for in this study are age of the respondent, age of the focal child, ethnicity of the survey respondent, marital status, education (whether a high school graduate), whether child care represents a barrier to work or going to school, whether the respondent prefers not to work to take care of the family, whether someone trustworthy is available to take care of the children, number of children in the household, whether the family was receiving food stamps in the previous quarter, whether the family was receiving AFDC in each quarter of the prior two years, number of full months receiving AFDC in the prior year, (continued)

The program-control group difference provides an indication of the effect of the welfare reform programs on these outcomes. If the programs increase employment, then one would expect to see a corresponding increase in the use of non-parental child care. Of course, it is possible that newly employed parents may respond to the welfare reform program by utilizing parental care and it is also possible that child care will change for nonemployed parents.¹⁷ In these cases, there may not be a direct correspondence between changes in employment and changes in the use of non-parental child care.

The outcome variables examined in this study are as follows:

Employment. This outcome variable is a binary indicator of whether the respondent was employed at any time in the month prior to the focal child survey.

Welfare Receipt. This outcome variable is a binary indicator of whether the family received welfare benefits (either from AFDC or from the experimental welfare reform program) in the month prior to the focal child survey.¹⁸

Type of Child Care. A series of binary indicators (dummy variables) is constructed for three measures of child care use. These three measures break down child care for successively increasing levels of detail. The first measure (termed "outside child care") indicates simply whether the focal child was cared for by someone other than the respondent or the respondent's in-home spouse. Nonresident parents and nonmarried partners living in the home are considered outside child care, while the mother and the resident husband (if there is one) are not considered outside child care. Self care by the child is also considered outside care, although analysts usually do not consider self care to be child care. The impact on this variable should be close to the impact on employment, but could differ if parental care is used or if nonworkers alter their

number of full months receiving food stamps in the prior year, whether the respondent was employed in each quarter of the prior two years, earnings in the prior year, and earnings squared in the prior year. Means and standard deviations of these baseline characteristics are presented in the Appendix, Table A-4.

¹⁷The focal child surveys obtain child care information for both working and nonworking parents, in contrast to many earlier surveys that restrict child care information to families with working parents.

¹⁸The impacts on employment and welfare receipt may not be the same as the employment and welfare receipt impacts reported in the official reports from the four studies for three reasons. First, the focal child survey sample is a subset of the full study samples. Second, the official reports present impacts based on unemployment insurance records and not survey information. Third, the impacts here are for the month prior to the survey, while the impacts in the official reports are for calendar quarters (or years) subsequent to the start of the study. Appendix Table A-5 presents a comparison of the employment and welfare receipt impacts for the full study samples and for the focal child samples.

¹⁹The surveys measure child care use in the week prior to the survey and at least once a week in the four weeks prior to the survey. The latter measure is used in this study.

²⁰Self care is so infrequent that omitting it from the definition of child care would not affect the results.

child care in response to the welfare reform program. For programs in which there is an explicit child care component, one may see larger impacts on this measure.

The second measure of child care use breaks down "outside child care" into three mutually exclusive categories: formal care, informal care by a relative, and informal care by a nonrelative. Formal care consists of Head Start, nursery school, child care center, before- and after-school programs, summer camp and other organized activities. Informal care by a relative consists of self-care by the child, care by an unmarried partner living in the home, care by the biological father not living in the home, care by a grandparent, care by a sibling, or care by another relative. Informal care by a nonrelative consists of care by a nonrelative in the child's home (nanny or babysitter) or care in the provider's home (sometimes termed "family child care").

Many child care subsidy programs emphasize subsidies to either formal care and/or informal care by a nonrelative. Therefore, it is of interest to determine the effects of the welfare reform programs on these two general measures of child care compared with effects on informal relative care.

The third measure of child care use breaks down the impacts by the twelve categories reported in the surveys.²¹ These categories include (1) self care by the child, (2) in-home care by the respondent's unmarried partner, (3) care by a grandparent, (4) care by the biological father not living in the respondent's home, (5) care by a sibling, (6) care by another relative, (7) care by a nonrelative in the child's home, (8) care by a nonrelative outside the child's home,²² (9) care in a Head Start facility, a nursery school, or a child care center, (10) care in a before- or after-school program, (11) care in a summer camp, or (11) care by some other provider.²³

Other Child Care Measures. In addition to child care types, there is an indicator of whether the child care is licensed, the weekly cost to the parent of the child care, an indicator of whether the child care is subsidized, whether the child feels safe with the provider (FTP and CTJF only), and an indicator of whether the provider plans activities (FTP and CTJF only).

²¹The NEWWS surveys report a thirteenth category, kindergarten, which is not included as child care for purposes of this study.

²²The MFIP survey does not distinguish where non-relative care takes place, so this category and the previous category are combined.

²³The survey asks whether *any* of these types are used by the child and the *primary* child type used. The results for both measures are generally similar. In the main text, results are reported for the primary care measure. The sum of the more detailed child care measures add up to the first aggregate measure (outside care).

Impacts for Welfare Leavers and Stayers

Impacts for the full sample of families subject to the welfare reform program, while informative, do not directly address the issue of what types of child care arrangements people utilize when they leave welfare. Many families will respond to the welfare reform program by finding employment, leaving welfare, and using nonparental child care. Others will find employment, use nonparental care, but remain on welfare (combine work and welfare). Still others will not find employment, but may use nonparental care because they are enrolled in school or training, or are looking for work.²⁴ Thus, the experimental impacts on child care use for the full focal child sample represent a weighted average of the impacts for families that leave welfare and for those that remain on welfare.

It might appear straightforward to break down the focal child sample into those who have left welfare ("leavers") and those who have remained on welfare ("stayers") and calculate program-control group differences for each of these subsamples. However, these differences no longer represent experimental impacts because the subsamples are not randomly chosen (the welfare reform program affects the probability of leaving welfare).

This can be seen by considering the following example. Suppose that before welfare reform there are equal numbers of persons in the program group and the control group. ²⁵ Also suppose that the welfare reform program increases the probability of leaving welfare, so that in the sample of welfare leavers there are more program group members than control group members. Now suppose that 50 percent of the welfare leavers in the control group use a child care center and 40 percent of the welfare leavers in the program group use a child care center. A simple program-control group difference would indicate a 10 percentage point *decline* in the use of a child care center because of the welfare reform program. However, suppose that none of the *induced* leavers²⁶ in the program group would have used a child care center if they had left welfare for reasons other than the welfare reform program, but that the welfare reform program increases that fraction to 10 percent. Thus, while the program-control group difference indicates a 10 percentage point reduction in the probability of using a child care center because of the welfare reform program, the *true* impact of the program is a 2.5 percentage point *increase* in the probability of using a child care center.

²⁴Many persons may have to leave welfare without a job because of the time limit (FTP and CTJF in our sample) and might use non-parental child care while looking for employment.

²⁵Equality of sample sizes for the program and control groups are assumed to simplify the discussion. In practice, they are often not the same. When they are different, any adjustments that are made to the samples preserve the original program-control group sampling ratios.

²⁶Induced leavers are those who would not have left welfare in the absence of the welfare reform program.

program. 27 The calculated impact among the unbalanced samples of leavers is .4 - .5 = -.1. The true impact (continued)

The problem, of course, is that the portion of the welfare leaver subsample in the program group that was induced to leave welfare because of the welfare reform program has no counterpart in the control group subsample of welfare leavers. In order to construct valid estimates of the impact of the welfare reform program on the subsample of welfare leavers, it is necessary to find control group members still on welfare that would have left welfare *if they had been subjected to the welfare reform program*. In other words, a subset of control group members still on welfare has to be selected to *match* the induced welfare leavers in the program group.²⁸ If these matched control group members are similar in all other respects to the induced program group members (including their use of child care), then a program-control group difference using the matched sample would represent a valid estimate of the impact of the welfare reform program on the child care choices of persons leaving welfare.

There are a variety of methods that can be used to construct a matched subsample of control group members comparable to the subsample of program group members that have left welfare (or have stayed on welfare). These methods rely on using observed baseline (preprogram) characteristics of program and control group members to perform the matching. Essentially, what is done is that program and control group members are matched on the basis of the similarity in their observed baseline characteristics, such as age, education, ethnicity, years on welfare prior to the beginning of the study, years employed prior to the beginning of the study, etc., which are by definition unaffected by the welfare reform program because they are measured prior to the program. All of these matching methods are "nonexperimental" in the sense that one can never know for sure whether the matched samples are equivalent in all other respects. There may also be *unobserved* differences between the two groups that are not captured by the observable baseline characteristics. The more observed characteristics one can use in the matching process, the better the matching will be. However, there is always the possibility that the match will not be correct with respect to certain unobserved characteristics (such as tastes) that affect child care choices.

For this study, four matching methods were utilized. They are as follows:

Full Propensity Score Matching. This method of matching is due to Rosenbaum and Rubin (1984). The program and control group subsamples of welfare leavers (or stayers) are used to estimate a logit (or probit) regression model in which the dependent variable is a binary indicator of whether the sample member is in the program group (the "propensity" of being the

among leavers is [(.75)(.5)+(.25)(.1)] - [(.75)(.5)+(.25)(0)] = .4 - .375 = .025, where the difference for the second set of terms in the brackets is the impact for the induced group.

²⁸It is not known who the induced leavers are, but the number of them is known. For example, if there are 100 program and 100 control group members on welfare when the study begins and 60 program group members and 70 control group members on welfare two years later, then it is known that there were 10 program group members who were induced to leave welfare because of the welfare reform program.

program group). The independent variables are the extensive set of baseline characteristics described earlier. Using the coefficients from this equation, a predicted "propensity score" is derived for each member of the full control group sample (leavers *and* stayers) and the predicted scores are ordered from the highest to the lowest. For the subsample of program group welfare leavers (or stayers), the program group members are matched one-for-one with the subset of control group members with the highest propensity scores. The resulting sample contains an equivalent number of program group leavers (or stayers) and their matched counterparts in the control group.²⁹ However, not all control group leavers (or stayers) will necessarily be in the matched sample. It is possible, for example, that a control group leaver (or stayer) has a low propensity score and isn't matched.

Partial Propensity Score Matching. The full propensity score matching procedure doesn't really fully exploit the experimental nature of the data because some appropriate control group members (those who have left welfare) are not necessarily matched to program group members in the leaver or stayer samples. The partial propensity score matching method is a variant of the full propensity score matching method that more fully exploits the experimental nature of the data. The matching process begins with the full leaver (or stayer) subsamples in both the program and control groups and then proceeds a bit differently, depending on whether there are fewer or more control group members than program group members in the leaver (or stayer) subsamples. If there are fewer control group members (which is usually the case in the leaver samples when the welfare reform program induces people to leave welfare), additional control group matches are obtained from the rest of the control group sample (stayers, in this case) by selecting those with the highest propensity scores. If there are more control group members than program group members (which is usually the case in the stayer samples), the control group members with the lowest propensity scores are dropped from the sample. As in the case of full propensity score matching, the resulting matched samples contain an equivalent number of program and control group members (or numbers that preserve the original programcontrol group sampling ratio).³⁰

²⁹Recall that if there are originally unequal numbers in the program and control groups, the matching is done to preserve the original program-control sampling ratio. Thus, if originally there are three program group members for every two control group members, the matching is done on a three-for-two basis.

³⁰Use of this matching method (which is done separately for each program) will yield slightly biased estimates of a program's impacts on child care for leavers and stayers if the impact of a given program on welfare receipt is positive for some sample members and negative for others. Thus, if a given program induces some persons to leave welfare and others to remain on welfare, the method may not result in fully balanced samples of program and control group members in the leaver and stayer samples. There is no reason to believe that any given program will cause some persons to leave welfare and others to remain on welfare, but it is possible, particularly for programs that combine financial incentives (which tend to increase welfare use) and mandatory employment services (which tend to decrease welfare use). Of the programs analyzed in this paper, only MFIP is expected to increase welfare receipt for most sample (continued)

Nearest Neighbor Matching With Replacement. The next two procedures utilize another form of matching, based on the Mahalanobis nearest neighbor matching technique (Rubin, 1979), which matches individuals based on a weighted function of observed baseline characteristics. Under this technique, the Mahalanobis distance is calculated between a program group member and a control group member, ³¹ and then a match is accepted for the pair with the smallest distance between them. The matching can occur with or without replacement. With replacement means that once a control group match is found for a program group member, the same control group member can be matched with another program group member. In this case, the number of control group members in the matched sample will generally be less than the number of program group members.

Nearest Neighbor Matching Without Replacement. This procedure is the same as above, except that once a control group member is matched with a program group member, the control group member cannot be matched again with another program group member. In this case, the resulting sample will have an equivalent number (or proportion if the original sampling ratio is not equal to one) of program and control group members.³²

Results were generated for the FTP program using all four matching procedures. Based on the results, it was decided to use the partial propensity score matching procedure for the remaining programs, because the partial propensity score matching procedure utilizes the most information about the sample members and best exploits the experimental nature of the data. In general, the various matching procedure produced similar results, but there were some differences.³³

Results

The samples were first pooled for all ten programs. The pooled results provide a general indication of the effects of a combination of welfare reform programs taking place in different environments on families' child care choices. Pooling the samples also allows us to test whether the diversity of programs and environments leads to a diversity of impacts, or whether child care responses are invariant with respect to program or environmental characteristics. Pooled results

members by the time of the focal child survey. CTJF may increase welfare use for many sample members early in the program (before time limits), but not when the time limits are reached. I thank Keisuke Hirano for pointing out this issue to me.

³¹The Mahalanobis distance is given by $(X_1-X_2)'S^{-1}(X_1-X_2)$, where X_1 and X_2 are column vectors of the matching variables for two observations and S is the covariance matrix of the matching variables.

³²Because a control group member can only be matched once with a program group member, the results of the matching procedure are not invariant to the order in which the data are sorted for the matching.

³³The biggest differences were in estimated impacts on employment.

are presented first for the full samples and then for the matched samples of welfare leavers and stayers. Pooled results are also presented for each group broken down by age of the focal child.

Full Sample Results

Table 3 presents the pooled impacts on employment, welfare receipt, and child care for the full focal child samples. The first two rows indicate that the ten programs reduced welfare receipt by over 13 percentage points on average and increased employment by almost 7 percentage points on average.³⁴ In two of the programs (FTP and CTJF), these impacts are measured after time limits came became effective for many program group members.

The 7.3 percentage point impact of the programs on the use of child care is very close to the 6.9 percentage point impact on employment, indicating that families induced by the programs to become employed were also induced to use child care. Almost all of the additional child care was informal relative care, particularly care by a grandparent or a sibling, although there was also a statistically insignificant 1.6 percentage point increase in the use of formal care. This pattern of child care impacts partially reflects the age composition of the focal child sample. Recall that while many of the focal children were very young at the time of study entry, they were older at the time of the focal child surveys several years later. In particular, almost all of the children were of school age (over the age of 5) and the impacts on informal care are therefore not surprising. However, among those program group members using outside child care, more than a quarter were using formal child care (13.4/50.5). The results suggest that formal child care may not have been as readily available to families that would not have worked in the absence of welfare reform. However, it is also possible that such families simply preferred relative care for their children.³⁵

In addition to increasing the use of outside child care, the welfare reform programs also increased the use of subsidized child care by 2.5 percentage points. This represents about one- third of the additional child care generated by the welfare reform programs. There was also an increased in the cost to the parent of child care, but this increase was not statistically significant, perhaps indicating that subsidies covered a significant portion of the cost or that free care was used.

From the perspective of the families, all of the additional child care utilized as a result of the welfare reform programs appeared to be in safe environments, as reflected in the 7.3 percentage point increase in the number of families that said that their child feels safe with the pri-

³⁴As indicated earlier, these impacts are "adjusted" for the effects of baseline characteristics.

³⁵It is also possible that nonresponding families using formal care had been using the formal care for prior years and didn't change their arrangement when the child became of school age.

mary care provider (PCP).³⁶ Before welfare reform, about two-fifths of the families said that their child felt safe with the PCP. After welfare reform, this fraction rose to more than half. Because most of the increased care was by relatives, this result is not surprising. There was also a statistically significant 5 percentage point increase in the number of families that reported that the PCP plans activities. Thus, it appears the children of mothers employed as the result of welfare reform were being placed in safe child care arrangements.³⁷

Results by Age of the Focal Child

Table 4 shows the pooled impacts broken down by age of the focal child. Two groups are compared, families in which the focal child is between the ages of 5 and 7 years and families in which the focal child is over the age of 7. Except for self care, there is no instance in which the impacts differ statistically for the two groups of families. This may not be surprising because both sets of children were in elementary school at the time of the focal child survey. However, the impacts on informal relative care are slightly larger for families in which the focal child is over the age of 7 (7.5 versus 4.9 percentage points) and the impacts on formal care are slightly smaller (6.4 versus 7.9 percentage points. Because there are virtually no differences in the impacts by age of the focal child, the remainder of the results presented in this study are for all the age groups combined.

Results for Welfare Leavers and Stayers

Table 5 shows the pooled impacts broken down by welfare status at the time of the focal child survey. The samples of welfare leavers and stayers were constructed using the partial propensity score matching procedure described earlier. If the matching worked properly, the differences in outcomes between the program groups and the control groups would represent true impacts of the welfare reform programs for welfare leavers and stayers. However, if the matching did not work properly, these program-control group differences would not represent true impacts.

Child care patterns are roughly similar for welfare leavers and stayers. Among control group families, 27 percent of the child care used is formal for both leavers and stayers (14.7/54.7=9.6/35.5=.27)), 56 percent is informal relative (30.8/54.7=19.9/35.5=.56), and 16 percent is informal nonrelative (8.5/54.7=5.8/35.5=.16). The percentage breakdown among types of care is similar for program group families.

³⁶Of course, feeling safe doesn't necessarily imply that the parents were satisfied with the care their child was receiving.

³⁷The question on feeling safe was not asked in the NEWWS study and the question on planned activities was not asked in the NEWWS and MFIP studies.

The percentage of families using child care is similar to the employment rate of the mother. Among welfare leavers, the use of child care is somewhat less than the employment rate, suggesting considerable use of parental care, while among welfare stayers the use of child care is somewhat greater than the employment rate. The additional child care among nonemployed welfare stayers may reflect participation requirements of the welfare programs. For example, if the mother is enrolled in a job training or education program, child care may be used. Parental care is also probably less frequent among those staying on welfare.

The welfare reform programs appeared to significantly increase the employment of welfare leavers, but had virtually no impact on the employment of welfare stayers. This difference is statistically significant, as indicated by the test statistics reported in the last two columns of the Table 5. There was a corresponding increase in the use of child care by welfare leavers (mainly informal care by relatives), but this increase was not significantly different from the impact on welfare stayers.

Results for the Individual Programs

The last two columns of Table 3 report the results of tests of differences in the impacts across the ten welfare reform programs. For every outcome except one, the tests indicate that the impacts are different across the ten programs. This is not surprising because the programs themselves were quite different. In this section, the results for the individual programs are presented.

Full Sample Results

Table 6 presents the impacts for the full samples in each program. As this table indicates, there is considerable variation in all of the impacts. For welfare receipt the impacts vary widely, between -13.3 percentage points in CTJF to +10.1 percentage points in MFIP Incentives Only. The large negative impact in CTJF reflects mainly the 21-month time limit provision of that program, while the large positive impact in MFIP Incentives Only reflects mainly the financial incentive provision that increased the breakeven level of the program. For employment, the impacts vary between -2.4 percentage points in NEWWS-Grand Rapids HCD to +12.7 percentage points in NEWWS-Riverside LFA.

As was true for the pooled sample, the impacts on child care are similar to the impacts on employment, although there are substantial differences for a few of the programs. The impacts on child care are statistically significant in only three of the ten programs (FTP, NEWWS-Riverside LFA, and CTJF), although they are positive for nine of the programs. The three programs with significant impacts on child care are also the programs that had the largest impacts on employment, and two of these 'programs (FTP and CTJF) also tested a child care component

(although Gennetian et al. (2001) argue that control group members in CTJF had the same access to child care subsidies and services as program group members).³⁸

In each of the three programs that had a significant impact on overall child care use, the impact was primarily on informal relative care, particularly care by a grandparent, sibling, or other relative. These results are consistent with those for the pooled sample in Table 3.

In two of the programs without an overall increase in the use of child care, there was a statistically significant increase in the use of formal child care and a corresponding statistically significant increase in receipt of a child care subsidy NEWWS-Atlanta HCD and CTJF). Two other programs also had a statistically significant increase in receipt of a child care subsidy (NEWWS-Riverside HCD and NEWWS-Riverside LFA).

Results for Welfare Leavers and Stayers

Tables 7 and 8 present the impacts by program for the matched samples of welfare leavers and stayers. Although the formal test indicated that the child care impacts are not significantly different for leavers and stayers, the detailed breakdowns show a couple of interesting patterns. First, despite larger employment impacts among welfare leavers, there is not a single instance where the use of formal care is significantly increased, whereas formal care is significantly increased in two of the programs for welfare stayers (NEWWS Atl-HCD and CTJF). Second, there is not a single instance among welfare leavers where receipt of a child care subsidy is significantly increased, whereas subsidy receipt is significantly increased in six of the programs for welfare stayers. Thus, the results strongly indicate that these welfare reform programs do not increase the use of subsidies for families that work and leave welfare whereas it does increase subsidy use for families that combine work and welfare.³⁹

It is not known whether the lower utilization of subsidies by families that leave welfare is because of their lower eligibility for subsidies, their lower awareness of subsidies, or their lower preferences for subsidies. It is also possible that the lower utilization of subsidies by families leaving welfare may be due to the States' prioritization of families on welfare and required copayments for certain families. Finally, it is important to note that the child care subsidies provided in these experimental welfare reform programs may be considerably less generous than the subsidies

³⁸NEWWS-Riverside HCD also had large impacts on employment and child care (12.7 and 6.5 percentage points respectively, but the child impact is not statistically significant.

³⁶It should be noted that subsidy receipt is generally greater among welfare leavers, but this is because employment and child care use is so much higher for this group. Among program group members that are employed, the percentage receiving a subsidy is higher for families on welfare (26.0 percent versus 17.5 percent for families not on welfare).

provided to welfare leavers in these same states under PRWORA. It is quite possible that more generous subsidies could have larger effects on employment and subsidy use by welfare leavers.

Summary and Conclusions

This study has examined the effect of welfare reform on the child care choices of families participating in ten experimental programs conducted by MDRC in the United States between 1989 and 2002. The ten experimental programs reduced average welfare receipt by over 13 percentage points and increased average employment by almost 7 percentage points. These "impacts" were measured between two and four years after the programs began operating. The use of child care for a "focal child" in the family also increased by about the same amount as the increase in employment. However, most of the increased child care was informal care by a relative, particularly care by a sibling or a grandparent. There was also a small statistically insignificant increase in the use of formal child care.

The concentration of impacts on informal care is not surprising, given that almost all of the focal children were over the age of 5 when the family's child care choices were measured. However, more than a quarter of the sample was using formal care at that time. Thus, formal child care may not have been as readily available to families that would not have worked in the absence of welfare reform or such families may have simply preferred relative care for their children.

About one-third of the additional child care generated by the welfare reform programs was subsidized, but most of the subsidies were received by families that remained on welfare after becoming employed. There was also an increase in the cost of child care to the family, but this increase was not statistically significant.

There is no strong evidence that the impact on subsidy use was greater for programs that included a child care "treatment." However, it is important to note that the child care treatments in these experimental programs differ substantially from the policies being implemented under PRWORA, which are often more generous and which are designed more explicitly to stimulate employment and subsidy use. Child care subsidies increased in MFIP, where there the child care treatment was the most generous of those considered here, but they also increased in a few of the NEWWS programs, where there was no explicit child care treatment. It

⁴⁰This finding differs from that of Gennetian et al. (2002) who find that there are significant differences in subsidy use between experimental programs that had a child care treatment and those that did not. Differences between their study and this one are (1) they focus on all single parents in the experimental programs while this study focuses on the focal child sub-sample, (2) they measured subsidy use over a two-year period while this study measured it during the month of the focal child survey, and (3) they used data for 19 experimental welfare reform programs while this study used data for only the 10 programs that collected focal child information.

is not known why more families that left welfare did not make use of child care subsidies. Either child care subsidies were not available (or known) to these families or the families simply preferred not to use them. Though only suggestive, the lack of impacts on subsidy use among welfare leavers in these experimental programs suggests that policymakers should pay careful attention to the child care options presented to families that leave welfare to ensure that adequate support is available to those that might want it.

Overall, there are significant differences in the welfare, employment, and child care impacts across the various programs tested. Four of the programs significantly reduced welfare receipt, four had no impact on welfare receipt, and two increased welfare receipt. Six of the programs significantly increased employment, but only three significantly increased the use of child care. However, small sample sizes for the individual programs make it very difficult to draw firm conclusions about the pattern of differences across the programs. In contrast, while there are some differences in the impacts of the welfare reform programs on the child care choices of welfare leavers and stayers, the differences are not statistically significant. Again, small sample sizes make it difficult to draw firm conclusions about the precise nature of any differences.

The results of this study clearly indicate that welfare reform creates additional need for child care. However, because almost all of the children in our samples are of school age and are being cared for by relatives, it is not clear that this additional need translated into additional costs. Nonetheless, it is quite possible that programs with more generous child care policies could stimulate greater effects on employment and subsidy use and hence could be more costly.

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Table 1 Features of Welfare Reform Studies

Program	Florida's Family Transition Program (FTP)	National Evaluation of Welfare to Work Strategies (NEWWS)	Minnesota's Family Investment Program (MFIP)	Connecticut's Job-First Program (CTJF)
Study Period	1994-2000	1989-2001 ^a	1993-2000	1996-2002
Study Site(s)	Escambia County	Atlanta, Grand Rapids, Riverside ^b	Three urban counties (Hennepin, Anoka, Dakota) Four rural counties (Mille Lacs, Morrison, Sherburne, Todd)	New Haven, Manchester
Number of Programs Tested	1 (Combined financial incentives plus employment serices)	6 (Labor Force Attachment and Human Capital Development programs in each site)	2 (Financial incentives only and incentives plus employment services)	(Combined financial incentives plus employment services)
Full Study Sample Size 2,815	2,815	23,584	3,554	4,803
Focal Child Survey Sample Size	1,108	3,018	1,531	1,470
Age Range of Children Ages 1-8 at baseline in Focal Survey Sample Ages 5-12 at 48 month followup	Ages 1-8 at baseline Ages 5-12 at 48 month followup	Ages 3-5 at baseline Ages 5-7 at 24 month followup	Ages 2-9 at baseline Ages 5-12 at 36 month followup	Ages 2-11 at baseline Ages 5-14 at 36 month followup

(continued)

Table 1 (continued)
Features of Welfare Reform Studies

Program	Florida's Family Transition Program (FTP)	National Evaluation of Welfare to Work Strategies (NEWWS)	Minnesota's Family Investment Program (MFIP)	Connecticut's Job-First Program (CTJF)
Non-Child Care Policid	Non-Child Care Policies Intensive case management, Tested enhanced employment services provided directly in welfare program office, 24 (or possibly 36) month time limit, enhanced earnings disregard, increased asset limits, lower age of child exemption (6 months versus 3 under AFDC)	Job club, basic education, vocational training, college, work experience	Intensive case management, enhanced employment services, enhanced earnings disregard (tested separately as well as part of other policies), relaxed penalties for noncompliance, food stamp cashout,	21 month time limit, all earnings disregarded, increased asset limits, extended transitional Medicaid, all child support to family, reduced benefit for additional child born while on welfare, exempted if child under age 1 (compared to age 2 under AFDC)
Child Care Policy Tested	Two years of transitional child care aid (versus one year under AFDC), resource and referral services provided in the welfare program office	None	Child care paid directly to provider up to county maximum rate	Child care assistance provided for welfare leavers as long as income is below 75% of state median (compared to one year of transitional child care under AFDC)
Childcare Treatment Difference Rating ^c	v	0	9	PO

Sources: Bloom et al. (2000, 2002), Hamilton et al. (2002), Miller et al. (2000).

^aMembers of the control group were eventually transferred from AFDC to TANF.

^bOther NEWWS study sites (Portland, Columbus, Detroit, and Oklahoma City) are not included because they did not conduct a focal child survey.

^cRating developed by Gennetian et al. (2001).

^dIn practice, control group members had the same access to child care subsidies and services as program group members.

Table 2: Sample Sizes for Focal Child Survey

Program	Total	Program Group	Control Group
FTP NEWWS	1,108	543	565
Atlanta HCD	1,026	520	909
Atlanta LFA	902	396	206
Grand Rapids HCD	421	205	216
Grand Rapids LFA	441	225	216
Riverside HCD	578	256	322
Riverside LFA	694	208	486
CTJF	1,470	749	721
MFIP Full Sample	1,104	564	540
MFIP Incentives Only	296	427	540
Total	7,127	4,093	3,034

NOTE: Each site in NEWWS and MFIP used the same control group for each program group. Riverside HCD used only a portion of the Riverside control group (322 out of 486).

Table 3: Impact on Child Care Use for Focal Children, All Programs Standard Error in Parentheses

Outcome	Program Group	Control Group	Impact ^a	Significance of Program Differences ^b	P-Level for Program Differences
On welfare in Prior Month	45.1	58.2	-13.2 *** (1.8)	+- +-	0.000
Employed in Prior Month	56.1	49.3	6.9 *** (1.9)	+++++++++++++++++++++++++++++++++++++++	0.000
Used outside care consistently past 4 weeks	50.5	43.2	7.3 *** (1.9)	+++++++++++++++++++++++++++++++++++++++	0.000
Primary care is formal	13.4	11.9		÷	0.003
Head Start, nursery school, or center	7.5	6.1	1.3 (1.0)	+	0.005
After-school program	5.0	4.7		+	0.040
Summer Camp	1.0	1.0	0.0 (0.4)	++++	0.007
Primary care is informal, relative	30.6	24.4	* * *	+++++++++++++++++++++++++++++++++++++++	0.000
Self	9.0	0.4		+-	0.983
Partner	2.4	2.1	0.3 (0.6)	÷-	0.000
Other Parent	3.0	3.1	-0.1 (0.7)	÷-	0.000
Grandparent	13.5	11.0	2.5*(1.3)	÷	0.002
Sibling	4.8	3.1	* *	÷-	0.002
Other Relative	6.3	4.9	1.4 (0.9)	- 	0.003
Primary care is informal, non-relative	6.2	6.4		- - -	0.000
Non-relative, in child's home	2.4	2.6		÷-	0.005
Non-relative, not in child's home	3.8	3.6	0.3 (0.7)	- !- - !-	0.004
Other primary care	0.2	9.0	-0.4 (0.3)	:-	0.049
Received child care subsidy in past month	10.9	8.3	2.5 ** (1.1)	+	0.020
PCP (Primary Care Provider) Licensed	24.0	22.5	1.5 (1.6)	+-	0.023
PCP cost per week for focal child	11.6	8.7	3.0 (2.5)	+ + +	0.000
Child feels safe with PCP	51.1	43.9	7.3 *** (2.0)	÷-	0.001
PCP plans activities	41.3	36.3	5.0 *** (1.9)	n.s	0.500
Sample size	4 093	3.034			

NOTES: ^aImpacts are adjusted for the effects of covariates.

^{*}Significant at 10 percent level, **Significant at 5 percent level, ***Significant at 1 percent level.

^bTest is for hypothesis that impacts are the same across programs. †Significant at 10 percent level, ††Significant at 10 percent level, ††Significant at 10 percent level.

Table 4: Impact on Child Care Use for Focal Children by Age, All Programs Standard Error in Parentheses

	FC	Focal Child Aged 5 to 7	ged 5 to 7		Focal Child Aged 7+	Aged 7+		Significance	P-Level for
Outcome	Program Group	Control Group	Impact ^a	Program Group	Control Group	Impact ^a		of Age Differences ^b	Age Differences
On welfare in Prior Month	50.0	-	* *	34.6	9	-11.9 ***	(2.4)	n.s.	0.356
Employed in Prior Month	49.8	43.5	6.4 ** (2.7)	67.3	60.4	*** 6.9	(2.6)	n.s.	0.883
Used outside care consistently past 4 weeks	51.0	43.1	* *	49.6	43.3	6.4 **	(2.7)	n.s.	0.671
Primary care is formal	15.4	12.9	2.4 (2.0)	9.7	8.6	-0.1	(1.6)	n.s.	0.277
Head Start, nursery school, or center	9.0	7.5		4.4	3.6	8.0	(1.1)	n.s.	0.624
After-school program	5.2	4.5		4.6	5.4	-0.8	(1.2)	n.s.	0.373
Summer Camp	1.2	1.0		0.7	6.0	-0.1	(0.5)	n.s.	0.713
Primary care is informal, relative	28.4	23.5	*	33.9	26.4	7.5 ***	(2.5)	n.s.	0.462
Self	0.0	0.1		1.7	1.1	9.0	(9.0)	+ +	0.021
Partner	1.8	2.1		3.1	2.3	8.0	(0.9)	n.s.	0.386
Other Parent	2.7	3.8		3.1	2.3	6.0	(0.9)	n.s.	0.133
Grandparent	14.2	11.7		12.4	9.1	3.3 *	(1.7)	n.s.	0.753
Sibling	3.4	1.8	*	7.4	5.5	1.8	(1.3)	n.s.	0.850
Other Relative	6.5	4.0	*	6.3	6.1	0.1	(1.3)	n.s.	0.192
Primary care is informal, non-relative	6.7	6.2		0.9	6.4	-0.5	(1.3)	n.s.	0.639
Non-relative, in child's home	2.5	2.1		2.8	3.7	6.0-	(0.9)	n.s.	0.318
Non-relative, not in child's home	4.1	3.8		3.1	2.8	0.3	(0.9)	n.s.	0.994
Other primary care	0.3	0.5		0.0	0.5	-0.5 **	(0.3)	n.s.	0.440
Received child care subsidy in past month	6.6	5.8	4.1 *** (1.5)	15.7	14.8	1.0	(1.8)	n.s.	0.187
PCP (Primary Care Provider) Licensed	28.6	26.4	2.2 (2.5)	11.1	10.7	0.4	(1.6)	n.s.	0.450
PCP cost per week for focal child	10.1	6.1	4.1 (2.7)	17.7	15.7	2.0	(5.1)	n.s.	0.703
Child feels safe with PCP	58.0	50.1	7.9 ** (3.2)	47.1	40.9	6.1 **	(2.7)	n.s.	0.638
PCP plans activities	47.4	39.4	8.0 *** (3.1)	37.1	34.2	2.9	(2.4)	n.s.	0.139
Sample size	2,563	1,884		1,518	1,145				

NOTES: ^aImpacts are adjusted for the effects of covariates. *Significant at 10 percent level, **Significant at 10 percent level, **Significant at 1 percent level.

^bTest is for hypothesis that impacts are the same across age categories. †Significant at 10 percent level, ††Significant at 10 percent level, †††Significant at 1 percent level.

Table 5: Impact on Child Care Use for Focal Children by Welfare Status, All Programs Standard Error in Parentheses

		Welfare Leavers	eavers			Welfare Stavers	Stayers	S	Significance of	P-Level for
Outcome	Program Group	Control Group	Impact ^a		Program Group	Control Group	Impact ^a		Leaver-Stayer Differences ^b	Leaver-Stayer Differences
Employed in Prior Month	79.8	6.07	8.9 ***	(1.7)	29.2	30.6	-1.4	(2.7)	+++	0.001
Used outside care consistently past 4 weeks	61.0	54.7	6.2 ***	(2.0)	36.7	35.6	1.1	(2.9)	n.s.	0.119
Primary care is formal Head Start mrsery school	16.1	14.7	1.4	(1.4)	10.4	6.7	8.0	(1.8)	n.s.	0.793
or center	8.8	7.4	1.5	(1.1)	5.6	5.5	0.2	(1.4)	n.s.	0.458
After-school program	6.1	6.1	0.0	(1.0)	3.9	3.6	0.3	(1.2)	n.s.	0.815
Summer Camp	1.2	1.2	-0.1	(0.4)	6.0	9.0	0.3	(0.5)	n.s.	0.622
Primary care is informal, relative	36.3	30.8	5.5 ***	(1.9)	22.9	19.9	3.0	(2.5)	n.s.	0.408
Self	0.7	0.7	0.1	(0.3)	0.2	0.5	-0.3	(0.3)	n.s.	0.485
Partner	3.4	2.7	0.7	(0.7)	1.7	1.1	9.0	(0.7)	n.s.	0.897
Other Parent	3.9	3.6	0.3	(0.8)	1.7	3.3	-1.6	(1.0)	n.s.	0.125
Grandparent	16.0	14.5	1.5	(1.5)	10.7	7.6	3.1 *	(1.8)	n.s.	0.461
Sibling	5.0	3.6	1.4 *	(0.8)	3.6	3.5	0.1	(1.1)	n.s.	0.356
Other Relative	7.6	5.8	1.8 *	(1.0)	5.1	4.0	1.0	(1.3)	n.s.	0.634
Primary care is informal, non-relative	8.3	8.5	-0.2	(1.1)	2.9	5.8	-2.9 **	(1.3)	n.s.	0.114
Non-relative, in child's home	2.9	3.5	9.0-	(0.8)	1.7	1.9	-0.2	(0.9)	n.s.	0.732
Non-relative, not in child's										
home	5.1	4.7	4.0	(0.9)	2.1	2.7	9.0-	(1.0)	n.s.	0.467
Other primary care	0.1	0.7	** 9:0-	(0.3)	0.5	0.3	0.1	(0.4)	n.s.	0.124
Received child care subsidy in past month	14.0	11.8	2.1	(1.4)	7.5	4.1	3.4 **	(1.5)	n.s.	0.534
PCP (Primary Care Provider) Licensed	23.2	21.9	1.4	(1.7)	24.5	24.1	0.4	(2.9)	n.s.	0.744
PCP cost per week for focal child	17.5	12.8	4.8	(3.2)	5.3	2.8	2.5	(2.8)	n.s.	0.590
Child feels safe with PCP	57.6	53.0	4.6 **	(2.1)	35.5	35.0	0.5	(3.7)	n.s.	0.263
PCP plans activities	44.5	40.3	4.2 **	(2.1)	29.8	22.3	7.5 **	(3.7)	n.s.	0.383
Sample size	2,061	1,735			2,024	1,448				
	,	,			,	ì				

NOTES: "Impacts are adjusted for the effects of covariates. Program and Control groups are matched using partial propensity score method. *Significant at 10 percent level, **Significant at 5 percent level, **Significant at 1 percent level.

^bTest is for hypothesis that impacts are the same across welfare status categories. †Significant at 10 percent level, ††Significant at 10 percent level, ††Significant at 10 percent level.

Table 6: Impact on Child Care Use for Focal Children, by Program Standard Error in Parentheses

		FTP			NEWWS Atl-HCD			NEWWS Atl-LFA			NEWWS GrRp-HCD			NEWWS GrRp-LFA	
	Control	,		Control	,		Control	,						,	
Outcome	Group	Impact ^a		Group	Impact ^a		Group	Impact ^a		Group	Impact ^a		Group	Impact ^a	
On welfare in Prior Month	21.9	-12.3 ***	(2.2)	6.79	-3.3	(3.0)	6.79	-7.1 **	(3.0)	52.4	3.0	(4.7)	52.4	-7.3	(4.6)
Employed in Prior Month	62.9	** 9.9	(2.8)	39.0	3.5	(3.1)	39.0	6.4 **	(3.1)	51.1	4.5	(4.9)	51.1	4.8	(4.8)
Used outside care consistently															
past 4 weeks	38.9	6.1 **	(3.0)	40.6	4.5	(3.2)	40.6	-4.3	(3.2)	61.9	4.5	(4.8)	61.9	4.3	(4.7)
Primary care is formal	10.4	0.1	(1.8)	19.3	3.2	(2.6)	19.3	0.5	(2.6)	10.0	3.1	(3.0)	10.0	-1.8	(2.9)
Head Start, nursery school		,		,			,	,					,	,	
or center	5.1	0.3	(1.3)	9.3	4.6 **	(2.0)	9.3	-0.2	(2.0)	9.1	4.1	(2.9)	9.1	6:0-	(2.8)
After-school program	4.7	-0.3	(1.3)	7.1	0.1	(1.7)	7.1	-0.5	(1.7)	0.5	1.4	(0.9)	0.5	9.0-	(0.9)
Summer Camp	0.5	0.2	(0.5)	2.8	-1.6	(1.1)	2.8	1.2	(1.1)	0.4	0.2	(0.0)	0.4	-0.4	(0.0)
Primary care is informal	22.5	6.9	(5.6)	18.7	1.3	(2.5)	18.7	-3.9	(2.5)	38.9	8.0	(5.0)	38.9	3.6	(4.8)
Self	0.0	0.2	(0.2)	0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)
Partner	0.4	8.0	(0.5)	0.5	0.2	(0.5)	0.5	0.1	(0.5)	5.4	-3.7 *	(1.9)	5.4	-1.4	(1.8)
Other Parent	0.3	0.7	(0.5)	2.2	6.0-	(0.8)	2.2	-1.4 *	(0.8)	3.9	1.0	(2.3)	3.9	2.9	(2.2)
Grandparent	15.0	1.7		8.3	1.4	(1.8)	8.3	9.0-	(1.8)	20.5	1:1	(4.1)	20.5	-1.0	(4.0)
Sibling	1.8	3.1 ***		5.6	6.0	(1.1)	5.6	-0.2	(1.1)	1.6	1.7	(1.6)	1.6	1.9	(1.5)
Other Relative	5.0	0.7	(1.4)	5.0	-0.4	(1.3)	5.0	-1.8	(1.3)	7.5	8.0	(2.8)	7.5	1.2	(2.7)
Primary care is informal,															
non-relative	0.9	6.0-	(1.4)	1.8	0.3	(0.9)	1.8	-0.3	(0.9)	12.2	0.5	(3.4)	12.2	3.2	(3.3)
Non-relative, in child's home	3.2	8.0-	(1.0)	0.1	0.2	(0.5)	0.1	* 6.0	(0.5)	5.7	-1.9	(2.1)	5.7	-1.3	(2.1)
Non-relative, not in child's															
home	2.8	-0.1	(1.0)	1.7	0.1	(0.7)	1.7	-1.2	(0.7)	6.5	2.3	(2.8)	6.5	4.5 *	(2.7)
Other primary care	0.2	-0.2	(0.2)	0.0	-0.3	(0.5)	6.0	* 8:0-	(0.5)	8.0	0.2	(0.8)	8.0	8.0-	(0.8)
Received child care subsidy															
in past month	7.9	1.0	(1.7)	6.9	4.0 **	(1.8)	6.9	0.5	(1.8)	3.3	-0.3	(2.0)	3.3	2.2	(1.9)
PCP (Primary Care Provider) Licensed	12.9	9.0	(2.0)	35.0	7.1 **	(3.2)	35.0	-2.0	(3.2)	27.7	3.0	(4.6)	27.7	-1.9	(4.5)
PCP cost per week for focal child	9.7	1.0	(2.4)	3.8	6.0-	(1.0)	3.8	9.0-	(1.0)	8.1	1.1	(1.8)	8.1	2.3	(1.8)
Child feels safe with PCP	37.9	5.9 **	(3.0)	•	•	. 1	٠	٠	. 1	•	•		•	•	. 1
PCP plans activities	25.9	3.5	(2.7)	1	•	1	1	•	1	1	1	-	1	1	•
Sample size (Total)	565	(1,108)		506	(1,026)		909	(905)		216	(421)		216	(441)	

(continued)

Table 6 Continued: Impact on Child Care Use for Focal Children, by Program Standard Errors in Parentheses

		NEWWS Rvsd-HCD		7 X	NEWWS Rvsd-LFA			CTJF			MFIP		Inc	MFIP Incentives Only	
Outcome	Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a	
On welfare in Prior Month Employed in Prior Month	82.3 22.0	-5.8 12.7 ***	(3.7)	80.0	-12.4 *** 14.4 ***	(3.5)	44.9 58.9	-13.3 *** 6.6 ***	(2.4)	49.2 60.6	6.3	** (2.8) * (2.7)	49.2	10.1 ***	(3.0)
Used outside care consistently past 4 weeks Primary care is formal	26.3	6.5	(4.5)	33.0 5.2	13.6 ***	(3.6)	54.3 7.2	7.5 ***	(2.6)	48.4 14.9	-2.6 3.3	(2.2)	48.4	-3.4	(3.2)
or center After-school program Summer Comm	1.6	3.0 *	(1.8)	4.0 1.2	0.4 0.3	(1.5)	1.0 4.4 8	1.5 **	(1.1)	8.3	1.6	(1.7)	8.3	1.3	(1.8)
Primary care is informal	18.8	1.9	(4.0)	20.1	10.5 ***	(3.2)	38.5	6.2 **	(2.6)	25.1	-2.3	(2.6)		-0.6 -1.1	(2.9)
Partner Orther Parent	0.0	9.0	(1.4)	1.0	3.3 ***	1.1	3.9	-0.3 0.6	(1.0)	3.5	1.0)		0.0 ** 7.2-	2(2)
Grandparent Siblino	8.1	3.5	(2.9)	8.7	4.6 * * *	(2.3)	15.7	4.5 **	(2.0)	6.5	6.0-	(1.6)		3.4 **	<u></u> 2
Other Relative	4.5	-1.7	(1.9)	3.2	2.8 *	(1.5)	8.5	0.7	(1.5)	4.2	0.8	(1.2)		-1.7	(1.3)
Primary care is informal, non-relative	4.7	2.4	(2.3)	6.9	3.0	(2.0)	7.6	9.0	(1.4)	8.4	-3.5	** (1.5)	8.4	-3.2 **	(1.6)
Non-relative, in child's home Non-relative, not in child's	1.6	-0.2	(1.4)	2.3	1.6	(1.2)	3.8	0.0	(1.0)	•	1				1
home Other primary care	3.0	2.6	(1.8)	4.6	1.4	(1.7)	3.8	0.7	(1.1)	1 1	1 1				1 1
Received child care subsidy in past month	9.0	2.7 *	(1.4)	1.2	3.3 ***	(1.2)	20.3	3.7 *	(2.1)	11.5	9.6	*** (2.2)	11.5	5.2 **	(2.4)
PCP (Primary Care Provider) Licensed PCP cost per week for focal child Child feels safe with PCP PCP plans activities	23.1 2.4	0.3	(4.1)	27.5 4.1	1.3	(3.4)	11.1 21.1 53.0 44.1	1.8 5.3 7.2 *** 6.0 **	(1.7) (6.5) (2.6) (2.6)	- 13.6 45.3	-2.7 -2.8 -	. (1.8) (2.9)	13.6	-5.5 *** -2.6	(2.0)
Sample size (Total)	322	(578)	П	486	(694)	Ħ	721	(1,470)	П	540	(1,104)		540	(296)	

SOURCE: MDRC calculations from two-, three-, and four-year client surveys, and from administrative records.

NOTES: The FTP and MFIP samples include children ages 5-12 at the time of the survey. The NEWWS samples includes children ages 5-7 at the time of the survey. The CTJF sample includes children aged 3-14 at the time of the survey.

^a Impacts are adjusted for the effects of the covariates. *Significant at 1 percent level, ***Significant at 1 percent level, **Significant at 10 percent level.

Table 7: Impact on Child Care Use for Focal Children Welfare Leavers Standard Error in Parentheses

		FTP			NEWWS Atl-HCD			NEWWS Atl-LFA			NEWWS GrRp-HCD			NEWWS GrRp-LFA	
Outcome	Control Group	Impact ^a													
Employed in Prior Month	2.99	7.1 **	(2.8)	80.2	5.8	(4.0)	75.7	12.2 ***	(4.4)	71.6	-4.0	(7.0)	64.7	14.1 **	(6.0)
Used outside care consistently	41.1	6.4 **	(3.2)	59.0	3.9	(5.3)	60.1	-13.4 **	(5.7)	72.4	4.6	(9.9)	68.3	7.9	(6.1)
past 4 weeks Primary care is formal	10.6	8.0	(2.0)	32.4	0.5	(5.1)	31.6	-4.6	(5.3)	12.1	4.6	(5.3)	11.9	-1.8	(4.2)
Head Start, nursery school	5.2	0.5	(1.4)	16.3	1.8	(4.1)	15.8	-4.7	(3.9)	11.9	3.0	(5.2)	11.9	-1.8	(4.2)
or center															
After-school program	4.8	0.0	(1.4)	11.5	1.3	(3.7)	11.8	0.0	(3.8)	0.3	1.7	(1.5)	0.0	0.0	(0.0)
Summer Camp	9.0	0.3	(0.5)	4.5	-2.6	(1.9)	4.1	0.0	(2.3)	0.0	0.0	(0.0)	0.0	0.0	(0.0)
Primary care is informal	24.0	6.2 **	(2.8)	23.0	2.9	(4.8)	23.8	-5.8	(4.9)	45.7	-2.2	(7.7)	42.6	0.5	(6.9)
Self	0.0	0.2	(0.2)	0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)
Partner	0.4	9.0	(0.5)	-0.1	1.8 *	(1.0)	0.0	0.5	(0.0)	7.1	-5.5 *	(3.0)	7.5	-0.7	(3.6)
Other Parent	0.4	0.7	(0.5)	4.2	-3.5 **	(1.7)	4.4	-4.0 **	(1.8)	5.2	9.0	(3.6)	4.9	1.7	(3.3)
Grandparent	15.8	1.2	(5.4)	9.1	3.7	(3.5)	10.5	0.1	(3.7)	23.3	-0.1	(6.5)	21.1	8.0-	(5.3)
Sibling	2.0	3.2 ***	(1.1)	4.2	-0.1	(2.2)	3.4	6.0-	(2.0)	2.3	1.5	(2.4)	2.0	0.5	(1.9)
Other Relative	5.4	0.5	(1.5)	5.7	1.1	(2.8)	5.4	-1.5	(2.6)	7.8	1.4	(4.4)	7.1	-0.2	(3.5)
Primary care is informal,	6.4	9.0-	(1.5)	2.2	1.3	(1.9)	2.1	0.0	(1.7)	13.5	3.2	(5.6)	12.7	10.6 **	(5.2)
non-relative															
Non-relative, in child's home	3.4	9.0-	(1.1)	9.0	-0.7	(0.6)	0.4	0.7	(1.0)	6.1	-3.2	(3.1)	5.5	0.4	(3.2)
Non-relative, not in child's	3.0	0.0	(1.1)	1.6	1.9	(1.8)	1.7	-0.7	(1.4)	7.5	6.4	(4.8)	7.2	10.2 **	(4.5)
home															
Other primary care	0.2	-0.2	(0.2)	6.0	-0.2	(0.9)	2.0	-2.2 *	(1.1)	1:1	-1:1	(1.0)	1:1	-1.3	(0.9)
Received child care subsidy in past month	7.9	1.6	(1.8)	9.7	4.9	(3.7)	8.9	-1.3	(3.4)	2.7	-0.3	(2.5)	3.8	5.5	(3.3)
PCP (Primary Care Provider) Licensed	13.2	1.5	(2.2)	41.5	11.2 **	(5.5)	48.7	-10.1 *	(0.9)	24.8	8.7	(9.9)	26.1	2.2	(6.4)
PCP cost per week for focal child	10.4	1.4	(2.7)	8.5	-3.6	(2.3)	8.7	-3.1	(2.6)	12.7	2.0	(3.5)	12.4	2.6	(3.0)
Child feels safe with PCP	40.0	6.4 **	(3.1)	•	1	•	1	1	•	•	1	•	•		•
PCP plans activities	27.2	4.6	(2.9)	1		1	1		•	1		1	1		1
Sample size (Total)	504	(886)		175	(355)		176	(314)		102	(199)		1111	(227)	

(continued)

Table 7 Continued: Impact on Child Care Use for Focal Children Welfare Leavers Standard Errors in Parentheses

		NEWWS			NEWWS			CTJF			MFIP			MFIP	
		Rvsd-HCD			Rvsd-LFA								Ince	Incentivs Only	
Outcome	Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a	
Employed in Prior Month	49.5	15.7 *	(0.0)	44.4	23.1 ***	(6.7)	73.4	** 8.5	(2.7)	84.8	-1.1	(3.2)	87.3	-4.0	(3.7)
Used outside care consistently	26.7	21.2 **	(8.8)	40.0	14.0 **	(7.1)	64.5	5.4 *	(3.0)	62.3	-6.4	(4.4)	63.8	-3.6	(5.2)
past 4 weeks	3	3.7	9 5	0 1	,,	2	8	0 3	8 1	17.0	4	6	3 66	ć	(3.5)
Fillidaly cale is formal Head Start, nursery school	3.6	1.4	(4.0) (4.2)	8.1	-2.2 -2.8	(3.7)	0.5 4.1	2.1 **	(1.0)	9.4	2.1	(2.8)	11.1	-2.2 -1.7	(3.4)
or center			,			,			,			,			
After-school program	-0.2	2.3	(2.1)	1.0	9.0	(1.9)	4.7	-1.7	(1.2)	8.7	1.3	(5.6)	11.4	-0.5	(3.6)
Summer Camp	0.0	0.0	(0.0)	0.0	0.0		2.3	-0.7	(0.9)	-0.2	1.1 *	(0.0)	0.0	0.0	(0.0)
Primary care is informal	14.2	14.8 *	(7.8)	19.3	17.2 ***	(6.2)	44.6	7.5 **	(3.2)	31.8	-4.5	(4.2)	28.3	4.0	(5.2)
Self	0.0	0.0	(0.0)	0.7	1.0	(1.3)	0.0	* 9.0	(0.4)	3.3	-1.5	(1.5)	3.1	0.3	(2.0)
Partner	2.9	-2.7	(2.3)	2.3	1:1	(2.1)	4.5	0.2	(1.3)	9.6	-2.4	(2.0)	5.0	2.1	(2.7)
Other Parent	3.5	5.0	(4.9)	6.2	-4.5	(3.2)	4.6	9.0	(1.4)	9.6	0.5	(2.2)	4.2	6.0-	(2.2)
Grandparent	5.2	10.7 *	(5.8)	8.9	7.2	(4.7)	19.0	4.6 *	(2.6)	8.1	-1.5	(2.5)	6.2	4.6	(3.1)
Sibling	0.0	0.0	(0.0)	-0.4	5.8 **	(1.8)	6.3	0.3	(1.5)	0.9	-1.6	(2.0)	6.3	-3.0	(2.4)
Other Relative	2.6	1.9	(3.2)	1.1	9.3 ***	(3.0)	10.3	6.0	(2.0)	3.3	2.0	(1.9)	3.5	8.0	(2.2)
Primary care is informal,	7.9	3.4	(5.3)	10.3	-2.1	(4.3)	10.1	8.0-	(1.9)	12.6	-6.4 **	(2.7)	13.0	-5.4	(3.4)
non-relative															
Non-relative, in child's home	2.0	-2.3	(1.5)	2.2	1.9	(2.4)	5.2	-1.0	(1.4)	•		'	٠		•
Non-relative, not in child's	5.9	8.8	(5.2)	8.2	4.0	(3.7)	5.0	0.2	(1.4)	•		'	•		•
Other primary care	0.0	0.0	(0.0)	1.1	0.1	(1.3)	1.0	* 8.0-	(0.5)	•			•		•
Received child care subsidy in past month	0.5	2.2	(2.6)	1.5	3.1	(2.3)	24.3	2.5	(2.7)	13.0	1.6	(3.1)	17.9	4.5	(3.9)
PCP (Primary Care Provider) Licensed	19.8	11.4	(9.5)	30.9	1.2	(7.0)	13.6	0.3	(2.2)	•	•		٠		٠
PCP cost per week for focal child	5.4	5.3	(3.9)	6.7	4.1	(6.5)	22.6	8.3	(7.9)	17.6	1.9	(3.3)	20.3	** 0.8-	(3.8)
Child feels safe with PCP	'	•	'	•		'	63.8	4.1	(3.0)	58.0	4.4	(4.5)	59.3	6.0-	(5.3)
PCP plans activities	1		•	1	•	'	53.3	3.7	(3.1)	•		. 1	1		. 1
Sample size (Total)	72	(130)		161	(230)		487	(994)		245	(501)		197	(353)	

NOTES: The FTP and MFIP samples include children ages 5-12 at the time of the survey. The NEWWS samples includes children ages 5-7 at the time of the survey. The CTJF sample includes children ages 3-14 at the time of the survey. Program and control groups are matched using the partial propensity score method.

^a Impacts are adjusted for the effects of the covariates. *Significant at the 10 percent level, ***Significant at the 1 percent level.

Table 8: Impact on Child Care Use for Focal Children, by Program

FTP		Welfare Stayers Standard Error in Parentheses	FTP NEWWS NEWWS NEWWS	Atl-HCD Atl-LFA GrRp-HCD	0
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		FTP			NEWWS Atl-HCD			NEWWS Atl-LFA			NEWWS GrRp-HCD			NEWWS 3rRp-LFA	
Outcome	Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a		Control Group	Impact ^a	
Employed in Prior Month	20.7	8.6	(10.2)	17.5	1.4	(3.0)	18.5	0.3	(3.3)	32.8	-3.6	(8.8)	32.4	-2.9	(9.9)
Used outside care consistently	24.4	0.2	(9.7)	31.2	4.1	(3.7)	30.4	-1.2	(3.9)	52.5	5.2	(7.4)	53.9	-1.0	(7.2)
past 4 weeks Primary care is formal	9.5	-7.8	(4.8)	11.9	5.1 *	(2.7)	12.1	3.0	(2.9)	7.0	4.2	(4.1)	7.3	-2.3	(3.5)
Head Start, nursery school	3.0	4.0-	(3.2)	5.3	*** 9.9	(2.1)	6.2	1.1	(2.1)	5.7	2.2	(3.5)	9.9	-1.9	(3.4)
or center After-school program	6.5	* 4.7-	(3.9)	4.8	-0.9	(1.6)	4.1	-0.5	(1.6)	0.9	0.8	(1.8)	0.7	-0.4	(1.0)
Summer Camp	0.0	0.0	,	1.7	-0.7	(0.9)	1.8	2.3	(1.4)	0.3	1.2	(1.4)	0.0	0.0	(0.0)
Primary care is informal	14.9	8.1	(9.2)	17.1	-0.7	(2.9)	16.7	-4.0	(3.0)	35.1	-0.1	(7.1)	36.1	5.1	(7.2)
Self	0.0	0.0		0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)
Partner Od. or Beneat	-0.7	6. 6.	(2.2)	0.8	9.0-	9.0	0.8	-0.1	(0.8)	3.8	-2.0	(4.6)	4.0 0.0	 	(2.2)
Outet Falent Grandparent	0.0	0.0	(8.0)	2.7	0.4 1.0	6.0	C.1	-1 -	(0.0)	7.5	0.0 4	(6.4)	2.9 19.1	5.5 0.0	(2.2)
Sibling	1.6	9.0	(3.1)	2.0	1.1	(1.2)	2.2	-0.1	(1.2)	1.6	0.2	(1.8)	1.6	3.4	(2.6)
	2.0	1.6	(3.9)	4.9	-1.8	(1.5)	4.7	-1.6	(1.6)	7.5	0.2	(4.0)	8.4	1.7	(4.3)
Primary care is informal,	0.0	0.0		1.6	-0.2	(1.0)	1.1	-0.1	(0.9)	9.5	0.3	(4.1)	9.5	-2.7	(4.0)
Non-relative, in child's home	0.0	0.0		0.0	9.0	(0.4)	0.0	1.0 *	(0.0)	5.1	-0.3	(3.2)	0.9	-3.2	(3.0)
Non-relative, not in child's home	0.0	0.0		1.7	8.0-	(6.0)	Ξ	+ 1:1	(0.6)	4.3	0.7	(3.0)	3.5	0.5	(2.8)
Other primary care	0.0	0.0		1.0	-0.5	(0.7)	6.0	6.0-	(0.6)	1.0	8.0	(1.7)	1.0	-1.1	(1.0)
Received child care subsidy in past month	2.9	-0.2	(3.9)	5.1	3.8*	(2.0)	5.6	1.5	(2.1)	3.1	1.1	(2.6)	3.1	-1.4	(2.2)
PCP (Primary Care Provider) Licensed	11.1	-9.1 *	(5.1)	31.1	5.3	(3.8)	29.9	-1.4	(4.0)	30.7	-2.8	(9.9)	28.0	-3.8	(6.5)
PCP cost per week for focal child	3.2	4.2-	(2.1)	1.4	0.2	(1.0)	1.4	0.1	(0.7)	3.2	2.2	(1.8)	3.6	1.3	(1.6)
Child feels safe with PCP	23.8	ر. د. د	(9.4)	•		'	•		1	•		1	•	•	•
PCP plans activities	12.5	4.7-	(6.8)	•		1			1	•		1	•	•	•
Sample size (Total)	54	(106)		330	(670)		329	(587)		113	(221)		104	(213)	

(continued)

Table 8 Continued: Impact on Child Care Use for Focal Children, by Program Welfare Stayers
Standard Error in Parentheses

		NEWWS Rvsd-HCD			NEWWS Rvsd-LFA			CTJF			MFIP		Ince	MFIP Incentives Only	
Outcome	Control Group	Impact ^a		Control Group	Impact ^a										
Employed in Prior Month	13.9	12.7 ***	(4.0)	23.1	11.4 ***	(4.3)	27.2	* 8.7	(4.3)	41.8	8.3 **	(3.9)	9.74	1.3	(4.0)
Used outside care consistently	23.7	5.8	(4.5)	33.1	11.6 **	(4.7)	31.9	12.7 ***	(4.6)	37.7	-0.3	(4.0)	41.0	-3.7	(3.9)
past 4 weeks Primary cara is formal	0.0	3 6	(4.8)	ν,	60	0.0	4.0	4 %	(5.3)	11.4	3.0	(7.7)	13.4	90	(2.7)
Head Start, nursery school	1.2	3.0 *	(1.6)	3.6	0.0	(6:0)	0.0	6. 4.	(6.5)	6.8	1.6	(2.2)	7.4	-1.3	(2.0)
or center			,						,			′			,
After-school program	0.7	-0.4	(0.7)	1.6	6.0-	(1.1)	3.1	3.1	(2.0)	4.6	1.3	(1.9)	5.9	1.4	(2.0)
Summer Camp	0.0	0.0	(0.0)	0.0	0.0		6.0	0.7	(1:1)	0.0	0.0	(0.0)	0.0	0.4	(0.3)
Primary care is informal	18.1	0.2	(3.9)	20.2	** 9.8	(4.1)	23.9	5.5	(4.2)	19.1	9.0	(3.4)	21.7	-1.6	(3.4)
Self	0.0	0.0	(0.0)	0.3	0.1	(0.5)	0.0	0.0		0.2	8.0	(0.7)	8.0	1.5	(1.0)
Partner	0.1	1.5	(0.0)	0.2	4.9 ***	(1.4)	2.4	6.0-	(1.3)	1:1	0.2	(0.9)	1.1	1.6	(1.1)
Other Parent	2.3	-0.1	(1.5)	5.6	-3.9 *	(2.0)	3.3	-0.2	(1.7)	4.2	-1.9	(1.5)	4.6	-4.3 ***	(1.3)
Grandparent	7.6	2.2	(2.8)	8.5	3.2	(5.9)	9.7	5.7 **	(2.9)	4.9	0.0	(1.8)	4.5	4.8 **	(2.1)
Sibling	2.9	-0.5	(1.6)	2.3	3.0 *	(1.8)	5.3	1.4	(2.1)	3.7	1.5	(1.7)	5.7	-1.8	(1.7)
Other Relative	5.1	-3.0	(1.9)	3.2	1.4	(1.8)	5.4	9.0-	(2.1)	4.9	0.0	(1.8)	4.9	-3.5 **	(1.5)
Primary care is informal,	3.4	3.3	(2.2)	7.5	4.1	(2.7)	3.4	2.5	(2.0)	7.1	-3.9 **	(1.8)	0.9	-2.6	(1.8)
non-relative															
Non-relative, in child's home	1.7	0.3	(1.4)	2.7	8.0	(1.6)	2.0	9.0	(1.4)	•	•		•	•	
Non-relative, not in child's	1.7	3.0 *	(1.8)	4.8	3.3	(2.3)	1.4	1.9	(1.4)	1	1	1	ı		1
home															
Other primary care	0.3	-0.3	(0.4)	0.2	-0.2	(0.3)	0.0	0.0		1		1	•		
Received child care subsidy in past month	0.8	2.5 *	(1.4)	1.4	2.6 *	(1.5)	11.2	* 6.5	(3.3)	9.6	14.9 ***	(3.0)	10.5	*** 9.6	(2.9)
PCP (Primary Care Provider) Licensed	23.5	-2.3	(4.4)	29.5	-3.1	(4.5)	5.3	5.1 **	(2.5)	•	٠		•		
PCP cost per week for focal child	1.6	2.1 *	(1.1)	2.8	-0.3	(1.2)	9.2	8.2	(8.8)	9.1	** 8.4	(2.2)	10.4	-5.0 **	(2.4)
Child feels safe with PCP	1	•		•		,	29.9	13.8 ***	(4.6)	35.3	-1.7	(3.9)	38.1	-3.0	(3.9)
PCP plans activities	•	•		1			24.1	10.5 **	(4.3)	i	ı		ı	1	
Sample size (Total)	249	(447)		324	(463)	П	231	(472)	П	294	(602)		342	(613)	

SOURCE: MDRC calculations from two-, three-, and four-year client surveys, and from administrative records.

NOTES: The FTP and MFIP samples include children ages 5-12 at the time of the survey. The NEWWS samples include children ages 5-7 at the time of the survey. The CTJF sample includes children ages 3-14 at the time of the survey. Program and control groups are matched using the partial propensity score method.

^a Impacts are adjusted for the effects of the covariates.

*Significant at the 10 percent level, **Significant at the 5 percent level, **Significant at the 6 percent level, **Significant at the 10 percent level, **Significant at the 2 percent level, **Significant at the 2 percent level, **Significant at the 3 percent level, **Significant at the 4 percent level, **Significant at the 5 percent level, **Significant at the 6 percent l

Table A-1: Sample Sizes for Focal Child Survey By Age of Focal Child At Time of Survey

		Age 5-7			Ages 7+	
Outcome	Total	Program Group	Control Group	Total	Program Group	Control Group
FTP	494	237	257	614	306	308
NEWWS						
Atlanta HCD	1,013	512	501	7	3	4
Atlanta LFA	889	388	501	9	5	4
Grand Rapids HCD	414	201	213	4	2	2
Grand Rapids LFA	434	221	213	4	2	2
Riverside HCD	568	253	315	9	3	6
Riverside LFA	682	204	478	10	4	6
CTJF	566	269	297	903	480	423
MFIP Full Sample	289	151	138	815	413	402
MFIP Incentives Only	265	127	138	702	300	402
Total	4,447	2,563	1,884	2,663	1,518	1,145

NOTE: Each site in NEWWS and MFIP used the same control group for each program group. Riverside HCD used only a portion of the Riverside control group (322 out of 486).

Table A-2: Sample Sizes for Focal Child Survey By Welfare Status

	We	elfare Leaver	S		Welfare Sta	yers
Outcome	Total	Program Group	Control Group	Total	Program Group	Control Group
FTP	921	484	437	174	52	122
NEWWS						
Atlanta HCD	345	180	165	681	340	341
Atlanta LFA	303	138	165	599	258	341
Grand Rapids HCD	199	97	102	222	108	114
Grand Rapids LFA	218	116	102	223	109	114
Riverside HCD	116	58	58	462	198	264
Riverside LFA	175	69	106	519	139	380
CTJF	907	507	400	560	241	319
MFIP Full Sample	543	256	287	561	308	253
MFIP Incentives Only	443	156	287	524	271	253
Total	3,558	2,061	1,497	3,553	2,024	1,529

NOTES: Each site in NEWWS and MFIP used the same control group for each program group. Riverside HCD used only a portion of the Riverside control group (322 out of 486).

Table A-3: Sample Sizes for Focal Child Survey By Welfare Status, Matched Samples

	Matche	d Welfare Lea	ivers	Matcheo	d Welfare Sta	yers
Outcome	Total	Program	Control	Total	Program	Control
		Group	Group		Group	Group
FTP	988	484	504	106	52	54
NEWWS						
Atlanta HCD	355	180	175	670	340	330
Atlanta LFA	314	138	176	587	258	329
Grand Rapids HCD	199	97	102	221	108	113
Grand Rapids LFA	227	116	111	213	109	104
Riverside HCD	130	58	72	447	198	249
Riverside LFA	230	69	161	463	139	324
CTJF	994	507	487	472	241	231
MFIP Full Sample	501	256	245	602	308	294
MFIP Incentives Only	353	156	197	613	271	342
Total	3,796	2,061	1,735	3,472	2,024	1,448

NOTES: Program and control groups are matched using partial propensity score method.

Table A-4: Baseline Characteristics for Focal Aged Children Pooled Sample

	Program	Control	Difference	Standard
Outcome	Group	Group	Difference	Error
	•	·		
Age of Respondent at Baseline 20-24	25.2	26.7	-1.5	1.0
25-34	55.0	55.2	-0.2	1.0
35-44	16.0	15.1	0.8	0.9
Greater than 45	1.2	1.1	0.1	0.3
Focal child age at random assignment	4.5	4.4	0.1 ***	0.0
Ethnicity of respondent: black	50.5	49.6	0.9	1.2
Ethnicity of focal child: Native American, Hispanic or other	3.6	3.0	0.6	0.4
Martial status: never married	61.9	58.7	3.2 ***	1.2
Has no HS diploma or GED	40.1	40.8	-0.8	1.2
AFDC Status: applicant ^b	34.5	39.6	-5.1 ***	1.5
••				
Not working full-time because	40.0	44.7	2 7 44	1.7
cannot arrange childcare ^{a, b}	48.2	44.7	3.5 **	1.7
Current job provides childcare ^{a, b, c}	0.2	0.4	-0.2	0.3
Not going to a school or job training				
because afraid to leave child at day care ^{a, c}	22.9	23.1	-0.2	1.1
Not going to a school or job training				
because cannot arrange childcare ^{a, c, d}	75.1	75.3	-0.2	1.5
Prefer not to work to take care of family ^a	28.1	27.4	0.8	1.1
Have someone they trust to				
take care of kids ^a	73.7	74.9	-1.3	1.0
Number of children in household at baseline	2.2	2.2	0.0 *	0.0
Ever receive food stamps,	82.5	80.1	2.4 ***	0.9
prior quarter one				
Ever received AFDC				
Prior Quarter 1	81.6	79.8	1.7 *	0.9
Prior Quarter 2	75.7	71.6	4.1 ***	1.0
Prior Quarter 3	74.1	70.1	4.0 ***	1.1
Prior Quarter 4	71.1	67.9	3.2 ***	1.1
Prior Quarter 5 ^d	69.2	68.4	0.8	1.2
Prior Quarter 6 ^d	67.9	67.8	0.1	1.3
Prior Quarter 7 ^d	66.2	65.7	0.5	1.3
Prior Quarter 8 ^{c, d}	54.1	53.5	0.6	1.5
1 1101 Quarter 0	JT.1	33.3	0.0	1.3

(continued)

Table A-4: Baseline Characteristics for Focal Aged Children (Contined)
Pooled Sample

	Program	Control	Difference	Standard
Outcome	Group	Group		Error
Number of full months receiving	8.6	8.1	0.4 ***	0.1
AFDC in prior year				
Number of full months receiving FS in prior year	8.8	8.3	0.5 ***	0.1
Any barrier to full time work ^a	53.6	51.9	1.7	1.3
Employed				
Prior Quarter 1	28.8	30.1	-1.3	1.1
Prior Quarter 2	28.0	29.7	-1.7	1.1
Prior Quarter 3	28.0	29.4	-1.4	1.1
Prior Quarter 4	26.3	29.8	-3.5 ***	1.1
Prior Quarter 5	26.5	28.9	-2.4 **	1.1
Prior Quarter 6	26.9	28.9	-1.9 *	1.1
Prior Quarter 7	27.6	28.2	-0.6	1.1
Prior Quarter 8	25.8	27.3	-1.5	1.0
Earnings in year prior to baseline	1,879	2,149	-269 **	106
Earnings in year prior to baseline squared	22,491,695	25,218,542	-2,726,847	2,533,979
In FTP group	13.3	12.2	1.0	0.8
In NEWWS Atlanta HCD group	12.7	21.9	-9.2 ***	0.9
In NEWWS Atlanta LFA group	9.7	21.9	-12.2 ***	0.9
In NEWWS Grand Rapids HCD group	5.0	9.4	-4.4 ***	0.6
In NEWWS Grand Rapids LFA group	5.5	9.4	-3.9 ***	0.6
In NEWWS Riverside HCD group	6.3	14.0	-7.7 ***	0.7
In NEWWS Riverside LFA group	5.1	17.5	-12.4 ***	0.8
In CTJF group	18.3	15.6	2.7 ***	0.9
In MFIP group	13.8	23.4	-9.6 ***	0.9
In MFIP Incentives Only Group	10.4	23.4	-13.0 ***	0.9
Sample size (total = 7,127)	4,093	3,034		

NOTES:

^aNot available for CTJF program.

^bNot available for NEWWS programs.

^cNot available for FTP program.

^dNot available for MFIP programs.

Table A-5
Comparison of Welfare and Employment Impacts
Full Survey Sample and Focal Child Sample

	Sample Size	Size	Welfare Impact	pact	Employment Impact	npact
	Full Survey Sample	Focal Child Sample	Full Survey Sample	Focal Child Sample	Full Survey Sample	Focal Child Sample
FTP	1,711	1,108	-11.4 ***	-12.3 ***	3.7 *	** 9.9
NEWWS			(1.7)	(2.2)	(2.3)	(2.8)
ATL-HCD	3,003	1,026	-3.2	-3.9	8.0	3.1
ATL-LFA	3,003	806	(2.1) -4.8 **	(3.1) -6.7 **	(2.1)	(3.2) 5.4 *
GR-HCD	1,732	421	(2.1)	(3.1) -0.9	(2.1)	(3.2)
GR-I FA	1 732	441	(2.8)	(4.9)	(2.9)	(4.8)
			(2.8)	(4.9)	(2.9)	-(4.8)
RV-HCD	1,633	278	-2.5 ** (1.0)	.4.9 (3.9)	2.9 *** (1.0)	11.9 ***
RV-LFA	2,299	694	-8.8 ***	-11.9 ***	7.1 ***	12.7 ***
CTJF	2,423	1,470	-10.9 ***	-13.3 ***	7.6 ***	*** 9.9 (5.0)
MFIP-FULL	1,730	1,104	(···) 8.0°	6.3 **	4.0	5.3 *
MFIP-IO	1,427	296	(2.2)	(2.8)	(2.2)	(2.7)
			(2.6)	(3.0)	(2.6)	(3.0)

SOURCES: MDRC calculations from two-, three-, and four-year client surveys, and from administrative records.

NOTES: Impacts are adjusted for the effects of covariates.