The Next Generation

Family and Individual Predictors of Child Care Use by Low-Income Families in Different Policy Contexts

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The authors welcome comments and discussion.

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The Next Generation Project

This paper is part of the Next Generation's working paper series. The Next Generation is a project that examines the effects of welfare, antipoverty, and employment policies on children and families. Drawing on rich data from recent welfare reform evaluations, the project aims to inform the work of policymakers, practitioners, and researchers by identifying policy-relevant lessons that cut across evaluations.

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Abstract

We examine family and individual characteristics that predict low-income parents' child care use, problems with child care, and receipt of public subsidies using data from three demonstration studies testing policies to promote employment for low-income parents (primarily single mothers). The characteristics that mattered most and that were more strongly related to center care than to home-based care include family structure (ages and number of children), parents' education and work history, and personal beliefs. The effects of race and ethnicity were mixed suggesting that generalizations about ethnic differences in child care preferences should be viewed with caution. In addition, there is minimal support for the proposition that many low-income parents do not need child care assistance because they use relative care. Experimental policies designed to reduce the cost of care and to increase parents' employment were not necessarily effective in alleviating all barriers to employment but did alleviate the difficulties associated with providing child care for very young children and for large families (except in the case of policies that mandated employment) and were more effective in reaching parents with relatively less consistent prior employment experience.

Introduction

Child care is a central issue in both welfare and income-support policies designed to promote parental employment in low-income families. Prior to 1996, federal funding for child care fell in three categories: tax credits, child development block grants for assistance to low-income families that began in 1991, and subsidies to recipients of AFDC and to parents at risk for entering AFDC. In 1996, the federal assistance programs for low-income families were combined into the Child Care Development Fund, and levels of funding were increased. At present, there is considerable debate about whether current subsidies are adequate; how critical they are as a support for parental employment; and whether they suit the needs and preferences of low-income parents and their children.

These debates can be informed by taking into account the diversity within the population of low-income parents. Among parents at all income levels, individual differences in parents' abilities, values, social circumstances, and child care needs affect decisions about employment and child care within a given policy context. These individual differences may interact with different policies; that is, different policies may match or fail to match the needs of different types of families.

The purpose of this paper is to examine family and individual characteristics that predict parental decisions about using child care, their problems with child care, and the likelihood that they will receive subsidies in different policy contexts. We examine family structure, parents' human capital and resources, geographic location and ethnic group, and personal characteristics as predictors of child care use, subsidy use, and problems with child care for low-income parents (primarily single mothers) who participated in evaluations of three demonstration programs designed to increase employment. These programs were selected because each offered enhanced child care assistance in the form of free on-site or nearby child care providers, generous and efficient subsidies, and/or direct payment to providers. In all three studies, parents were randomly assigned to the program group which was eligible for the enhanced child care assistance or to a control group which was eligible for whatever federally- and locally-funded forms of child care assistance were available in their locale. All three programs led to higher use of child care, particularly care in child care centers, by program group families than by controls (Bos, Huston, Granger, Duncan, Brock, & McLoyd, 1999; Gennetian & Miller, 2000; Quint, Bos, & Polit, 1997).

Our question in this paper is whether individual differences measured at baseline were related to child care decisions <u>within</u> each program and control group. The analysis provides rich information about a broad range of low-income populations from several regions of the United States, including teen mothers, welfare recipients, and individuals outside the welfare system.

Child Care

Child care is an umbrella term referring to any form of nonparental care that occurs on a regular basis. We classify types of care as center, nonrelative or relative care. A <u>center</u> refers to a group setting designed for the care of young children. Centers are typically not in a home setting; there are multiple caregivers; and they typically serve relatively large numbers of children. Center care includes programs designed primarily for enrichment or early education (e.g., Head Start, preschools, or after-school programs) as well as settings designed primarily to provide care while parents are working. In all states, centers must be licensed and are therefore

subject to some regulations regarding physical safety, ratios of caregivers to children, and the like. Center care is generally considered the most "formal" type of care, and it is usually the most expensive for parents unless it is subsidized by public funds (e.g., Head Start). Center care is of particular interest because there is also evidence that, on average, it is of higher quality than home-based care (Chase-Lansdale, Coley & Li Grining, 2001) and, with quality equated, that it is associated with better cognitive and language development for young children than is home-based care (NICHD Early Child Care Research Network, 2000).

Nonrelative care can occur in the caregiver's home (e.g., family child care homes) or in the child's home. Parents typically pay for such care. Some child care homes are licensed, certified, or registered, and some receive training and technical assistance, but many do not. Relative care is provided by grandparents, siblings, or other relatives in the child's home or in their homes. Parents sometimes pay for such care. In some studies, "relatives" include the parent's partner or the child's other parent.

Subsidies and Child Care Problems

As one purpose of this paper was to understand individual differences within various policy contexts, we examined parents' reports that child care problems interfered with their ability to sustain employment and their use of child care subsidies. Subsidies are designed to facilitate parents' employment by reducing the cost of child care, but there is considerable disagreement about their effectiveness. The National Study of Child Care for Low-Income Families indicate that, despite the large increase in the number of children receiving subsidized care, states served only 15-20% of federally-eligible children in 1999; no state served more than 25% with funds from federal and state sources. In 12 of the 17 states studied, there were waiting lists of families who had requested but did not receive subsidies (Layzer & Collins, 2000). At the same time, there are widespread reports of low take-up rates for child care subsidies (e.g., from state studies of TANF leavers), suggesting that even when child care subsidies are available, most families do not use them (Schumacher & Greenberg, 1999). In a recent analyses of post-1996 data, Blau and Tekin (2001) conclude that subsidies promote employment and participation in schooling, but only for parents receiving welfare. They attribute this finding to the federal requirement that priority for subsidies be given to parents receiving or at risk for receiving TANF.

Low take-up of subsidies could indicate that many parents have relatives or others who can provide unpaid care, but it may also result from bureaucratic hassles, lack of information about eligibility, and lack of available child care slots. Many employed parents with low incomes do use relative care, but close to half (44%) of United States low-income families with employed mothers used nonrelative care for preschool children in a recent national survey (Capizzano et al., 2000), and 42% used center-based care for their 3-5-year-olds (Tout, Zaslow, Papillo, & Vandivere, 2001). Moreover, when subsidized care is available, low-income parents increase their use of center care, suggesting that many prefer it to other forms of care (see Zaslow, Oldham, Moore, & Magenheim, 1998). Single employed mothers are more likely than employed married mothers to pay for care, and low-income parents who pay for care spend 25-30% of their incomes (Hofferth, 1995; Phillips, 1995). Hence, child care costs lead to difficult choices about employment and deployment of family resources for many low-income parents.

One reason for these contradictory conclusions is that a "one-size-fits-all" subsidy policy may not fill the needs of some families. An analysis of in-depth qualitative data collected

from a sample of parents in the New Hope study indicated that child care decisions were based on complex sets of family values and circumstances. These included their particular combination of material and social resources, their values and beliefs regarding parenting and care, their efforts to maintain balance and reduce conflict for themselves and those around them, and the degree of stability and predictability in day-to-day activities. The available subsidy programs addressed some families' needs, but did not address those of others. For example, parents with irregular and nonstandard work hours had few viable child care settings from which to choose (Lowe & Weisner, 2001).

Predictors

The predictors were selected on the basis of existing literature, but we were constrained by the measures obtained at the onset of the three studies we analyzed. We grouped our predictors as follows: family structure, human capital and resources, location and ethnic group, and personal beliefs and supports.

Family structure. In families from all income levels, the need for child care is likely to depend on family structure. The most obvious of these are family size and ages of children, but we also examined child gender, age of the parent, presence of an adult relative in the household, and whether the parent had ever been married. In general, the larger the family and the younger the children, the more costly and demanding is the child care required. Child care subsidy use is greatest for parents with preschool children (Blau & Tekin, 2001). From birth to age 6, the older the child, the more likely they are to be in some type of nonmaternal child care (Leibowitz, Klerman, & Waite, 1992; Fuqua & Labenshon, 1986; Tout et al.,2001), and the more likely are their mothers to be employed (Pungello & Kurtz-Costes, 1999). Older preschool children (3- to 5-year-olds) are also more likely to be in formal care than are younger children (birth to 2) (Fuller et al., 1996; Liebowitz, Waite, & Wisberger, 1988; Lehrer, 1983; Tout et al., 2001). This difference may be due to mothers' beliefs about the developmental needs of their children (Meyers & van Leuwen, 1992) as well as to differences in availability and cost for infant and preschool center care (Hofferth, 1995; Willer et al, 1990). During the school years, children spend decreasing amounts of time in nonmaternal child care. By about fifth grade, few participate in extended day care, but many spend time in a range of settings that provide some supervision (Belle, 1999; Capizzano et al., 2000; Posner & Vandell, 1999; Marshall et al, 1997).

Children in large families receive less child care than do those in small families (NICHD Early Child Care Research Network, 1997), and when they do participate in child care, it is more likely to be relative or home-based than center-based (Johansen, Leibowitz, & Waite, 1996; NICHD Early Child Care Research Network, 1997; Zaslow, et al., 1998). Parents may find it more difficult and expensive to arrange care for a large number of children than for a small number, and the cost of center care for multiple children can be very high. Relative and nonrelative care may be attractive because it is not age-graded in the same way child care centers are; therefore, siblings of different ages can be in the same child care setting rather than requiring separate enrollment, often in separate locations. Finally, in large families, older children may take responsibility for the care of younger siblings.

Adult family members in the house may provide child care, although they can also require care, posing a barrier to employment. Nonetheless, available research indicates that when a second parent or another relative lives in the home, children are likely to receive care from those

individuals while mothers are employed (Fuller et al., 1996; NICHD Early Child Care Research Network, 1997). Young parents, especially adolescent mothers, may be more likely than older parents to have parents of their own who can provide child care.

Human capital and resources. The child care studied here was used primarily while parents were employed or participating in education and training activities. Because education, literacy, work history, welfare history, transportation and stable housing increase the likelihood of employment, one would expect that these indicators of human capital and material resources would be related to the use of child care.

Available evidence indicates that adults with more human capital use more child care, and are more apt to use center-based as opposed to relative care. In general, parents with higher levels of education use more center-based rather than relative or home-based care (Hofferth & Wissoker, 1992; Hofferth et al., 1991; Zaslow, et al., 1998). One reason may be higher incomes (NICHD Early Child Care Research Network, 1997), but education may also signify the value placed on academic and educational stimulation. In a sample of welfare mothers, those who placed their children in early childhood programs provided more cognitive stimulation and emotional support at home than did mothers who did not use nonmaternal care (Zaslow, et al., 1998).

Adults with high human capital may be more likely to have stable, full-time jobs with regular schedules and relatively high earnings, all of which increase the likelihood of using center care. For the most part, the more hours mothers work, the more likely they are to use paid care, including centers and family child care homes, rather than other forms of care (Capizzano et al, 2000; Connolley & Kimmel, 1999; Edrwins & Buffardi, 1994; Fuller et al., 1996; Hofferth & Wissoker, 1992; Kontos et al., 1995; NICHD Early Child Care Research Network, 1997). For school-age children, low-income families used more supervised arrangements and less self-care, but fewer before- and after-school programs than did higher income families (Capizzano et al., 2000).

Transportation and housing circumstances could affect employment as well as access to child care settings. In one sample, parents who lived in public housing and who had moved frequently were more likely to use early childhood programs than were those in other residential circumstances.

Location and ethnic group. Both geographic context and ethnic group may affect employment and child care decisions. The availability of employment and access to child care are likely to vary by geographic context (Capizzano et al., 2000; Phillips,1995). On the whole, urban communities have more center-based child care than do rural areas (Fuller, Holloway & Liang, 1996); parents in rural areas use more relative care and less center care than do urban parents (Shoffner, 1986).

Ethnic group membership may affect access to jobs, access to child care, beliefs and attitudes about child care, family resources, and many other aspects of the cultural ecology. Compared to white families, some studies report that black families use relative care more and center care less (Hofferth & Wissoker, 1992). When income is controlled, however, black families are as likely or more likely to use center-based care (Fuller et al., 1996; Hofferth et al., 1991; NICHD, 1996). Latinos are less likely than other groups to use center-based care (Hofferth & Wissoker, 1992). Interviews with African American and Hispanic parents indicate that they have relatively low trust in home-based providers whom they do not know; if relatives are unavailable, they prefer centers to child care homes because they believe there is less danger of abuse in

a relatively public group setting (Phillips, 1995; Lowe & Weisner, 2001). Black parents use before-and after-school programs more than Latina parents do, and white children are more likely than black children to be in self-care by the time they are 10-12 years old (Capizzano, Tout, & Adams, 2000).

Personal characteristics. Parents' decisions about employment and use of child care are likely to depend on personal characteristics such as psychological adjustment, future orientation, mastery beliefs, attitudes about welfare, and beliefs about combining work with family responsibilities. In two analyses of mothers who were eligible for welfare, there were no relations of personal dispositions (depression or perceived efficacy) to child care patterns (Yoshikawa, 1999; Zaslow, et al., 1998). By contrast, maternal attitudes and beliefs are important predictors of their decisions about employment and child care. Mothers with nontraditional attitudes toward child-rearing, gender roles, and women's participation in the labor force use more hours of nonmaternal care and more formal care than do those with more traditional views (NICHD Early Child Care Research Network, 1997; Chang & Huston, 2001; Vandell et al., 1997). The parent's social context may also support or hinder her ability to sustain employment and may affect her child care choices. If family members provide social support and encourage employment, and if the parent has stable routines, she may be more likely to sustain employment and to use child care.

Different Policy Contexts

The three demonstration studies analyzed in this report were selected from a larger group of programs designed to promote employment of low-income parents because they included policy components specifically designed to reduce the barriers associated with availability or cost of child care. In New Chance, free child care was provided while mothers participated in program activities or jobs; center-based care was supplied on site or nearby in most of the sites; in the others, parents were assisted in finding care. In New Hope, parents who worked full-time were eligible for subsidies paid directly to the provider for the full cost of any licensed care (center or family day home) except for a small co-payment by the parent. In the Minnesota Family Investment Program (MFIP), subsidies were available for care while mothers worked or participated in work preparation. The amount of the subsidy was equivalent to that paid by the AFDC or TANF program available to the control group, but it was paid directly to the provider rather than being part of the welfare grant. Therefore, parents did not have to wait for reimbursement after paying for care. All of the programs provided supportive staff services that included encouragement and help in locating child care, perhaps overcoming problems for people who would not have done so with less support.

There were important differences among the samples in the three studies. Compared to the other two programs, parents in New Chance were much younger, had fewer and younger children, were less likely to have been married, were more likely to live with another adult, had lower average education, and had less employment experience. The samples in New Hope and New Chance were both volunteers who did not have to be receiving welfare to be eligible, and they had similar ethnic distributions (about half African American and 25 to 30% Hispanic). The Minnesota study included all AFDC recipients; the sample was predominantly European American; and some lived in rural areas. New Hope and MFIP were both in the upper midwest and the sample members were similar in most respects—average age, family size, education level, and previous earnings.

Hence, these policies all reduced the out-of-pocket costs of care, and might be expected to increase the use of formal care and other forms of paid care for those parents who preferred such care. In fact, the comparisons of experimental and control groups demonstrated significant impacts on using care, particularly center-based care, in all three studies (Bos et al., 1999; Gennetian & Miller, 2000; Quint et al., 1997). Nonetheless, these policies may have matched the needs of some families while failing to address the needs and concerns of others. Because all three programs were designed to reduce the costs of care, they may have reduced the barriers to employment associated with children's ages, family size, or other family structure variables. Because the interventions encouraged or, in some instances, required parents to seek training and employment, they may have reduced the differences associated with human capital and personal characteristics. On the other hand, other individual differences may have emerged as important factors in parents' responses to these policy contexts.

Research Questions

In the analyses that follow, we asked two sets of questions. Among low-income parents (primarily single mothers), to what extent do family structure, human capital and resources, geographic location, ethnic group, and personal circumstances and beliefs predict the amount and type of child care used, child care as a barrier to employment, and use of public subsidies? Do policies designed to facilitate the use of care by reducing its cost and increasing incentives for employment attenuate or increase the relations of any of these characteristics to decisions about the amount or type of child care used, child care problems, or subsidy use?

Method

The data for these analyses were taken from three random-assignment experiments: New Chance, New Hope, and the Minnesota Family Investment Program (MFIP). Each study was designed to test a different experimental program intended to increase parental employment. One or two children in each family were identified as focal children for intensive study of impacts on children. In each study, characteristics measured at baseline were grouped into four conceptually-guided sets: family structure, human capital, geographic location, ethnic group, and psychological and social characteristics.

Description of Studies

New Chance was a voluntary program "that provided comprehensive education, training, and other services intended to increase the long-term self-sufficiency and well-being of these mothers and their children" (Quint, Bos, & Polit, 1997). The target group was mothers 16 to 22 years old who had given birth at age 19 or younger, were receiving AFDC, and did not have a high school degree or GED. At random assignment, focal children's ages ranged from 0 to 6 years with an average of 1½ years; they had an average age of 3 years at the 18-month follow-up[i].

One feature of the New Chance program was free child care when mothers were participating in program activities, including jobs, throughout their 18 months of eligibility for the program. In slightly over half of the sites, there was a child care center at the site where mothers received educational and other services; in the other half, the program helped to arrange nearby off-site care in centers or child care homes or offered referral services to help mothers find care.

Program-group children were more apt than controls to have experienced child care, particularly center-based care, in infancy and early childhood, but much of that care was unstable because mothers' program and job involvement was sporadic (Quint et al., 1997).

New Hope was conducted in Milwaukee, Wisconsin; it offered wage supplements, health care subsidies, and child care subsidies to adults who worked full time (30 or more hours a week). The target group was low-income adults of both sexes. Volunteers were randomly assigned to a program group who were eligible for services or a control group who were not. Our analyses were conducted on a subsample consisting of parents with children ages 1 through 10 years old at random assignment (3 through 12 at the follow-up evaluation) who were studied intensively in the original evaluation.

The New Hope child care subsidy could be used for any child age 12 or younger in any licensed child care center or child care home. Parents were required to contribute a small copayment; the amount depended on their income and family size. In the 24 months after random assignment, parents in the program group used more formal center-based and extended day care than did control parents, but there was no treatment effect on home-based care (Bos, et al., 1999).

In the Minnesota Family Investment Program (MFIP), recipients of AFDC were enrolled in a welfare waiver demonstration testing two policies—incentives only and mandated participation with incentives. All program group members received financial incentives for employment in the form of an earned income disregard that permitted them to keep part of their welfare grant while they had earnings. In addition, those in the mandated group were required to participate in work-focused employment and training activities. Focal children were ages 2 through 9 years old at random assignment (ages 5 through 12 at the follow-up evaluation 36 months later). Both the program and control groups were eligible for child care subsidies up to the county maximum amount, but, in the program group, the child care provider was paid directly by the county. In the control group, the parent paid for care and was later reimbursed through her welfare grant.

The 36-month evaluation demonstrated that program group children experienced more child care, particularly formal care, than did the control children (Gennetian & Miller, 2000). The sample used in our analyses included long-term welfare recipients and recent applicants in both urban and rural areas of Minnesota.

Predictors

All predictors were measured at baseline before individuals were assigned to program or control groups. Slightly different characteristics were measured in each study, but many were identical or comparable. The means and standard deviations are shown in Table 1.

Family structure. The predictors included age and gender of the target child, age of the youngest child, family size (number of children under 18), marital status (ever married), age of the parent, and other adult family member(s) in home.

Parent human capital and resources. Education, defined by years of completed schooling was available for all groups. In New Chance, literacy was measured by the Test of Adult Basic Education (Quint et al., 1997). The score indicates grade level. Employment history was indexed by "ever employed" (New Chance and MFIP), months in a full time job in the previous year (New Hope), and earnings during the previous year (all groups). Welfare history was defined as

time receiving AFDC (New Hope) or being long-term recipient (more than two years in MFIP). New Hope included a measure of access to a car and the number of residential moves in the previous year as indicators of resources.

Geographic area and ethnic group. Geographic area was indexed by size of city or urban-rural comparisons. In New Chance, the 16 sites were divided into large cities (population > one million), medium-sized cities (300,000 — 1 million), and small cities (< 300,000). In MFIP, there were three urban counties and three rural counties. Ethnic groups included African American, Hispanic, Native, European American, and "other groups."

Parents' beliefs and social context. Different measures were obtained in each study. In New Chance, depressive symptoms were measured with the Center for Epidemiological Studies Depression Scale (CES-D, Radloff, 1977), and the amount of social support was indicated by the number of people (friends/family members) who provide emotional support. In New Hope and MFIP, most applicants completed a Personal Opinion Survey at the time of random assignment. The questions in the two studies were different, but they represented some overlapping constructs.

In New Hope, seven variables were created. *Personal work adjustment* consisted of 10 questions dealing with personal problems that interfered with work (e.g., "You and the other workers argued and this got you into trouble", α = .77). High scores indicate few problems. Future orientation was three items indicating planning and goals (e.g., "Are you someone who plans ahead OR someone who does things on the spur of the moment?" α = .49). *Welfare stigma* was 2 items (e.g., " How many of the neighbors who you know well enough to say hello to are receiving welfare?" r =.60). *Social support* contained five questions concerning who is available to help (e.g., "When someone in your household is working, do relatives or friends help when problems come up, like caring for a sick child or shopping?" α = .43). *Family attitudes toward employment* was indicated by two questions (e.g., "Among your relatives and friends, how often does a woman going to work cause problems between her and her husband or boyfriend?" r = .50). Housing stability was 3 items including "Have you ever been homeless?" α = .42). *Daily routine* was indicated by one item, "Does everyone in your household who is not at work or at school have a supper together at the same time?"

In MFIP, the six variables were: *mastery,* six items (e.g., "I have little control over the things that happen to me," reversed scoring, α = .73); *family priority over work*, eight items (e.g., "If you had a choice, which would you prefer, getting a part-time job or staying home to take care of your family?" α = .78); *welfare stigma*, two items (e.g., "I feel that people look down on me for being on welfare," r = .46); *social support* , two items (e.g., "When I have trouble or need help, I have someone to talk to," r = .33); *barriers to work*, six items (e.g., "I cannot work at a part-time job for 10 hours a week right now because I have no way to get there everyday," α = .79); *child care as a barrier to work,* three items (e.g., "I cannot work because I cannot arrange for child care," α = .73).

Child Care Outcomes

The means and standard deviations of all child care variables appear in Table 2.[ii]

Four variables described how much and what kind of care children experienced during the period between random assignment and the follow-up evaluation. Whether the child had ever

been in any type of care was coded for all focal children (1= yes; 0 = no). For children who had been in care, we analyzed 2) months in center care, 3) months in nonrelative care, 4) months in relative care. For all parents, we coded whether they reported child care problems that interfered with work-related activities (1=yes; 0=no). For parents who used child care, we coded whether they had ever used child care subsidies (1=yes; 0=no).

Analysis Strategy

For each study, each child care variable was regressed on all predictors available in that study for the program and control groups separately. Logistic regressions were used on the dichotomous variables (use of any child care, child care problems, use of subsidies), and ordinary least squares regressions were performed on the continuous variables (months in center, nonrelative, and relative care). In the analyses of child care use, the focal child was the unit of analysis. For child care problems and use of subsidies, the family was the unit of analysis. In a second set of analyses, program and control groups were combined, and interactions of program/control with other predictors were tested to determine whether the relations of the predictors to outcomes differed in families exposed to different child care policies. The main effects from those analyses are not presented because they were intended primarily to test possible interactions. Because the variables from the Personal Opinion Survey were different for each study, and because the number of participants who completed these forms was smaller than those for whom the other baseline information was available, a second set of analyses was performed adding the Personal Opinion Survey variables to the models. In New Hope, 78% of the sample completed the POS. Responders were more likely to be African American, less likely to be Hispanic, and less likely to have ever married (ps < .05) than nonresponders, but did not differ on other predictors. In MFIP, 68% completed the POS. Responders had more children in household, less children of age between 3 and 5, and had completed more years of school (p < .05) than nonresponders.

Results

Child Care Use

The results of the regressions on "ever used child care" and months in each type of care (center, nonrelative, and relative) are shown for each study—New Chance in Table 3, New Hope in Table 4, and MFIP in Table 5. The great majority of children in each group had experienced some child care, reducing the possibility for individual differences to emerge. The predictors accounted for considerably more variation in use of center care than in nonrelative or relative care (see R^2s in Tables 3-5).

Family structure. Child age was the most consistent predictor of amount of care, particularly of center-based care. In New Chance, where children ranged from young infants to about 6 years old, parents used more center care for those over 18 months than for younger children. In the other two studies, where focal children ranged from 1 to 10 years old, parents used more care for infants and preschool-aged children than for school-aged children. Children's ages were most consistently related to the use of center care. There were generally no differences by child age in amount of relative care and only occasional differences in amount of nonrelative care.

With children's ages controlled, family size was important in MFIP. Parents with larger families used less child care for focal children than did those with smaller families. When members of the control group did use care, people with more children used less center and nonrelative care than did people with smaller families. Although the average family size in New Hope was similar to that in MFIP, family size was not related to child care use. In New Chance, most mothers had only one child.

Having another adult in the home could lead to a lower need for care because there is someone else to provide an income, or it could lead to more relative care if that adult is available for child care. Having another adult in the home predicted relative care in some instances. Young mothers in New Chance who lived with adult family members tended to use relative care, and the same was true for parents in the New Hope control group (this variable was unavailable in MFIP). It is noteworthy that even among the young mothers in New Chance, fewer than half lived with another adult; in New Hope, only about 20% had another adult in the household, probably because they were considerably older than the New Chance mothers.

Human capital. In general, parents with higher human capital used more child care. Maternal education in particular predicted use center care (see Tables 3-5). In New Chance, mothers with higher human capital (education, literacy, previous employment) were more likely to use some child care, but the relations of human capital to type of care were inconsistent. In New Hope and MFIP, parents with higher levels of education used more center care. There were scattered findings that those with more previous employment or earnings used more care.

Location and ethnic group. In New Chance, parents in large cities used less child care than did those in small cities. When they did use care, it was more likely to be relative care rather than center care. There were no urban-rural differences in MFIP.

There were few ethnic group differences in the likelihood of using care, and the differences in type of care were not consistent. In both New Chance and New Hope, African Americans used more center care than European Americans did, but in MFIP they used less center-based care, as did Native Americans and other ethnic minorities. There was no evidence that Hispanics or African Americans were more likely than European Americans to use relative care.

Personal characteristics. Personal characteristics and social circumstances were relatively strong predictors of child care use for New Hope families, and they were slightly related for New Chance and MFIP parents (see Tables 3, 4, and 5). Psychological adjustment (depressive symptoms in New Chance, adjustment in work situations in New Hope) was related to child care use only in the New Chance control group. Mothers with lower depressive symptoms used more center-based child care, perhaps because they were better able to mobilize their energies for schooling or employment.

In MFIP, mothers who believed that family should have priority over work used less child care and, in the program group, less center care than did those whose beliefs about combining family and work were more favorable, but other beliefs and values were not consistent predictors for MFIP or New Hope parents.

A supportive social context was indexed by measures of general social support, family members' supportive attitudes about employment, housing stability, a daily routine that included eating supper together, and having few barriers to employment. There were few relations of so-

cial support to child care use, and they were inconsistent in direction. Most of the social support questions dealt with general emotional support, so they may not have indicated sources of child care help. In both studies, parents whose housing was unstable used more nonrelative care, but there was no consistent pattern with respect to using center-based care.

Child Care Problems and Subsidy Use

In this section, we examine the relations of two outcomes — reports of child care problems and use of public subsidies—to the individual and family predictors measured at baseline. The logistic regressions predicting child care problems and subsidy use appear in Table 6 for New Hope and in Table 7 for MFIP. These analyses treated families as units of analysis; all cases were included in the analyses of child care problems, but only those using child care were included in the subsidy analysis. There was no information about subsidy use in New Chance, and the analyses of child care problems produced chi squares with p values >.10, indicating that the predictors accounted for very little variance. Therefore, we do not discuss New Chance further.

Family structure. In both New Hope and MFIP, people used more subsidies when they had younger children and when they had larger families. In most instances, however, people with younger children and more children still reported more child care problems. Younger mothers also had more child care problems, but no consistent pattern of subsidy use. Perhaps younger mothers are likely to have less regular jobs or to have more issues of personal adjustment than older mothers do.

Human capital. There were few significant relations of human capital to child care problems. In both studies, people with low prior earnings tended to report more child care problems than did those with more earnings.

Location and ethnic group. Control group parents in urban Minnesota reported more child care problems than did those in rural areas, and there was a nonsignificant tendency for them to receive fewer subsidies. In New Hope, African Americans and Hispanics reported more child care problems than did European Americans, but there was a nonsignificant tendency for them to use fewer subsidies. In MFIP, there were no ethnic differences in the frequency of child care problems, and there were few differences in subsidy use. Native Americans in the program group received fewer subsidies than did European Americans. These patterns suggest that, in some instances, subsidies were not reaching ethnic minority parents who needed them.

Personal characteristics. People who believed in the priority of family over work reported more child care problems in the MFIP control group, and those in the MFIP program were less likely to use subsidies. People with high mastery scores also used fewer subsidies even though they reported more child care problems.

Social circumstances were related to both problems and subsidy use, primarily in MFIP. People who reported child care barriers to employment at baseline also had more child care problems after random assignment. People with other barriers to employment used fewer subsidies, suggesting that subsidies did not address employment barriers other than child care or differences in personal beliefs and attitudes. In New Hope, there were few relations of personal or social characteristics to child care problems or subsidy use.

Did Predictors Differ in the Program and Control Groups?

Did the experimental programs attenuate or change the relations of predictors to outcomes? Analyses testing the interactions of program vs. control (dummy coded) with the predictors were conducted for each program. The interactions were entered as a block in each analysis reported in Tables 3-7. The results of those analyses for the family structure, human capital, and ethnic group variables appear in Table 8. Because interaction tests in regression have relatively low power, we discuss those that reached $p<.10$ when there is a consistent pattern across studies or measures.

Family structure. The relations of child age to several outcomes differed for program and control groups. In New Chance, the age of the youngest child (who was usually the focal child) was related to using care in the control group, but not in the program group. That is, in the New Chance program, mothers used as much child care for their infants as they did for their older children, probably because it was offered in conjunction with the program. In the MFIP program group, preschool children were especially likely to receive child care, particularly center care in comparison to older children.

Comparison of the program and control group patterns suggests that the New Hope program was effective in alleviating child care problems that interfered with employment. Like the control group, parents in the program group used more subsidies when they had younger children and when they had more children, but, unlike the control group, they did not report more child care problems associated with the number and ages of their children. In the MFIP program group, parents with younger children used more subsidies, but they also reported more child care problems.

Human capital. There was some evidence that the programs reduced the relations of human capital predictors to child care use. In New Chance, human capital predicted child care use somewhat more consistently for control group members than for program group members. In MFIP and New Hope, control group members with high levels of prior earnings and those with short histories of receiving welfare used more child care (MFIP) or more center care (New Hope) than did their counterparts. These relationships did not occur in the program groups. These patterns may have occurred because the programs were especially likely to increase employment for people who had not been working very much and who had been receiving welfare for long periods.

In both the MFIP and New Hope program groups, people with low prior earnings were more likely to receive subsidies, suggesting that they were effectively targeted by the programs. In the MFIP control group, long-term welfare recipients received more subsidies than other parents did, perhaps because they were most likely to qualify for AFDC-related assistance. In New Hope, however, people with low prior earnings also experienced more child care problems, perhaps because they were less likely to meet the full-time work requirement that would entitle them to New Hope subsidies. In MFIP, prior employment and earnings were less strongly related to child care problems in the program group than in the control group, suggesting that the program may have alleviated some of the child care problems associated with employment.

Ethnic differences in child care use were especially pronounced in the New Hope program group. In New Hope, the tendency for African American parents to use more care and more months of center care were more pronounced in the program than in the control group. Although

African American parents also reported slightly fewer child care problems, they did not receive more subsidies.

Personal characteristics. The interactions of the Personal Opinion Survey variables were tested in separate analyses because of the smaller samples for whom those scores were available (not shown in Table 8). In New Hope, the block of interactions of program-control with the POS variables was significant for ever used any care (χ^2 (10) = 28.25, $\underline{p}$<.01), months in center care ($\underline{F}$ (14, 461) = 1.68, $\underline{p}$<.10), months in nonrelative care ($\underline{F}$ (9, 468) = 2.18, $\underline{p}$<.05), and months in relative care ($\underline{F}$ (7, 467) = 2.96, $\underline{p}$<.001). None of the interactions predicting child care problems or subsidy use was significant.

On the whole, personal characteristics predicted use of any care and type of care better for program than for control parents. Parents who planned ahead used more child care when they were in the program group than when they were in the control group. When family members (e.g., partners, parents) had supportive attitudes about employment, parents in the program group used more child care, more formal care and less nonrelative care. Parents who reported stable housing (few moves) were more likely to use child care in the program group, but less likely to do so in the control group. When they did use care, people with stable housing used more relative care. Parents who had stable routines, as indexed by the family having supper together used more child care when they were in the program group; in the control group, they were more likely to use nonrelative care and less likely to use relative care.

In MFIP, none of the interaction blocks predicting child care use were significant. Although the block was not significant for child care problems, three individual interactions reached $\underline{p}$ < .10: mastery (χ^2 (1) = 3.23, p<.10), welfare stigma (χ^2 (1) = 3.19, p<.10), and child care barriers (χ^2(1) = 3.43, p<.10). The interaction block was significant for subsidy use (χ^2 (8) = 16.34, p<.05). Both child care barriers (χ^2 (1) = 2.78, p<.10) and other barriers to employment (χ^2 (1) = 11.31, p<.001) were significant.

In the program group, barriers to employment (child care and other types of barriers), mastery beliefs, and belief in welfare stigma were not as highly related to child care problems as they were in the control group. These same characteristics predicted subsidy use more consistently for program than control group members. In the program group, but not the control group, people with high child care barriers received more subsidies, suggesting that the subsidies addressed these parents' child care needs.

Discussion

The first question addressed in this paper was: To what extent are low-income parents' decisions about child care, problems with child care, and use of child care subsidies dependent upon family structure, human capital, geographic location, ethnic group, and personal circumstances and beliefs?

Child care needs and patterns for most parents depend first on the ages and number of children in the family. It is hardly surprising that parents used more child care for preschool children than for older children, but the age differences occurred primarily for center care, a finding that is consistent with nationally representative survey data (Tout et al., 2000). Children in all age groups averaged about the same amount of time in relative and nonrelative care. The fact

that school-aged children spent about as much time as infants and preschoolers in home-based care by relatives and nonrelatives suggests that the developmental level of the child had little influence on decisions to use these types of care. Center care, by contrast, is probably more available for preschoolers than for infants or school-aged children; that may be one reason why subsidies were used more by parents with children in the preschool age range. It is also possible that less formal forms of care are easier to arrange for school-age children than for younger children because school occupies some parts of the day during some parts of the year. Despite their relatively high subsidy use, parents with very young children still reported more child care problems than did those whose children were older.

Larger families present more child care needs and make employment less economically advantageous; indeed, parents with larger families reported more child care problems and used less care than did those of smaller families. When they did use care, they were more likely to receive subsidies, but they were still were more likely to use relative and nonrelative care. The cost differential between center care and home-based care is often greater with multiple children because centers generally charge fees for each child.

Some observers have suggested that many low-income parents do not need child care assistance because they can use relative care. We found minimal support for this proposition. When parents in these studies lived with another adult, they were somewhat more likely to use relative care, but there was no reduction in child care problems. Relative care is not necessarily trouble-free, even when there is no monetary cost. In ethnographic interviews, parents mentioned obligations and potential conflicts as well as advantages when relatives cared for their children (Lowe & Weisner, 2001). Moreover, the majority of parents did not have another adult relative in their households, so this source of potential child care was not readily available. Close to half of the New Chance mothers, who were fairly young, lived with another adult, but younger mothers reported more child care problems than older mothers did.

Human capital was expected to predict child care because people with relatively high education and work history would be employed for more hours than those with low human capital. Our data suggest two patterns. First, parental education was more consistently associated with using center care than were other aspects of human capital, suggesting that parents' value for educational opportunity for their children may have played a role in their child care decisions. Second, despite the apparent links between employment, income, and child care needs, these indicators of human capital were surprisingly unimportant predictors of the amount and type of care used. Parents with the best prospects for employment, as indicated by their prior histories of employment and earnings, did tend to use a little more child care and to report fewer child care problems, but the links were weak.

Previous studies indicate that rural areas have fewer child care options than do urban areas. In these studies, however, parents in large urban areas had more child care problems and used less child care than did those in smaller cities and areas; when they did use care it was more likely to be relative or nonrelative care rather than a center. There are local variations in availability and access to center care, and cost may be particularly high in large urban areas.

The ethnic group findings differed across studies. In New Chance and New Hope, most of the sample members were African American or Hispanic; these groups used more center care than did European Americans. In MFIP, the majority of sample members were European Ameri-

cans, and they used more center care than other groups did. Perhaps people are more likely to use centers when the other children in the center are from their own ethnic group than when their children are likely to be in the minority. Whatever the explanation, these findings suggest that generalizations about ethnic differences in child care preferences should be viewed with caution.

Parents' own beliefs about combining work with family and the beliefs of important people in their lives predicted their child care decisions in ways that are consistent with findings from a wide range of income levels. Parents who believed in the priority of family over work used less child care, and, when they did use child care, it was less likely to be center care. Although these parents reported relatively high levels of child care problems, they used fewer subsidies, possibly because they were reluctant to use paid care by strangers. These parents appear to be similar to a group identified in the New Hope ethnographic sample who had grave reservations about non-family care for their children (Lowe & Weisner, 2001). By contrast, parents whose own attitudes about employment were positive and those whose partners and other family members supported employment used more child care, especially center-based care. These differences in individual and family attitudes about maternal employment may play an important role in the success or failure of policies designed to promote maternal employment among parents living in poverty.

The second major question addressed in this paper is whether family structure, human capital, and our other predictors operated similarly or differently in different policy contexts. Like other welfare-to-work policies, these programs probably induced some people into employment and into using child care who would not otherwise have made the transition. As a result, the effects of some individual characteristics might be attenuated, but other characteristics could also emerge as important influences on parents' decisions and responses to the policies they encountered. All three programs tested were designed accomplish the goal of increasing parental employment, and all three included enhanced support for paid child care, particularly center care, as part of the policy package tested. Each program may have addressed the child care needs of some groups more effectively than did the assistance programs available to the control groups (primarily through AFDC) and may, therefore, have altered the relations of the predictors tested here to the child care outcomes.

The experimental programs that increased availability and/or reduced the cost of care not only increased the use of formal child care overall (see Crosby, Gennetian & Huston, 2001), but attenuated the effects of children's ages and family size. In New Chance, mothers were as likely to use center care for their infants as they were for older children, and in New Hope, children's ages and family size were not associated with child care problems, suggesting the program alleviated the difficulties associated with providing child care for very young children and for large families. The MFIP program increased the difference between preschool and school-age use of center care and of subsidies, presumably because it led to increases for 3-5-year-olds. But people with young children also reported more child care problems in MFIP, perhaps because many of them were required to seek employment (the other programs were voluntary). It appears that the MFIP subsidy system was not sufficient to meet the increased needs for child care experienced by people with preschool children, a finding that is particularly relevant to current welfare policies that require most or all parents to participate in employment-related activities.

The relations of human capital to child care use suggest that both New Hope and MFIP subsidies were effective in reaching parents who needed child care help to increase employment

whereas the control group subsidies were most effective in reaching those with a long history of welfare. Both New Hope and MFIP led to increased use of child care (or center care) particularly for people who had spotty employment histories. People with low prior earnings were as likely as those with high earnings to use child care (or center care) and to receive subsidies. This pattern contrasted with the control groups in which people with low prior employment and earnings used less child care, and subsidies were most prevalent among long-term welfare recipients.

At present, federal law requires that people leaving TANF be given priority for child care subsidies provided through the Child Care Development Fund, a policy that can, and often does, operate to the detriment of other working poor parents when funds are insufficient to subsidize all low-income families. Although these findings are only suggestive, they raise the critical issue of priorities for child care assistance. As the welfare population declines, increasing numbers of low-income parents are not reached by the welfare system; if they lose eligibility for child care assistance as a result, many may find it difficult to maintain employment and to avoid returning to public assistance.

The New Hope program reduced the ethnic group differences in total care, but increased the tendency for African Americans to use more center care and less relative care than did European Americans. The program reduced but did not eliminate the tendency for African American and Hispanics to have more child care problems than did European Americans, but it did not change the tendency for ethnic minorities to receive fewer subsidies. Across both of the programs and their control groups, it appears that child care subsidies were not reaching members of ethnic minority groups as effectively as they were reaching non-Hispanic whites. The reasons for this difference are probably complex, but these findings suggest that practitioners should be especially attentive to issues of ethnic differences and equity in the delivery of assistance programs.

In the New Hope program group, such characteristics as being planful and having supportive and stable social environments were more strongly related to child care use in the program group than in the control group. As there were almost no relations of these characteristics to child care problems or subsidy use in either the program or control group, it seems likely that this pattern is due to features of the program other than its child care subsidy. People with these characteristics may have been in a particularly good position to take advantage of the client services and policies that facilitated and subsidized employment.

By contrast, in MFIP, prior child care barriers to employment and individual beliefs and values were less likely to predict child care problems for program group members than they were in the control group. Child care subsidies of the kind provided in MFIP can alleviate some barriers to employment but not others. They remove some of the barriers specifically associated with child care, but do not address other barriers (e.g., health problems). They appear to be helpful for people with positive attitudes about combining work and family, and those with low belief in personal control, but less so for other people.

In summary, some of the relationships observed were quite robust across samples that represented a wide range of maternal age, geographic location, and policy contexts. Child care needs and problems were consistently associated with the age and number of children; the more children and the younger they were, the more care was needed. Parents' education predicted their use of center care, but other aspects of human capital were less strongly related to child care decisions than one might expect. Geographic location and parents' immediate social contexts pro-

vided a backdrop guiding child care decisions, possibly by affecting the availability and relative cost of different types of child care. Individual beliefs and values about family, work, the future, and personal control predicted decisions about caring for children at home or in homelike settings with family members vs. more formal center-based and early education settings.

These findings have implications for child care policy. All of the programs tested in these studies contained features to promote use of paid child care, particularly center-based or licensed home care. Center-based care is generally more expensive than other forms of care, so public assistance may be especially important for enabling parents to choose this type of care. A comprehensive set of child care policies might be crafted to address the needs of people with widely varying needs and preferences. Except for New Chance, the policies tested in these studies addressed the cost of child care, but did not increase its availability, quality or convenience. Even generous subsidies may not be helpful if the supply of care is limited, it is in a location to which the parent cannot transport the child easily, its hours do not match the parent's needs, or its quality is poor.

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Table 1
Means and SDs of Child Care Selection Predictors

| | New Chance (18 months) | | New Hope (24 months) | | MFIP (36 months) | |
| | Program | Control | Program | Control | Program | Control |
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Family Structure						
Age of parent (years) [1]	18.8 (1.4)	18.8 (1.3)	2.8 (0.9)	2.8 (0.8)	29.2 (7.6)	29.4 (7.5)
Ever married (%)	9.3 (29.0)	10.8 (31.1)	37.0 (48.4)	37.4 (48.5)	53.2 (49.9)	53.1 (49.9)
Other adults in household (%)	40.7 (49.1)	44.5 (49.7)	21.8 (41.4)	21.1 (40.9)	------	------
Number of kids in household	1.4 (0.7)	1.5 (6.7)	2.2 (0.8)	2.2 (0.8)	2.1 (1.2)	2.1 (1.1)
Youngest child age (years) [2]	1.2 (1.1)	1.2 (1.1)	1.8 (0.8)	1.7 (0.7)	5.0 (4.3)	5.1 (5.0)
Child age = 18 months (%)	42.6 (49.5)	45.3 (49.8)	------	------	------	------
Child age < 3 years (%)	------	------	23.5 (42.5)	25.4 (43.6)	19.2 (39.4)	17.8 (38.2)
Child age 3-5 years (%)	------	------	31.5 (46.50)	32.14 (46.8)	43.8 (49.7)	47.0 (50.0)
Child age > 6 years (%)			44.1 (49.7)	40.3 (49.1)	37.0(48.3)	35.2 (47.8)
Child is boy (%)	52.9 (49.9)	50.6 (50.0)	54.3 (49.9)	49.8 (50.0)	42.1 (50.0)	48.9 (50.0)
Human Capital						
Highest grade completed	9.9 (1.2)	9.8 (1.2)	11.4 (2.1)	11.1 (2.1)	11.8 (1.8)	11.8 (1.7)
Reading level (Grade)	9.5 (2.8)	8.4 (2.9)	------	------	------	------
Earnings greater than $500 (%)	20.1 (40.1)	19.2 (39.4)	------	------	------	------
Earnings past year ($)	------	------	3745.9 (5019.5)	3586.2 (4954.5)	3482.5 (5985.6)	3695.7 (6299.36)
Ever employed past 12 mo (%)	36.6 (48.2)	37.0 (48.3)	------	------	56.4 (49.6)	57.9 (49.3)
Months in full time job past 12 mo	------	------	3.7 (4.4)	3.7 (4.3)	------	------
Time on AFDC [3]	------	------	4.6 (1.9)	4.4 (2.0)	------	------
Long-term recipients (%)	------	------	------	------	42.3 (49.4)	43.8 (49.6)
Have access to a car (%)	------	------	45.1 (49.8)	43.0 (49.6)	------	------
Number of moves [4]	------	------	2.1 (0.8)	2.2 (0.8)	1.9 (0.7)	1.9 (0.7)
Ethnic Group						
White (%)	25.2 (43.4)	23.9 (42.7)	11.3 (31.7)	15.3 (36.1)	67.3 (46.4)	66.7 (46.6)
African American (%)	51.7 (50.0)	53.8 (49.9)	59.2 (49.2)	53.1 (50.0)	21.9 (40.9)	22.7 (41.4)
Hispanic (%)	23.1 (42.2)	22.3 (41.6)	25.4 (43.6)	29.3 (45.6)	------	------
Native American(%)	------	------	------	------	6.2 (24.2)	6.6 (24.8)
Other (Hispanic, Asian, or others) (%)	------	------	------	------	4.5 (20.7)	3.9 (19.4)

Table1 cont.

Location						
Urban (%)	------	------	------	------	71.1 (45.3)	70.9 (45.4)
Small city (%) [5]	30.8 (46.2)	31.3 (46.6)				
Medium city (%) [6]	39.6 (48.9)	38.5 (48.7)	------	------	------	------
Big city (%) [7]	29.6 (45.7)	30.2 (46.0)	------	------	------	------
Personal Characteristics						
Depression (CESD score)	17.9 (10.3)	18.7 (10.3)	------	------	------	------
Emotional support	2.8 (2.1)	2.7 (2.0)	------	------	------	------
Personal Characteristics						
Personal adjustment	------	------	.03 (.51)	-.06 (.67)	------	------
Plans ahead	------	------	.08 (.66)	-.08 (.73)	------	------
Welfare stigma	------	------	.00 (1.03)	.00 (.97)	------	------
Social support	------	------	.00 (.54)	.01 (.54)	------	------
Others' attitudes	------	------	-.01 (.87)	-.01 (.86)	------	------
Housing stability	------	------	.04 (.66)	.00 (.72)	------	------
Supper together	------	------	2.72 (1.13)	2.75 (1.14)	------	------
Mastery	------	------	------	------	.00 (.62)	.03 (.62)
Family first	------	------	------	------	.01 (.62)	.01 (.63)
Welfare stigma	------	------	------	------	.03 (.80)	.03 (.81)
Social support	------	------	------	------	-.01 (.76)	.06 (.76)
Barriers to employment	------	------	------	------	.02 (.72)	-.02 (.72)
Child care barriers	------	------	------	------	.00 (.81)	-.08 (.81)
N	1401	678	284	294	1460	1433

Note 1. Sample sizes vary for individual variables because of missing values.
Note 2. Sample sizes are the number of families in the studies.
Note 3. Dichotomous variables are coded as (0=No, 100=Yes).
Note 4. Personal Characteristics variables, except 'supper together' are mean of standardized scores of the items.

[1] Age of parent is a categorical variable in New Hope (1= 18-19 yrs, 2= 20-24, 3= 25-34, 4= 35-44, 5= 45-54, 6=55 or over).
[2] Age of youngest child is a categorical variable in New Hope (1= 2 or under, 2=3-5, 3=6 or over).
[3] Time on AFDC is categorical variable (1=none, 2 = less than 4 months, 3=4mo-1yr, 4=1-2yrs, 5=2-5yrs, 6=5-10yrs, 7=10 or more).
[4] Number of moves is "Number of moves in past 2 years" and a categorical variable (1= none, 2=1, 3=2 or more).
[5] Small city is cities with population less than 300,000. Chula Vista, Inglewood, Lexington, Salem, and Allentown are included in this category.
[6] Medium city is cities with population between 300,000 to 1 million. Denver, Jacksonville, Minneapolis, Pittsburgh, Portland, and San Jose are included in this category.
[7] Big city is cities with population more that 1 million in 1990. New York City, Chicago, Detroit, and Philadelphia are included in this category.

Table 2.
Means and SDs of Child Care Variables

| | New Chance (18 months) | | New Hope (24 months) | | MFIP (36 months) | |
| | Program | Control | Program | Control | Program | Control |
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Child Care-Child Level						
Ever in any child care (%)	95.3 (21.1)	85.1 (35.6)	88.7 (31.6)	82.0 (38.5)	86.4 (34.4)	82.5 (38.0)
Months in formal care [i]	5.8 (6.0)	3.5 (5.3)	10.3 (10.0)	7.5 (9.0)	9.8 (13.0)	8.7 (12.7)
Months in nonrelative care [1]	1.6 (3.6)	1.4 (3.3)	2.1 (5.4)	2.1 (4.6)	4.2 (9.6)	5.1 (10.3)
Months in relative care[1]	3.8 (5.4)	4.8 (5.8)	7.7 (9.4)	9.2 (9.5)	12.5 (14.0)	14.8 (14.8)
Child Care -Family Level						
Had child care problem (%)	22.4 (41.7)	20.8 (40.6)	25.7 (43.8)	39.3 (48.9)	31.5 (46.4)	33.7 (47.3)
Received public subsidies (%) [ii]	------	------	75.3 (43.1)	50.9 (50.1)	51.4 (50.0)	36.1 (48.1)

[i]Children who ever used any type of care were only included.
[2]Families who used paid care were only included.

Table 3
Predictors of Child Care Use in New Chance

Child Care Use	Used Any Care				Formal Care		Nonrelative Care		Relative Care	
	Program (n=1136)		Control (n=558)		Program (n=1084)	Control (n=478)	Program (n=1084)	Control (n=478)	Program (n=1084)	Control (n=478)
Predictors	Odds ratio	Beta	Odds ratio	Beta	Beta	Beta	Beta	Beta	Beta	Beta
Family structure										
Age of parent	1.14	.10	.79	-.17†	-.01	.04	.04	.05	-.05	-.06
Ever married	.30	-.19**	.49	-.12†	.07*	.02	.04	-.06	-.03	.10*
Other adults in HH	.75	-.08	.90	-.03	-.09**	-.05	.10**	-.06	.05	-.04
# of kids in HH	.87	-.05	1.14	.05	-.02	.09†	-.07†	.01	-.03	-.05
Youngest child age	.98	-.01	1.80	.34**	.00	.12†	-.06	-.04	-.01	.04
Child age = 18 months	1.88	.17	.71	-.09	.13***	.23***	.02	-.07	-.03	-.08
Child is boy	.82	-.05	.90	-.03	-.01	.06	.00	-.05	-.01	-.03
Human Capital										
Highest grade	1.09	.06	1.39	.22**	.04	.03	.03	.05	.03	.14**
Reading level	1.12	.17†	1.19	.28***	-.03	-.06	.05	-.02	-.03	-.07
Earnings > $500 PY	.54	-.14	.76	-.06	.03	-.07	-.01	.15*	.07†	.09
Ever employed	1.97	.18	2.16	.20†	.02	.11*	.03	-.02	.03	-.02
Ethnic Group										
African American	.75	-.08	.69	-.10	.08†	.06	.00	-.18**	-.05	.01
Hispanic	.98	.00	.92	-.02	.05	-.02	.03	-.12**	.01	.00
Location										
Big city	.52	-.17†	.93	-.02	-.23***	-.07	-.02	.11†	.08*	.02
Medium city	1.94	.18	1.28	.07	-.11**	-.04	.01	.06	-.05	-.08
Personal Characteristics										
Depression	1.00	-.03	1.01	.04	.00	-.11*	-.03	.00	.05	-.02
Emotional support	1.11	.11	1.02	.02	.00	-.04	.03	.02	-.05	-.01
R^2	.03**		.09***		.07***	.17***	.03*	.06*	.04***	.05

Note. *** $p<.001$ ** $p<.01$ * $p<.05$ † $p<.10$

Table 4
Predictors of Child Care Use in New Hope

Child Care Use	Used Any Care				Formal Care		Nonrelative Care		Relative Care	
	Program (n=411)		Control (n=453)		Program (n=369)	Control (n=375)	Program (n=370)	Control (n=375)	Program (n=369)	Control (n=374)
Predictors	Odds ratio	Beta	Odds ratio	Beta	Beta	Beta	Beta	Beta	Beta	Beta
Family structure										
Age of parent	0.88	-.06	.87	-.06	-.11*	.01	-.14*	.17**	.13*	-.02
Ever married	.48	-.20†	.72	.09	.02	-.06	.07	-.06	-.03	.09
Other adults in HH	1.89	.14	1.10	.02	-.08	-.11*	-.02	.02	.03	.11*
# of kids in HH	.85	-.07	.88	-.05	-.08	-.02	.02	-.04	.01	.10
Youngest child age	.71	-.15	.70	-.15	-.16*	.00	.15*	-.13†	-.07	-.04
Child age < 3 years	1.03	.64*	1.04	.89***	.18*	.21**	-.01	-.02	-.09	.00
Child age 3-5 years	1.02	.50**	1.01	.28**	.22***	.21***	-.01	.05	-.05	.00
Child is boy	.87	-.04	.80	-.06	.06	.08	.00	.03	.04	-.05
Human Capital										
Highest grade	1.19	.21*	1.04	.05	.15**	.14**	.09	.11*	-.09†	-.14*
Earnings past year	1.00	.26	1.00	.09	-.01	.14†	.04	-.15	.03	.04
Months in full time job	1.10	.24	1.11	.23†	.06	-.07	-.04	.09	-.02	.15*
Time on AFDC	1.08	.08	1.18	.18*	.06	-.11*	.08	.00	-.10†	.09
Access to a car	1.56	.12	1.96	.18*	.05	-.03	.04	-.04	.06	-.01
# of moves	.94	-.03	1.19	.08	.08	.09†	-.02	-.02	-.15**	-.09†
Ethnic Group										
African American	2.84	.28†	.72	-.09	.25***	.09	-.03	-.05	-.14†	.07
Hispanic	1.08	.02	.80	-.06	.16*	.10	.07	.02	-.18*	-.02
R²	.18***		.19***		.22***	.16***	.06	.07†	.09**	.10**
Personal Characteristics										
Personal adjustment	1.38	.09	-.05	.86	-.10	-.04	-.13†	-.04	.07	.02
Plans ahead	7.00	.71**	-.09	.80	.06	-.12†	-.04	-.04	-.11	-.07
Welfare stigma	.46	-.45	.03	1.06	-.01	.19**	.05	-.11	.09	-.17*
Social support	.00	-1.7***	.09	1.37	.06	-.04	.34***	-.05	-.06	.19*
Others' attitudes	3.90	.67**	.14	1.37	.13†	.03	-.15*	.03	.10	-.12
Housing stability	25.84	1.2***	-.31*	.48	-.01	-.03	-.13†	-.06	.02	.20**
Supper together	14.27	1.6***	.09	1.16	-.02	.08	-.10	.20*	.01	-.20*
R²	.29***		.18***		.24***	.25***	.17**	.17**	.12	.16**

Note. *** $p < .001$ ** $p < .01$ * $p < .05$ † $p < .10$

Table 5
Predictors of Child Care Use in Minnesota Family Investment Program (MFIP)

Child Care Use	Used Any Care				Formal Care		Nonrelative Care		Relative Care	
	Program (n=697)		Control (n=677)		Program (n=528)	Control (n=488)	Program (n=528)	Control (n=488)	Program (n=528)	Control (n=489)
Predictors	Odds ratio	Beta	Odds ratio	Beta	Beta	Beta	Beta	Beta	Beta	Beta
Family structure										
Age of parent	.97	-.12	.96	-.15*	-.04	.05	.15**	.01	-.13*	-.09
Ever married	1.41	.11	1.25	.08	-.01	-.03	-.03	.09†	.06	.01
# of kids in HH	.77	-.19**	.81	-.15*	-.07	-.21***	-.08	-.11*	.05	.06
Youngest child age	.92	-.14†	.86	-.26***	-.01	-.08	-.12†	.00	.13*	.17**
Child age < 3 years	1.48	.10	2.37	.22*	.18**	.08	-.03	.12†	-.01	-.01
Child age 3-5 years	1.86	.20*	.99	.00	.19**	.09	.11†	.14*	-.03	-.03
Child is boy	1.17	.05	.80	-.07	.05	.01	.02	.08†	.07	-.03
Human Capital										
Highest grade	.94	-.07	1.04	.04	.13**	.10*	-.06	.08†	-.01	.10*
Earnings past year	1.00	.08	1.00	.29**	.00	.09	.06	-.09	.05	-.03
Ever employed	1.58	.15†	1.09	.03	-.03	-.07	.04	.02	-.01	.10†
Long-term recipients	1.12	.04	.64	-.15*	.02	.00	.00	-.04	-.12*	-.04
# of moves	1.07	.07	.97	-.04	-.15***	-.03	.10*	.02	.01	.01
Ethnic Group										
African American	1.09	.03	.92	-.13	-.10*	-.07	-.01	-.03	.01	.08
Native American	.75	-.05	.76	-.04	-.11*	-.04	-.09*	-.10*	.00	.03
Hispanic	1.41	.04	.48	-.08	-.13**	-.01	.00	-.09†	.05	.04
Location										
Urban	1.23	.05	1.12	.03	.03	.06	-.09†	.00	-.06	-.03
R^2	.08***		.14***		.13***	.09***	.07**	.08**	.06*	.05†
Personal Characteristics										
Mastery	1.84	.24*	1.05	.02	-.03	.00	.05	.00	-.03	-.08
Family first	.62	-.20*	.58	-.22*	-.10†	-.10	.06	-.06	.06	-.10
Welfare stigma	1.06	.04	.98	-.01	.07	.00	-.03	.09	.03	.05
Social support	.87	-.07	.07	.07	.06	.08	-.11†	-.06	.05	-.03
Barriers to employment	.91	-.04	-.03	-.03	-.04	.00	-.06	-.10	-.05	-.04
Child care barriers	.88	-.07	-.10	-.10	.03	.02	.00	-.03	.01	.00
R^2	.13***		.17***		.16***	.15***	.12**	.11*	.08	.09

Note. *** p<.001 ** p<.01 * p<.05 † p<.10

Table 6
Predictors of Child Care Problem and Use of Subsidies in New Hope

Predictors	Child Care Problem				Public Subsidy			
	Program (n=263)		Control (n=287)		Program (n=185)		Control (n=198)	
	Odds ratio	Beta	Odds ratio	Beta	Odds ratio	Beta	Odds ratio	Beta
Family structure								
Age of parent	.66	-.21†	.65	-.19*	.62	-.20†	.94	-.02
Ever married	.58	-.15	1.03	.01	1.62	.12	.41	-.23*
Other adults in HH	1.16	.03	.63	-.10	.76	-.06	.64	-.10
# of kids in HH	1.19	.08	1.57	.21*	.99	.00	1.84	.28**
Youngest child age	1.27	.11	.61	-.21*	.51	-.27**	.56	-.21*
Human Capital								
Highest grade	.99	-.01	1.06	.06	1.04	.05	1.07	.07
Earnings past year	1.00	-.34*	1.00	-.16	1.00	-.24	1.00	.10
Months in fulltime job	1.04	.10	.94	-.14	1.09	.21	.90	-.25*
Time on AFDC	1.13	.13	1.05	.05	.99	-.01	1.05	.05
Access to a car	.51	-.19*	1.63	.13†	.89	-.03	.70	-.10
# of moves	.85	-.07	1.21	.09	1.28	.11	1.42	.16†
Ethnic Group								
African American	1.69	.14	2.13	.21†	.60	-.14	.66	-.11
Hispanic	1.90	.16	3.19	.29**	.55	-.15	.60	-.13
R^2	.11**		.17***		.11†		.17**	
Personal Characteristics								
Personal adjustment	1.35	.08	.75	-.11	.54	-.15	.91	-.04
Plans ahead	1.86	.23	1.06	.02	.66	-.15	1.23	.09
Welfare stigma	1.11	.06	.80	-.12	.91	-.05	.82	-.11
Social support	.53	-.18	.29	-.35**	.69	-.11	.76	-.08
Others' attitudes	.90	-.05	.89	-.05	1.21	.07	2.45	.42**
Housing stability	1.15	.05	.52	-.26*	.62	-.17	1.00	.00
Supper together	1.38	.06	1.37	.20	1.22	.12	.87	-.08
R^2	.19***		.29***		.13		.23*	

Note. *** p<.001 ** p<.01 * p<.05 † p<.10

Table 7

Predictors of Child Care Problems and Use of Subsidies in Minnesota Family Investment Program (MFIP)

Predictors	Child Care Problem				Public Subsidy			
	Program (n=1279)		Control (n=1267)		Program (n=601)		Control (n=527)	
	Odds ratio	Beta	Odds ratio	Beta	Odds ratio	Beta	Odds ratio	Beta
Family structure								
Age of parent	.98	-.11*	.98	-.11*	.99	-.03	.98	-.07
Ever married	.96	-.01	.88	-.04	.72	-.11*	.67	-.13*
# of kids in HH	1.10	.08†	1.04	.03	1.15	.10†	1.26	.15*
Youngest child age	.89	-.32***	.93	-.26***	.91	-.18**	1.01	.03
Human Capital								
Highest grade	.98	-.03	1.06	.07†	.91	-.10†	1.10	.10†
Earnings past year	1.00	-.02	1.00	-.10*	1.00	-.15*	1.00	.02
Ever employed	1.16	.05	1.42	.11**	1.09	.03	1.04	.01
Long-term recipients	.87	-.05	1.11	.03	.85	-.05	1.65	.16**
# of moves	1.19	.08*	1.28	.11**	.85	-.07	.91	-.04
Ethnic Group								
African American	1.19	.05	.90	-.03	.82	-.06	1.34	.08
Native American	1.24	-.04	1.14	.02	.40	-.13**	1.14	.02
Hipanic	.74	-.04	1.14	.02	.76	-.03	2.08	.09†
Geographic Characteristics								
Urban	1.21	.05	1.60	.13***	1.17	.04	.71	-.09
R²	.10***		.10***		.08***		.07***	
Personal Characteristics								
Mastery	.91	-.04	.13*	1.42	.63	-.18**	.95	-.02
Family first	1.10	.04	-.01	.97	.64	-.18**	.80	-.09
Welfare stigma	1.13	.07	.11†	1.24	.96	-.02	.90	-.06
Social support	.78	-.13*	-.02	.95	1.17	.08	1.09	.04
Barriers to employment	1.01	.01	.16*	1.43	.63	-.21**	1.43	.16*
Child care barriers	1.33	.15**	.30***	1.78	1.58	.24**	1.07	.04
R²	.15***		.15***		.15***		.13***	

Note. *** $p<.001$ ** $p<.01$ * $p<.05$ † $p<.10$

Table 8

Tests of Interactions between Program/Control Groups and Selected Predictors

	New Chance	New Hope	MFIP
Any care			
Core Block	$\chi^2 (8)= 7.8$	$\chi^2 (9) = 10.7$	$\chi^2 (10) = 18.31*$
Child age = 18 mo.	.23† (2.55)		
Child age 3-5 yr.			.17† (1.01)
Age youngest child	-.19* (.53)		
Prior earnings			-.15† (1.00)
African American		.36* (4.30)	
Months in formal care			
	F (8,1534) = .87	F (9,717) = 1.72 †	F (10,988) =1.05
Core Block			.10*
Number of children		.16†	
African American			-.08†
Hispanic			
Nonrelative care			
	F (8,1534) = .81	F (9,718) = 2.52**	F (10,988) = 1.85*
Core Block			-.12†
Child age < 3 yr.			-.11*
Highest grade completed		.23**	
Age youngest child		-.21**	
Age of mother	-.08†		.09*
Prior earnings			
Relative care			
	F (8,1534) = .85	F (9,716) = 1.17	F (10,988) = .65
Core Block	-.09†		
Highest grade completed		-.21*	
African American			
Child care problems			
	$\chi^2 (8) =4.49$	$\chi^2 (7) = 10.70$	$\chi^2 (8) = 11.78$
Core Block		.20* (1.93)	
Age youngest child			
High school graduate			-.07†
Highest grade completed			.08*
Prior earnings			
Subsidy			
Core Block		$\chi^2 (7) = 4.24$	$\chi^2 (8) = 26.18$ **
Number of children	N/A	-.17† (.58)	
Age youngest child			-.17** (.89)
Highest grade completed			-.13* (.84)

Note 1. Core block presents test of total block of all interactions. Predictors not listed were not significant at $\underline{p}$ < .10 in any of the three studies.

Note 3. Entries are betas or betas (odds ratio).

Note 2. *** p<.001 ** p<.01 * p<.05 † p<.10

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[i]We analyzed the 18-month follow-up data rather than a later follow-up conducted 42 months after random assignment because individuals' eligibility for the program benefits, including child care, ended after 18 months.
[ii]Information about differences between program and control groups is available in the original reports (Bos et al., 1999; Gennetian & Miller, 2000; Quint et al., 1997). Because we calculated months in different types of child care and subsidy use for the subset of the total sample who used child care, statistical tests of program effects could not be performed. For the same reason, some of the means differ from those in the original reports.