

# Welfare to Work and Child Care Selection

Which Families Use Subsidies and Home-based or Center Care?

Policy Analysis for California Education University of California, Berkeley and Stanford University

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### **Executive Summary**

#### **Policy Questions**

Public spending on child care and preschooling has grown dramatically in recent years, rising from \$6.8 to \$14.3 billion between 1995 and 2000 nationwide. In California, the child care and early education budget has almost quadrupled, from \$800 million in 1996 to \$3.1 billion in the current fiscal year.

Yet the share of low-income families who actually draw public child care support — for preschool- or school-age programs — remains highly variable across states and communities. And little is known about the characteristics of families who are more likely to use child care subsidies, especially after 1996 as more parents faced pressures to move from welfare to work.

To broaden parental choice, policy makers have supported expansion of both center and homebased child care options. But we have not well understood how the expansion of one form of care may influence the actual choices made by parents moving from welfare to work, many of whom rely on less formal, licensed-exempt providers.

This paper reports on subsidy use and selection patterns for 1,974 parents in three California counties. All had successfully moved from cash aid to jobs or work activities under the state CalWORKs program in 2000-2001, and therefore needed child care. All sampled parents — residing in Kern, Orange, or Santa Clara county — were eligible for child care aid when they were initially sampled.

For this sample of CalWORKs participants we explore these empirical questions:

- Which parents are more likely to use *nonparental child care* arrangements, as opposed to relying on a spouse?
- Which parents using child care are more likely to draw a *child care subsidy*?
- When parents draw a child care subsidy are they more likely to select *center or home-based* child care?
- Are parents more or less likely to select center-based care when living in a community with higher center enrollment capacity?

For each question, we looked at the decision-making of CalWORKs parents with a preschool-age child, age 0-5 years-old, and for parents with a school-age child, age 6-13. When each parent was interviewed, a child was randomly selected from among the parent's children when they had more than one.

#### **Major Findings**

We found that the *use of nonparental care* for young children, age 0-5 years, is more likely for parents who have completed high school and who reported higher earnings. Use of nonparental care is less likely (and thus reliance on a spouse for child care is more likely) among CalWORKs

parents who are married and among Vietnamese American parents. These same factors also predict which parents are more likely to use after-school care for school-age children, age 6-13 years-old. In addition, longer term welfare clients are less likely to use after-school care.

The likelihood that parents *take-up a subsidy* is higher for those with more children at home and those who participate more extensively in CalWORKs program activities. Take-up is lower for married and non-English speaking parents. These predictors of subsidy use operate in a similar fashion for parents with young children, age 0-5, and for those with school-age children, age 6-13.

Parents with young children, age 0-5, are more likely to select *home-based providers* when they are married, of Latino ethnicity, or Vietnamese speakers (and less likely to select centers). The same factors predict the use of home-based after-school care for children, age 6-13, rather than use of formal programs. Parents who have not completed high school and who report lower earnings also are more likely to rely on home-based care for their school-age children.

For this summary, licensed family child care homes (FCCHs) are combined with license-exempt home-based arrangements. Selection patterns did not differ remarkably between the two, except that many more CalWORKs parents select licensed-exempt kith or kin providers, compared to the small number selecting FCCHs. We break-out findings for parents selecting FCCHs in the full text below.

The use of child care subsidies may raise the odds of selecting center programs, independent of *a priori* parental attributes. Yet we find a more likely causal process is that marital status, ethnicity, and home language first influence parents' propensity to select centers, which in turn implies the use of a subsidized slot. Center providers are then reimbursed via CalWORKs child care support.

When we take into account the capacity of centers within the parent's respective zip code, we find that parents are *less likely* to enter a center program when these organizations display higher aggregate enrollment capacity. This seems counter-intuitive. It may be due to the fact that center supply is most abundant in the poorest, more densely populated zip codes, since California effectively targets child care aid on low-income communities. Yet this means that CalWORKs parents living in slightly better-off zip codes benefit from less competition for center slots. Higher center supply does appear to equalize the odds that non-English speaking parents are able to select center-based programs.

#### Findings from a Parallel PACE Study

Researchers at the PACE center also have been following mothers, with children age 2½ years on average at entry to the study, who moved from welfare to work. The CDSS project supported additional work with these data from the *Growing Up in Poverty Project* — including mothers and child care settings in California, Connecticut, and Florida — to inform the same research questions articulated above.

In both the 1998 and the 2000 maternal interviews we asked a variety of questions about child care subsidy use, as well as the types and quality of child care selected as women moved into jobs. The likelihood of *drawing a subsidy* — through the local welfare office or any other child care or preschool support — was higher for mothers who had older children (age 3-4 years rather than infants or toddlers), had completed high school, and reported higher earnings.

While mothers in the two California counties reported lower subsidy take-up rates than those in Florida in 1998, subsidy use climbed significantly in both San Francisco and Santa Clara County by 2000. These California counties consistently displayed higher take-up rates than the two participating Connecticut counties.

We also find that mothers are more likely to select *home-based care* when they are less educated (having dropped out of high school), the focal child is a toddler (age 12-30 months-old), and when the mother is non-English speaking.

Any discrete effect stemming from subsidy take-up is difficult to detect. The *a priori* maternal and child characteristics — mother's education, child age, and home language — are more strongly related to selection of home-based or center care, which in turn contributes to the subsidy take-up rate.

For this multi-state sample, mothers are slightly more likely to select a center program when they live in a census tract with higher center enrollment capacity, after taking into account the maternal and child characteristics that help predict the type of care selected.

Finally, in a new paper that looks at child care selection among Connecticut mothers we find that the structure of women's jobs further explains the likelihood of selecting a home-based or center provider. Mothers working regular work hours during weekdays, representing just over half the sample, are more likely to select center programs. Those who work evenings, weekends, or different hours each week are significantly more likely to select home-based care.

# SECTION 1. Introduction: Child Care Subsidies and Types of Care Selected by CalWORKs Parents

Federal and state policy makers have invested heavily in child care and preschool programs over the past decade. Public spending has climbed from \$6.8 to \$14.3 billion annually since 1995 (Fuller, Kagan, Caspary, & Gauthier, 2002). The Congress, when creating the child care blockgrant program in 1990, required states to distribute subsidies as portable vouchers, allowing parents to select from among organized centers or home-based providers. Several states still support child care centers directly or via school districts, and many more states have expanded preschool programs for low-income families that parallel federal Head Start centers (Besharov & Samari, 2001; Blau, 2001; Schulman, Blank, & Ewen, 2001).

Yet the share of low-income parents expressing demand for child care subsidies — be they vouchers or slots in centers — remains low and uneven across states and communities. And little is known about what family characteristics help to predict which parents express demand for child care subsidies. Tandem empirical literatures are developing on (a) what kinds of low-income parents are more likely to express demand for subsidies, and (b) which parents, across a variety of social-class and ethnic groups, are more likely to select centers versus home-based providers (Meyers & Heintze, 1999; Fuller et al., 2002). Only a small portion of this work, however, has focused on families moving from welfare to work, and very little research has compared patterns of subsidy use or type of care selected for preschool-age versus school-age children.

This lack of empirical knowledge is costly for policy makers and planners who want to know whether rising spending on child care is keeping keep pace with rising demand. The expression of demand by families is boosted by specific policies that aim to make child care and preschooling more affordable and equally available, including large investments in welfare-to-work programs since 1996 and rising tax incentives for the working poor. Tax strategies also include expansion of child care credits, at federal and state levels, that relieve the cost burden for middle-class families. Child care and preschool spending in California, for example, has grown from \$800 million in 1996 to \$3.1 billion in the 2002 fiscal year (Department, 2001). This

includes a seven-fold increase in child care vouchers for low-income families since 1996, including parents moving from welfare to work.

Even with rising subsidies for a widening range of families, the actual use of public child care aid remains low and quite variable across states and local communities (U.S. Department, 2000; Acs & Loprest, 2001). This paper advances our understanding of what family characteristics help to predict the likelihood that they will (1) select a *nonparental child care provider*, (2) *draw a subsidy* for which they are eligible, and (3) select a *home-based* or *center provider*.

We first review what is known about parents' use of child care subsidies and their selection of different types of child care. Second, we detail our research design and the questions posed to 1,974 parents, mostly mothers, who were successfully moving from cash aid under the CalWORKs program into jobs. Third, we present descriptive findings that reveal the institutional coupling of subsidy allocation and selection of center-based programs. Fourth, we model how family-level attributes and facets of CalWORKs participation are related to the odds that parents select a nonparental child care provider, successfully draw a subsidy, and/or select a center-based program. We then build a two-level model to assess how the local availability of center enrollment slots may condition family-level selection, applying hierarchical linear modeling (HLM) techniques. We discuss implications for policy makers and for child care support.

## SECTION 2. What's Known about Child Care Subsidy Use and Types of Care Selected?

Two distinct lines of research inform our understandings of child care decision-making among low-income parents. Several studies focus on the participation of welfare families in a variety of work and income-support programs, including child care. Another set of scholars, rooted more in child development, demography, or sociology have studied what kinds of families — across a variety of groups — are more likely to select centers or home-based providers.

#### Low-income parents' use of child care subsidies

Government's rising investments in child care and preschooling — especially in the wake of the 1996 welfare reforms — aim primarily to expand the range of affordable options for low-income families (Besharov & Samari, 2001). Despite rising public support, many low-income families fail to express demand for subsidies, whether available from county welfare offices or center-based agencies, including Head Start and state preschools. For example, the Department of Health and Human Services estimated in 1999 that just 13% of all families drew federal child care support for which they were eligible (U.S. Department, 2000). Among women moving from welfare to work, subsidy take-up rates vary widely.

Early work revealed that between 8% and 46% of women were drawing child care support in their first year after leaving cash aid, depending on their state or county (Acs & Loprest, 2001). Four years into implementation of the 1996 reforms, another study found that 78% of California women, enrolled in TANF and using child care, were taking-up some form of child care subsidy, compared to 38% in Connecticut (Fuller, Kagan, & Loeb, 2002).

The institutional coupling of subsidy use and selection of center-based care also varies across states. In Texas, just over 80% of parents drawing child care subsidies selected a center in 1998; this proportion in Illinois equaled 32% in the same year (Meyers et al., 2001). When mothers do find an enrollment slot in a center or after-school program, they are more likely to be subsidized — compared to those paying out-of-pocket or simply not entering the monetized child care sector. In one tracking study, conducted in California and Florida, 90% of the mothers using centers received a subsidy (at times combined with a co-payment), whereas just 39% of mothers selecting home-based arrangement were drawing a voucher to reimburse their home-based caregiver (Fuller, Chang, Suzuki, & Kagan, 2001).

We also know that the proximal availability of center-based programs in low-income neighborhoods at may condition the likelihood that welfare clients will opt for this form of care rather than home-based providers. Looking across the 200 California zip codes with the highest count of welfare clients, disparities in center supply were significant. For instance, Alameda County (including Oakland) operated 17 child slots in centers for every 100 children, 0-5 years-old, compared to just 10 slots in Los Angeles County and 5 slots in rural Merced County (Fuller, Coonerty, Kipnis, & Choong 1997).<sup>1</sup>

Family-level factors may not be sufficient in estimating expressed demand for subsidies or particular types of child care, since policies and institutions mediate individual-level demand processes. Beyond local supply conditions, states differ in policies and practices that mediate access to, and the incentive value of, child care subsidies, including required copayment levels and the amount of market information made available to low-income parents (Blau, 2001; Adams, Snyder, & Sandfort, 2002). In addition, state welfare-to-work programs that provide more information about child care options and assertively allocate subsidies have increased women's entry into the monetized child care sector and, sometimes, boosted the use of center-based programs (Gennetian, Crosby, Huston, & Lowe, 2002).

#### Parents' selection of home-based or center care

A parallel literature is evolving that focuses on how attributes of parents and households — looking across social classes — are related to the propensity to select centers-based programs versus home-based providers. This work overlaps with important questions regarding the relative quality of different settings and implications for children's development, especially as rising voucher dollars aid families that use home-based providers.<sup>2</sup> The present review focuses only on selection.

We know that as children reach 3 or 4 years-old, they are more likely to enter center-based programs. Just 3% of all families enroll their school-age children in a formal child care facility after school; yet over one-third attend after-school programs, sports, lessons, or enrichment activities (Smith, 2000). Child-age effects on selection patterns apply to welfare families: an early assessment of child care selection among mothers participating California's early workfare experiment (GAIN) found that just 23% of mothers with very young children, age 0-2 years, selected centers, compared to 47% with children, age 3-5 (Meyers & Heintze, 1999).

The propensity of families to use monetized forms of care — drawing from national probability samples — varies widely across social-class and ethnic groups. For example, almost twice the proportion of affluent parents enrolled their 4 year-olds in a center-based programs (just over

70%) than did low-income parents (45%) in 1995 (Hofferth, Shauman, Henke, & West, 1995).<sup>3</sup> Latino parents select center-based programs at a rate that is 23% below the enrollment rate for African-American parents, and 11 percent lower than for whites, among households with working mothers. However, Latino parents who primarily speak English at home follow white middle-class selection patterns quite closely (Liang, Fuller, & Singer, 2000).

The family's demographic structure and strength of social support — variable among and within social classes — also helps to explain parents' propensity to enter the monetized sector and selection of center-based programs. The presence of the father or kin member within the household, as well as social support outside the home, tend to suppress the use of monetized care and center-based arrangements (Leibowitz, Waite, & Witsberger, 1988; Hofferth & Wissoker 1992; Fuller, Holloway, & Liang, 1996).

Recent evidence indicates that home-based providers often are seen as more accessible and trustworthy by low-income mothers, compared to how center staff are perceived. One tracking study, involving just under 1,000 mothers moving from welfare-to-work in California, Connecticut, and Florida found that those who selected home-based care reported stronger communication with the provider, more individualized attention for their child, and greater accommodation with the mother's work schedule, compared to women using center-based programs (Fuller, Kagan, & Loeb, 2002). Over 40% of these women worked evenings or weekends when few centers were open.<sup>4</sup>

#### Policy research questions

Few selection studies have focused specifically on women who are moving from welfare to work, especially under the post-1996 policy regime, characterized by time-limited cash aid and wider availability of child care support. This growth in subsidies has extended support to over one million additional low-income families nationwide, relative to the count of families receiving child care support before 1996 (Collins et al., 2000).<sup>5</sup>

Our data stem from interviews with 1,974 California mothers who were currently or had recently drawn CalWORKs cash aid, and recently entered a job or designated work activity between August 2000 and February 2001. Our phone interviews were designed to yield evidence on this

sample of current or recent clients that would inform three interwoven empirical questions: What attributes of parents, households, and program participation are associated with stronger odds that they will use a *nonparental child care provider* (at least 10 hours per week), *draw a child care subsidy*, and *select a home-based or center provider* — for their preschool- or school-age child.

In addition, we explore contextual effects stemming from community-level variation in center availability, asking whether these local conditions may be related to child care selection directly, or in mediating the influence of particular family-level factors on selection.

# SECTION 3. Methods: CalWORKs Family Sample, Measures, and Estimating Child Care Selection

#### CalWORKs parent sample

We focus on parents with at least one child age 0-13 years, who were successfully moving from cash aid to work activities. We requested complete lists of clients from three counties — Kern, Orange, and Santa Clara — that met these inclusion criteria. That is, each client had started a job or was participating in a work activity, and was a parent of a young child or school-age child. Our intent was to screen in clients who had a need for a child care provider, since they were in a work activity and were eligible for child care aid, based on case records.

The three counties provided diversity in terms of caseload composition, local labor markets, and the availability of child care options (particularly the enrollment capacity of local centers and preschools). Each county assembled files on clients who were active during February 2001 or who had successfully moved into a job or designated work activity during the prior six months.<sup>6</sup> In total, Kern provided electronic data on 7,207 families meeting our inclusion criteria; Orange assembled 8,070 such client files; and Santa Clara, 2,776 client records.<sup>7</sup>

Of the 18,053 potential participants in the study, individuals were randomly drawn and called until phone interviews were completed with one-sixth of the universe list, averaging across the counties. This yielded a total sample of 1,974 parents, the large majority of whom were mothers.<sup>8</sup> This selection process ensured that most sampled parents were eligible for child care assistance under the CalWORKs program.<sup>9</sup> A parent's eligibility status may have changed between when the county submitted their client files and when our interview was conducted. Based on their employment or work activity status and self-reported income, we estimated their eligibility for child care aid, then included this dichotomous variable as a control in all regression models.<sup>10</sup>

#### Analytic context: institutional linkage between subsidy use and center selection

Government policies, since the 1940s, have aimed to improve the availability of child care options for families. Federal policy currently displays a blend of pro-choice vouchers and a fairly centralized Head Start preschool program. In some welfare circles, the term *child care* tacitly excludes preschools or center-based programs. But about half of all families drawing vouchers under the Child Care and Development Block Grant, created by the Congress and President Bush in 1990, currently select centers. Under the 1996 welfare reforms, federal funding streams were consolidated into the block grant, and considerable TANF savings (resulting from the falling counts of caseloads) were transferred into child care. These tandem financing mechanisms mainly support parents trying to move from welfare to work (Besharov & Samari, 2001). In addition, the border between centers and preschools, both primarily serving 2-4 year-olds, has long been blurry (Kisker et al., 1991). Many states have funded and continue to expand networks of centers and preschools that primarily serve low-income families. Federal policy has been "pro-parental choice" since 1990; yet the earlier funding streams, emanating from Washington and state governments, continue to support center-based programs.

So, when families enter the cash aid system under CalWORKs, they may be presented with information about center- and home-based options. Research to date suggests that the center option may be seen as more directly linked to public subsidies, compared to drawing a voucher to reimburse a kith or kin member. The other option, revealed by qualitative research with welfare families, is that many parents opt not to enter the monetized child care sector, at times simply minimizing contact with the welfare office (Mensing, French, Fuller, & Kagan, 2000). These institutional conditions have led to a tight coupling between center selection and utilization of a subsidy, be it a directly subsidized enrollment slot or portable voucher used at a center. In contrast the coupling of home-based arrangements and subsidy take-up is much looser.

Focusing, for instance, on the 64% of our CalWORKs family sample who reported using a nonparental caregiver, just over one in five had selected a center-based program. Of these, fully 93% were receiving a public subsidy. But among all parents selecting home-based providers — either a family child care home or kith and kin — just 41% drew a child care subsidy.<sup>11</sup>

This is an important finding and one that presents an analytical constraint. Ideally, we could test two competing causal pathways: first, estimating the extent to which subsidy take-up results in center selection, after controlling on the a priori effects of family-level factors and other covariates, and then estimating a competing model that examines whether selecting a center-based program raising the rate of subsidy use. But the fact that 93% of all parents who selected a center have received a subsidized slot renders the causal sequence tautological, due to institutional histories. On the other hand, it may be that taking-up a child care voucher (the second form of subsidy) may encourage or discourage center selection, net the influence of prior factors.

# Identifying predictors of nonparental care, subsidy use, and type of care selected

*Family characteristics that predict use of nonparental child care.* First, we estimate the likelihood that parents selected a nonparental child care provider other than their spouse for at least 10 hours per week. This is a logit function in the form:

$$\log\left(\frac{NC_{n}}{1-NC_{n}}\right) = \dot{a} + \beta_{1}(L_{n}) + \beta_{2}(HS_{n}) + \beta_{3}(CH_{n}) + \beta_{4}(I_{n}) + \beta_{5}(W_{n}) + \beta_{6}(AC_{n}) + \beta_{7}(Q_{n}) + \beta_{8}(K_{n}) + \beta_{9}(EG_{n}) + \sum_{j=1}^{J} \beta_{10,j}(EL_{j,n})$$
(1)

Where the probability that parent, *n*, selected a nonparental provider, *NC*, is defined as a function of (1) demographic features of the parent and household, including the parent's living arrangement, *L*, school attainment, *HS*, number of children, *CH*, (2) monthly earnings at the time of the interview, *I*, (3) CalWORKs participation and knowledge, including whether the parent was receiving cash aid, *W*, the number of CalWORKs activities in which the parent was engaged, *AC*, years receiving cash aid, *Q*, and the parent's reported knowledge of available subsidies, including understanding that CalWORKs could pay for child care for up to two years after leaving cash aid, *K*, (4) a control variable to verify that the parent's eligibility for child care aid

had not changed between when administrative data was obtained and our interview was conducted, *EG*, and (5) the parent's ethnicity and home language,  $EL_j$  (which consists of *j* number of dummy coded variables for African American, Latino, Asian, white by English-, Spanish-, or Vietnamese-speaking).

*Factors predicting child care subsidy take-up*. Next we estimate the probability that the parent has successfully expressed demand for, and is drawing, a child care subsidy. This includes a portable voucher or a center slot for which the parent pays zero dollars. An identical logit function was constructed, except a dichotomous dependent variable was used indicating whether the parent was taking-up a child care subsidy:

$$\log\left(\frac{S_n}{1-S_n}\right) = \dot{a} + \beta_1(L_n) + \beta_2(HS_n) + \beta_3(CH_n) + \beta_4(I_n) + \beta_5(W_n) + \beta_6(AC_n) + \beta_7(Q_n) + \beta_8(K_n) + \beta_9(EG_n) + \sum_{j=1}^J \beta_{10,j}(EL_{j,n})$$
(2)

Where the probability of drawing a child care subsidy, *S*, is a function of the same predictors specified in equation 1 above.

*Factors predicting home-based or center selection*. We then estimate the likelihood that parents select a center-based program — *without* and then *with subsidy take-up* — as a predictor. The latter model assesses whether subsidy take-up substitutes for a priori family-level or program participation factors, suggesting endogeneity, or whether subsidy use is independently related to center selection. We employ a similar function:

$$\log\left(\frac{C_{n}}{1-C_{n}}\right) = \dot{a} + \beta_{1}(L_{n}) + \beta_{2}(HS_{n}) + \beta_{3}(CH_{n}) + \beta_{4}(I_{n}) + \beta_{5}(W_{n}) + \beta_{6}(AC_{n}) + \beta_{7}(Q_{n}) + \beta_{8}(K_{n}) + \beta_{9}(EG_{n}) + \sum_{j=1}^{J} \beta_{10,j}(EL_{j,n})$$

$$\log\left(\frac{C_{n}}{1-C_{n}}\right) = \dot{a} + \beta_{1}(L_{n}) + \beta_{2}(HS_{n}) + \beta_{3}(CH_{n}) + \beta_{4}(I_{n}) + \beta_{5}(W_{n}) + \beta_{6}(AC_{n}) + \beta_{7}(Q_{n}) + \beta_{8}(K_{n}) + \beta_{9}(EG_{n}) + \sum_{j=1}^{J} \beta_{10,j}(EL_{j,n}) + \beta_{11}(SUB_{n})$$
(3B)

Where the probability of center selection, *C*, is a function of the same predictors indicated in equation 1, first without and then including subsidy take-up, *SUB*, as an additional predictor.

*Community context and the odds of center selection.* We then move to a two-level hierarchical linear model (HLM) to assess whether the enrollment capacity of center-based programs within

parents' respective zip codes are related to (1) the mean odds of parents selecting centers, or (2) the within-zip code relationships between parental attributes and the odds of selecting centers (possible random effects on slope coefficients). For the case of estimating the likelihood of selecting a center-based provider, the HLM equations at level<sub>1</sub> (family level) and level<sub>2</sub> (zip-code level) are specified:

 $Level_1 model$ 

$$logit\left(\frac{C_{nz}}{C_{nz}}\right) = \eta_{nz} = \hat{a}_{0z} + \hat{a}_{1z}(HS)_{nz} + \hat{a}_{2z}(L)_{nz} + \hat{a}_{3z}(CH)_{nz} + \hat{a}_{4z}(NES)_{nz} + \hat{a}_{5z}(SUB)_{nz}$$
(4)

Level<sub>2</sub> model

 $\begin{aligned} \hat{a}_{0z} &= \tilde{a}_{00} + \tilde{a}_{0l}(Center\ capacity)_z + \hat{i}_{oz} \\ \hat{a}_{1z} &= \tilde{a}_{10} + \tilde{a}_{1l}(Center\ capacity)_z \\ \hat{a}_{2z} &= \tilde{a}_{20} + \tilde{a}_{2l}(Center\ capacity)_z \\ \hat{a}_{3z} &= \tilde{a}_{30} + \tilde{a}_{3l}(Center\ capacity)_z \\ \hat{a}_{4z} &= \tilde{a}_{40} + \tilde{a}_{4l}(Center\ capacity)_z \\ \hat{a}_{5z} &= \tilde{a}_{50} + \tilde{a}_{5l}(Center\ capacity)_z \end{aligned}$ 

Where at level<sub>1</sub>, the probability of center care selection,  $C_{nz}$ , for parent *n* in zip code *z* is regressed on parents' school attainment, *HS*, living arrangement, *L*, number of children, *CH*, home language, *NES* (dichotomously coded variable, 0 is English speaker, 1 is non-English speaker), and subsidy take-up, *SUB*. At level<sub>2</sub>, (center capacity)<sub>z</sub> is the aggregated center enrollment capacity within zip code *z* per 100 children, age 0-5 years-old. The  $\mu_{0z}$  term represents the random component in the level<sub>2</sub> model.  $\eta_{nz}$  is the logit link function for the nonlinear model. All level<sub>1</sub> and level<sub>2</sub> variables are grand-mean centered. This HLM model was run only for parents with young children, age 0-5, and for zip codes in which five or more parents resided, ensuring reliable slope estimations within zip codes. The resulting subsample equaled 326 parents nested in 33 zip codes.

#### CalWORKs family characteristics and measures

During the interview with each parent, we explored various topics related to their participation in welfare-to-work activities and their current child care arrangements. The interview questions fell into the following domains: (1) basic demographics related to the parent and the household's social structure; (2) elements of the household economy, including earned income and participation in the cash aid component of CalWORKs; (3) participation in other program

components of the county welfare-to-work program and knowledge of available child care supports; and (4) use and type of nonparental child care selected (if any), how the parent paid for this provider, and whether they received a public subsidy to cover the cost of child care. For parents with more than one child, a focal child was randomly selected after the parent had listed all his or her children.

We were particularly attentive to the parent's ethnicity and home language, given earlier research on the importance of these factors in determining child care selection. Respondents were interviewed in English, Spanish, or Vietnamese. Each county's administrative files indicated the parent's home language; we then matched an interviewer with fluency in the parent's language.

*Parent's demographic characteristics*. These variables included parent ethnicity, language, educational attainment, number of children and living status, defined as whether the parent is single (never-married, divorced or widowed) or living with a partner (married or not). Using the parents' self-report of language spoken at home and their ethnicity, we created additional dichotomous variables to distinguish English and non-English speaking Latinos and Vietnamese Americans

*Household economy*. Parents' reported their household's current income from wages. This was asked to understand the home's basic economic strength, not necessarily linked only to the parent's earnings. Parents also reported whether they were currently on cash aid under the CalWORKs program. We asked the number of hours the parent worked each week and possible employment during irregular hours. These latter two variables did not significantly contribute to our estimation models.

*Participation in CalWORKs program components.* The interview included several questions pertaining to parents' involvement in the welfare-to-work program, such as whether the parent was still receiving cash aid (while employed or in a work activity), the number of CalWORKs activities in the parent participated (e.g., job training, language training, job club), the number of years they have been on cash aid, their knowledge regarding CalWORKs child care subsidies, and the control variable that approximated whether they were still eligible to receive child care assistance.

*Child care use, costs, and type.* The outcomes variables included whether the parent used any type of nonparental child care (that is, other than their spouse) for more than 10 hours per week, the type of provider selected (the main provider), how much the parent paid out-of-pocket for care, and whether any public agency helped pay for the provider when private payments were close to zero. We asked whether a copayment for child care was required and how they found their provider. The incidence level of copayments was very low and did not contribute significantly to any estimation model.

# SECTION 4. Findings: Child Care Subsidy Use and Type of Care Selected

#### Parents' demographic characteristics

Basic characteristics appear in Table 1. Fully 62% of the Santa Clara County participants were currently married when interviewed. This is linked to ethnic membership: 60% of the Santa Clara parents were Vietnamese Americans of whom 83% were married. In contrast, one-third of the participants in Kern County were married. The Orange and Kern county samples were more heavily Latino in composition. In the Orange County sample, 17% were Latinos who reported English as their home language; another 12% were Spanish-speaking Latinos. In Kern County, 34% of the entire sample were English-speaking Latinos, plus 6% were Spanish-speaking Latinos. Vietnamese parents reported lower education levels, with 38% across all three counties reporting they had completed high school, compared to 76% of white parents and 49% of Latinos (not shown in Table 1). Thus in the heavily Vietnamese Santa Clara sample, just 42% of all parents interviewed had completed high school, compared to 67% in Kern.

While all parents, meeting our sample inclusion criteria, were employed or in an allowable work activity, 87% were still receiving cash aid under CalWORKs. The median range of reported household earnings equaled between \$500 and \$1,000 per month.

## TABLE 1. Demographic and Economic Attributes of Welfare Parent Sample

[means, percentages, or values reported)

	Total sample	Kern County	Orange County	Santa Clara County
	n=1,974	n=673	n=797	n=504
Basic demographics				
Married, living with partner (%)	46	33	47	62
school (%)	57	67	58	42
Ethnicity (home language %)				
Anglo (English)	24	38	20	9
African-American (English)	7	14	4	3
Asian (English)	3	2	3	4
Asian (Vietnamese)	51	0		60
Latino (English)	21	34	17	13
Latino (Spanish)	9	6	12	8
Other	5	5	6	4
Household economy				
Receiving cash aid from CalWORKs (%)	87	85	88	90
Monthly earnings (median range)	\$501-\$1,000	\$501-\$1,000	\$501-\$1,000	\$501-\$1,000
Focal child and child care				
Focal child is under 5 years old (%)	33	43	29	27
Parent uses nonparental child care (%)	64	70	66	52
Of parents using nonparental care				
Parent uses center or	21	21	23	17
atter-school program Parent uses family child	8	10	5	12
care home Parent draws child care subsidy	52	65	43	46

Compared to each county's overall caseload during our sampling period, CalWORKs families participating in the study were more likely to be married. For instance, 47% of study parents from Orange County were married at the time of the interview. But this county's overall caseload consisted of 15% two-parent families, 37% child-only cases, and 48% single-parent clients. The over representation of two-parent cases in our sample is likely due to fewer employment barriers experienced by married CalWORKs clients, especially when it comes to securing a child care provider. In addition, it highlights the fact that a county's caseload composition with influence the level of expressed demand for child care support, both information about options and demand for subsidies.

#### Patterns of child care selection

Among focal children, age 0-5 years-old, 71% spent at least 10 hours per week with a (nonparental) child care provider (Figure 1). For school-age children, 6-13 years-old, 57% were in a center or after-school program. For the younger cohort, 20% were enrolled in a center and 43% were with a kith or kin provider. Among the older group, just 9% went to a center or an organized program after school, and 46% were with kith or kin. For parents using a child care provider of any type, 52% were receiving aid to cover the cost of their provider (Table 1).



#### FIGURE 1. Child Care Use by Age Group

Basic patterns of selection are strongly related to parents' ethnicity and home language for some groups. Figure 2 reports on child care patterns across four specific groups, focusing on parents whose focal child was age 0-5 years-old. Among non-Latino whites, for example, fully 79% were currently using a child care provider. This included 37% who had selected a kith or kin member and 32% who had selected a center-based program (just under 10% selected a licensed family child care home, FCCH). Reliance on kith and kin providers was stronger among sampled African Americans (45%) and English-speaking Latinos (51%). Vietnamese-speaking parents displayed a distinct pattern: fully 49% had no care provider (perhaps due to their higher marriage rate), and only 5% had selected a center. The two groups comprising the smallest subsamples are not shown.<sup>12</sup>





Note: Sample sizes for whites, African Americans, English-speaking Latinos, and Vietnamese-speaking Asians (n) equal 192, 56, 187, and 105, respectively. Analysis excludes school-age children, 6-13 years.

Ethnicity and language also are related to the likelihood of taking-up a child care subsidy for parents with children, age 0-5. We see in Figure 3 that among parents using nonparental care, Vietnamese speakers using centers or home-based providers are less likely to draw a subsidy than all other groups. African-American parents using home-based providers are more likely to draw a subsidy than other ethnic groups.



FIGURE 3. Subsidy Use (%) by Ethnicity and Type of Childcare

#### Identifying predictors of child care use, subsidy take-up, and center selection

*Which parents are more likely to use nonparental child care*? We begin by estimating the probability that parents use a nonparental care provider, assessing possible relationships with parents' attributes, the household economy, welfare program participation, ethnicity, and home language (Table 2). Separate models were run for parents whose focal child was age 0-5, and for those with a focal child, age 6-13. Within each logistic regression we included the control variable that approximated whether the parent remained eligible for child care aid, screening out noise created by clients whose eligibility may have changed since we obtained the administrative data from counties. who may have been ineligible based on interview information.

#### TABLE 2. Predictors of Estimated Probability of Parents Using Nonparental

**Child Care** [logistic regression coefficients and, for significant factors, odds reported]

	Child age 0-5 years			Child	3 years	
	В	Sig (p)	Exp (B)	В	Sig (p)	Exp (B)
Basic demographics						
Married and living with spouse	-0.73	0.005	0.48	-0.29	0.058	0.74
Completed high school	0.48	0.054	1.62	0.61	0.000	1.85
Number of children	0.02	0.901		0.15	0.023	1.16
Household economy						
Monthly earnings	0.78	0.000	2.17	0.28	0.000	1.32
Receiving cash aid	-0.05	0.907		-0.28	0.236	
					<u> </u>	
Program participation and knowle	edge		r			
Number of CalWORKs activities	-0.12	0.575		-0.28	0.009	0.76
Years in CalWORKs participation	0.05	0.618		-0.14	0.001	0.87
Knows child care aid available, 2 years	0.14	0.556		-0.14	0.317	
					<u> </u>	
Ethnicity and home language			r			
African-American (English speaker)	-0.04	0.935		-0.61	0.036	0.55
Latino (English speaker)	-0.10	0.739		0.08	0.703	
Latino (Spanish speaker)	0.07	0.908		-0.36	0.157	
Asian (English speaker)	-0.90	0.077	0.41	-0.63	0.139	
Asian (Vietnamese speaker)	-0.15	0.700		0.42	0.058	1.52
Other Ethnicity (English speaker)	-0.19	0.707		0.00	0.990	
					Ĺ	
Eligibility verification [control var	riable]					
Subsidy eligibility	2.10	0.000	8.15	1.44	0.000	4.21
	N = 580			N = 1114		
		df = 15	1	df = 15		
	Chi-	square =	161.6	Chi-	square =	148.3
	-2 log	likelihood	= 499.3	$ -2 \log likelihood = 1357.0$		

Focusing on parents with a young child, age 0-5, we see that higher school attainment and household earnings are associated with higher odds that the child was with a nonparental provider. Parents who completed high school are 62% more likely to being using a nonparental care provider (percentage change in odds appear under column labeled,  $Exp(\beta)$ ). Every \$500 increment in reported monthly earning is associated with a more than doubling of the likelihood of using nonparental care. On the other hand, married parents and English-speaking Asians are less than half as likely to be using a nonparental care provider.

Findings for school-age children, age 6-13, are similar: parents who completed high school and reported higher earning were much more likely to be using nonparental child care. In addition, parents with more children at home are slightly more likely to select a nonparental provider than parents with fewer children (the odds are 16% greater for each additional child). And longer-term clients who are more deeply involved in the CalWORKs program are less likely to be using a nonparental care provider.

*Which parents are more likely to take-up a child care subsidy*? Next we assess whether these same parental and household-level factors are related to the probability of drawing public support for child care — focusing only on those parents who were currently using a child care provider when interviewed. In Table 3 we see that two demographic attributes are important: married parents are 70% less likely to take-up a subsidy; and parents were almost 30% more likely to draw a subsidy for each additional child living at home. Participation in CalWORKs program activities is positively related to the odds of drawing a subsidy. For each additional program activity, parents were 43% more likely to take-up their subsidy; and those who knew that child care was available for two years after moving off cash aid were 62% more likely to be drawing child care assistance. Non-English speaking groups, both Spanish-speaking Latinos and Vietnamese-speaking Asians, were less likely to draw a subsidy.

Results for school-age children, age 6-13, are almost identical. In addition, parents with higher monthly earnings are more likely to be drawing a child care subsidy (for after-school care providers). Parents' participation in more CalWORKs activities, such as reported involvement in job clubs, training, counseling activities, is associated with higher odds of drawing a subsidy for their school-age children.

#### TABLE 3. Predictors of Estimated Probability of Taking-Up Child Care Subsidy

[logistic regression coefficients and, for significant factors, odds reported]

	Child age 0-5 years				Child age 6-13 years			
VARIABLE NAME	В	Sig (p)	Exp (B)		В	Sig (p)	Exp (B)	
Basic demographics								
Married and living with spouse	-1.19	0.000	0.30		-1.86	0.000	0.16	
Completed high school	0.24	0.366			0.15	0.476		
Number of children	0.25	0.079	1.29		0.34	0.001	1.41	
Household economy			_					
Monthly earnings	0.19	0.149			0.27	0.016	1.31	
Receiving cash aid	0.20	0.561			0.32	0.257		
Program participation and kno	owledg	e						
Number of CalWORKs activities	0.36	0.080	1.43		0.30	0.052	1.35	
Years in CalWORKs program	0.06	0.598			0.08	0.284		
Knows child care aid available, 2	0.48	0.054	1.62		0.81	0.000	2.25	
years								
Ethnicity and home language	1	1	•	n		1	1	
African American (English	0.32	0.535			0.23	0.585		
speaker)								
Latino (English speaker)	-0.24	0.426			-0.11	0.689		
Latino (Spanish speaker)	-1.18	0.027	0.31		-0.80	0.034	0.45	
Asian (English speaker)	-0.58	0.354			0.22	0.759		
Asian (Vietnamese speaker)	-1.38	0.001	0.25		-1.21	0.000	0.30	
Other Ethnicity (English speaker)	0.50	0.397			-0.15	0.736		
<b>Eligibility verification [control</b>	variabl	e]	T		l.	T	ľ	
Subsidy eligibility	0.576	0.232			0.692	0.143		
	N = 429				N = 650		)	
		df = 15			df = 15			
	Chi-square = 86.4				Chi-square = 233.1			
	-2 log l	ikelihood	= 444.8		$-2 \log likelihood = 657.$			

*Which parents are more likely to select centers versus home-based care*? Next we focus on the type of child care selected, using center enrollment as the dependent variable (compared to selection of a home provider, the base). For parents with focal children, age 0-5, marriage is associated with lower odds of selecting a center, whereas parents with more children at home are more likely to enroll their child in a center (Table 4). Importantly, neither earnings nor

CalWORKs participation is related to center selection. But ethnicity and language are strongly related. English-speaking Latino parents are 61% less likely, and Spanish speakers are 77% less likely, to select a center (compared to non-Latino whites, the base). Vietnamese speakers are 84% less likely to select a center.

#### TABLE 4. Predictors of the Probability that Parents Select Child Care Centers

	Child age 0-5 years				Child age 6-13 years			
	В	Sig (p)	Exp (B)		В	Sig (p)	Exp (B)	
Basic demographics								
Married and living with spouse	-0.47	0.101	0.62		-1.03	0.001	0.36	
Completed high school	0.23	0.410			0.56	0.036	1.76	
Number of children	0.21	0.102	1.23		-0.12	0.286		
Household economy								
Monthly earnings	0.18	0 1 4 3			033	0.011	1.40	
Receiving cash aid	-0.18	0.584			0.05	0.886	1.40	
Program participation and kn		e			0.77	0.057	1.40	
Number of Calworks activities	0.27	0.163			0.33	0.053	1.40	
Years in Calworks program	-0.02	0.872			0.13	0.110		
Knows child care aid available, 2 years	0.21	0.406			0.26	0.303		
Ethnicity and home language	9							
African-American (English speaker)	-0.62	0.130			0.02	0.958		
Latino (English speaker)	-0.93	0.001	0.39		0.13	0.654		
Latino (Spanish speaker)	-1.45	0.032	0.23		-0.16	0.724		
Asian (English speaker)	-0.09	0.875			-0.44	0.606		
Asian (Vietnamese speaker)	-1.81	0.002	0.16		-1.61	0.000	0.20	
Other ethnicity	-0.22	0.589			-0.26	0.632		
Eligibility verification [contro	ol variab	le]	1					
Subsidy eligibility	-0.42	0.383			0.98	0.210		
		N = 431				N = 661		
	df = 15				df = 15			
	Chi-	square =	48.1		Chi-square = 84.9			
	-2 log li	ikelihood	= 478.0		-2 log likelihood = 497.1			

[logistic regression coefficients and, significant factors, odds reported]

Selection patterns for parents with school-age children, age 6-13, show some differences, compared to the young child cohort. For example, parents' education level is positively related to the odds of selecting an after-school program: those with a high school diploma are 76% more likely to have enrolled their youngster in such a program. Monthly earnings and the number of CalWORKs activities are both associated with a 40% greater likelihood of selecting an after-school program. Ethnic and language effects are less strong for the school-age cohort, compared to the younger cohort.

*Does subsidy take-up mediate family-level demand factors*? Policy makers advance child care subsidies to ease the cost burden for families. Yet the institutional fact that subsidy use is tightly correlated with center selection, described above, makes it difficult to identify mediating effects of subsidy use on the kinds of care selected. Only random assignment of families to differing subsidy conditions, could identify true causal effects. Stable structural equation models, useful in testing for mediating effects along alternative paths, are difficult to build with dichotomous mediators and dependent variables. Within a logistic modeling framework we can, however, examine changes in the chi-square fit statistics. In addition, the magnitude of mediating effects, stemming from a hypothesized intervening factor, can be determined by examining the percentage of reduction in the beta coefficients earlier estimated within the intervening factor in the model (DeMaris, 1992).

In Table 5 we again report the estimated probability of selecting a center without the subsidy-use predictor in the model (labeled, "without subsidy") for parents of young children, 0-5 years-old. Then we add the subsidy take-up variable and observe the reduction in the coefficients for the *a priori* parent and family-level predictors. For instance, we see that the coefficient for married and living with spouse was reduced almost to zero with the subsidy take-up predictor in the model. This suggests that subsidy take-up is endogenous to marital status but that subsidy use may help in mediating the effect of marital status. Similarly, inclusion of subsidy take-up reduces the negative association between non-English speaking groups and center selection. Inclusion of subsidy use reduces the -2 log likelihood by 58.9 (p<.001, df=1).

#### TABLE 5. Predictors of the Probability that Parents Select Child Care Centers,

#### Conditioned by Subsidy Take-Up

[logistic regression coefficients, odds for significant factors, and change in coefficients reported]

		Child age 0-5 years					Child age 6-13 years				
	Win su	Without With subsidy subsidy		%ÎB	Without subsidy		With subsidy		%ÎB		
	В	Sig (p)	В	Sig (p)		В	Sig (p)	В	Sig (p)		
Basic demographics	T	1	-	1			1	<b></b>	1		
Living with partner	-0.47	0.101	-0.01		98%	-1.027	0.001	-0.38		63%	
Completed high school	0.23		0.13			0.565	0.036	0.53	0.07	7%	
Number of children	0.21	0.102	0.15		27%	-0.123		-0.32	0.01		
Household economy			<b></b>								
Monthly earnings	0.18		0.12			0.335	0.011	0.29	0.04	13%	
Receiving cash aid	-0.18		-0.27			0.046		0.00			
Program participation and knowledge											
Number CalWORKs activities	0.27		0.16			0.333	0.053	0.30		11%	
Years in CalWORKs program	-0.02		-0.03			0.131		0.11			
Knows child care available, 2	0.21		0.01			0.258		-0.12			
years											
Ethnicity and home											
African American (English	-0.62		-0.76	0.075		0.023		-0.02			
speaker)											
Latino (English speaker)	-0.93	0.001	-0.98	0.001	5%	0.130		0.18			
Latino (Spanish speaker)	-1.45	0.032	-1.20	0.096	17%	-0.159		0.22			
Asian (English speaker)	-0.09		0.20			-0.440		-0.41			
Asian (Vietnamese speaker)	-1.81	0.002	-1.40	0.028	23%	-1.610	0.000	-1.20	0.01	25%	
Other ethnicity	-0.22		-0.32			-0.258		-0.20			
Eligibility verification (control variable)											
Subsidy eligibility	-0.42		-0.87			0.976		0.73			
Parent took-up child care subsidy			-1		<b>_</b>	-1		-1		-	
Subsidy take-up	- E		2.80	0.000	1		[ ]	2/1	0.000	T	
			2.00	0.000				2.41	0.000		
Model Statistics	<b>Model Statistics</b> $N = 431$ $N = 429$ $N = 664$ $N = 650$										
	df	= 15	df = 16			df = 15		df	df = 16		
	c2 =	48.076	c2 =	$c^2 = 1055$		$c_{2} = 84.9$		$c_2 = 148.0$			
	-2LL=	-2LL=477.980 -2LL = 419.1			-2LL = 497.1		-2LL = 426.8				

The results are similar for parents with school-age children. The relationship between marriage and center selection is greatly reduced when subsidy take-up is included in the model. The subsidy predictor modestly reduces the coefficients for monthly earnings and the number of CalWORKs activities in which parents are engaged. Inclusion of subsidy take-up significantly improved the model's fit, reducing the -2 log likelihood by 70.3 (p<.001, df=1).

*Does center enrollment capacity mediate family-level predictors within communities*? The relationship between family-level predictors and selection outcomes may be conditioned by the community-level availability of center-based programs. The availability of centers in low-income communities is largely driven by subsidy flows to schools and nongovernment organizations (NGOs), not only by family demand factors. And welfare-poor families typically make-up less than one-fifth of all families within low-income neighborhoods (Jargowsky, 1997). Thus the largely exogenous variability in the local presence of subsidized centers and preschools may condition or mediate the odds that welfare families select a center (or home-based provider).

The HLM models were built by moving from the significant predictors of child care use and center selection as identified in the family-level logit models. We then assessed whether each predictor displayed a random and a fixed effect across zip codes within an HLM environment at level<sub>1</sub> (see equation 4 above). When an insignificant random effect was observed, we fixed the effect across zip codes (Bryk & Raudenbush, 1992). We then entered as a level<sub>2</sub> factor the enrollment capacity of center-based programs standardized by the number of children, age 0-5, residing in the at zip code, based on census data.<sup>13</sup>

We found no consistent effects when estimating the odds of using nonparental care, beyond the relationships observed in the logistic regression environment. However, three findings emerged when estimating the likelihood that parents selected a center rather than a home-based provider. Table 6 displays the results for a two-level HLM model, focusing on how variation in the enrollment capacity of centers between zip codes is related to the odds that parents did select a center.

#### TABLE 6. Relationship between Local Center Capacity and Parents' Odds

	Coefficient	Р	Effects	Significant
Intercept (β <sub>0j</sub> )				
γ <sub>00</sub> =	-1.633463	0.000	Fixed:	Yes
μ <sub>0</sub> =	0.000180	0.350	Random:	No
Center Capacity $\gamma_{01}$ =	-0.025369	0.041	L2:	Yes
High school diploma ( $\beta_{1j}$ )				
γ <sub>10</sub> =	0.177526	0.595	Fixed:	No
Center Capacity $\gamma_{11}$ =	0.010843	0.746	L2:	No
Married ( $\beta_{2j}$ )				
γ <sub>20</sub> =	0.015848	0.967	Fixed:	No
Center Capacity $\gamma_{21}$ =	-0.042196	0.404	L2:	No
Number of children $(\beta_{3j})$				
γ <sub>30</sub> =	0.084578	0.578	Fixed:	No
Center Capacity $\gamma_{31}$ =	-0.002931	0.893	L2:	No
Non-English Speaker ( $\beta_{4j}$ )				
γ <sub>40</sub> =	-1.245030	0.042	Fixed:	Yes
Center Capacity $\gamma_{41}$ =	0.082027	0.009	L2:	Yes
Subsidy Use (β <sub>4j</sub> )				
$\gamma_{50} =$	3.624242	0.000	Fixed:	Yes
Center Capacity $\gamma_{51}$ =	-0.074161	0.102	L2:	Yes

of Selecting a Center-based Program (HLM model; *n*=326 parents in 33 zip codes)

First, parents living in zip codes with higher center capacity (standardized by child population) are less likely overall to select a center-based program ( $\gamma_{01}$ =-.03, p<.041). This seems counterintuitive; we return to possible contextual explanations in the discussion section. Second, while non-English speaking parents again display lower odds of selecting centers, this negative relationship diminishes significantly for those living in zip codes with higher center enrollment capacity ( $\gamma_{41}$ =.08, p<.009 for slope estimates). Finally, we see that the relationship between receiving a subsidy and selecting a center is marginally weaker in zip codes with higher enrollment capacity. This suggests that parents residing in communities with greater center capacity might also benefit from a wider range of child care options that are tied less to subsidy use.

#### Similar results from a parallel study — the Growing Up in Poverty Project

Researchers at the PACE center also have been following mothers, with children age 2½ on average at entry to the study in 1998, who are moving from welfare to work. The CDSS project supported additional work with these data from the *Growing Up in Poverty Project* — including mothers and child care settings in California, Connecticut, and Florida — to inform the same research questions articulated above.

In both the 1998 the 2000 maternal interviews we asked a variety of questions about child care subsidy use, as well as the types and quality of child care selected as women moved into jobs. The likelihood of *drawing a subsidy* — through the local welfare office or any other child care or preschool support — was higher for mothers who had older children (age 3-4 years rather than infants or toddlers), completed high school, and reported higher earnings.

While mothers in the two California counties reported lower subsidy take-up rates than those in Florida in 1998, subsidy use climbed significantly in both San Francisco and Santa Clara County by 2000. The California counties consistently displayed higher take-up rates than the two participating Connecticut counties.

We also find that mothers are more likely to select *home-based care* when they are less educated (having dropped out of high school), the focal child is a toddler (age 12-30 months-old), and when the mother is non-English speaking.

Any discrete effect stemming from subsidy take-up is difficult to detect. The *a priori* maternal and child characteristics — mother's education, child age, and home language — are more strongly related to selection of home-based or center care, which in turn contributes to the subsidy take-up rate.

For this multi-state sample, mothers are slightly more likely to select a center program when they live in a census tract with higher center enrollment capacity, after taking into account the maternal and child characteristics that help predict the type of care selected.

Finally, in a new paper from PACE that looks at child care selection among Connecticut mothers, we find that the structure of women's jobs further explains the likelihood of selecting a

home-based or center provider. Mothers working regular work hours during weekdays, representing just over half the sample, are more likely to select center programs. Those who work evenings, weekends, or different hours each week are significantly more likely to select home-based care. These estimation models are available from the authors.

## SECTION 5. Implications for Policy Makers, Program Managers, and Caseworkers

These findings show that the odds of drawing a child care subsidy and the type of care parents' select are systematically related to their own attributes, as well as demographic and economic features of their households. Ethnic membership and home language, in particular, are consistently and strongly related to which parents use nonparental care, their propensity to draw a subsidy, and the odds that they enter the center-based sector. We know from earlier research that county level policies and caseworker practices also can be influential (Adams, Snyder, & Sandfort, 2002). This may be related to the occasional relationships we observed between the extent to which parents are involved in welfare program activities and their child care selections. Still, features of individuals and their families strongly predict child-care related behaviors. Some family attributes appear to be positive: married parents may receive stronger social support, compared to single mothers, and opt to split child care responsibilities single between mother and father.

#### Risk factors that caseworkers should recognize

Other attributes, however, represent risk factors, predicting lower odds of using child care subsidies: parents who do not speak English, those less involved in the CalWORKs program, and those who are less knowledgeable of subsidy options. State and local policy makers — and front-line caseworkers — might focus stronger attention on these subgroups as attempts are made to allocate child care aid.

Several of the same factors also predict which families select centers or home-based care providers. This is due, in part, to the close coupling of subsidy use and center selection, an

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institutional fact that persists despite the rapid growth of portable vouchers since 1990. Among parents with young children, age 0-5, those who were married, Latino, and Vietnamese speaking were much less likely to select home-based providers. Parents with more children at home were somewhat more likely to select a center slot for parents with school-age children for their focal child. These findings were similar for parents with school-age children, age 6-13, including the fact that parents with high school diplomas and stronger earnings were more likely to select a center or formal after-school program.

Future studies may find that subsidy take-up contributes independently to center selection. But our findings suggest that subsidy use more likely stems from, and mediates the influence of, *a priori* parent and family characteristics that exogenously influence selection of center or home-based providers.

#### Child care choice within local contexts

The contextual influence of center availability — whereby parents in zip codes with lower center capacity are *more likely* to select a center-based program — seems counter-intuitive. But in our sample of zip codes, across the three counties, enrollment capacity was *higher* in zip codes with larger child populations (r=-.27), lower median household income (r=-.32) and lower maternal employment rates (r=-.22). This is consistent with earlier findings that public support for centers and preschools, since the 19960s, has been effectively targeted on the poorest communities in California (Fuller, Kagan, Caspary, & Gauthier, 2002). So, low-income parents who reside in relatively better-off zip codes, where enrollment capacity is lower, may be given higher priority for center slots. At the same time, when non-English speaking parents live in zip codes with more abundant center availability, their home language becomes less of a barrier to selecting a center slot.

More broadly, these results help to illuminate the wide variety of parents who have been moving from welfare to work. The fact that such numerous relationships were found, despite the truncated variation that arises in samples of low-income families, is a point that should be emphasized. Those parents with more schooling, stronger earnings, and few language barriers are more likely to draw a child care subsidy and more likely to select a center-based program. Recent immigrant groups — non-English speaking Latino and Vietnamese parents — may be

expressing an exogenous or cultural preference for home-based child care. Yet we know that the availability of center and preschool options are more scarce in their neighborhoods, at least in the California context (Fuller et al., 2002). And as the present paper has detailed, English-speaking groups, better educated parents, and those stronger employment success come to express greater demand for subsidies and center slots, compared to parents who live out on the periphery of society.

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#### Endnotes

<sup>1</sup> The per capita enrollment capacity of centers was lower in zip codes with higher concentrations of Latino families, yet higher in communities with more churches, suggesting that a neighborhood's organizational environment may help to shape local center supply. Whether prior supply conditions stem from government action or family demand likely depends on whether one is focusing on low-income neighborhoods where parental fees play a small role, or affluent communities where fee revenues are sufficient to spur greater supply over time.

<sup>2</sup> We are not presuming that low-income parents prefer, a priori supply conditions, to select a center or preschool rather than a home-based provider. Nor are we assuming that in all cases centers can better accommodate the work hours of parents, or yield stronger child development outcomes, than home-based settings. For review of empirical literature that speaks to these issues, see Blau (2001); Fuller, Kagan, Caspary, & Gauthier (2002).

<sup>3</sup> Among all young children under 6 from affluent families, 37 percent attend a center or preschool program, versus just 15 percent of youngsters from low-income families (West, Wright, & Hausken, 1995).

<sup>4</sup> This broader literature on child care selection also looks at contextual factors and local supply conditions. For instance, the age at which toddlers are first placed in child care varies sharply across regions of the country. The odds that a child will be placed in any form of nonparental care before reaching 6 months of age are 2.1 times higher in the South than in the Northeast, after taking into account the family's demographic and economic features, maternal employment, and school attainment (Singer et al., 1998). This is likely due to the greater availability of center-based programs, like Head Start and state preschools, earlier observed in the South (Kisker, Hofferth, Phillips, & Farquhar 1991), and perhaps interacting with higher maternal employment rates among black families historically.

<sup>5</sup> The impact of subsidy growth on the availability of center enrollment slots appears limited, since much of the new voucher funding is reimbursing home-based providers (Piecyk, Collins, & Kreader, 1999; Fuller, Waters-Boots, Castilla, & Hirshberg, 2002).

<sup>6</sup> Two sets of CalWORKs clients were included in the county universe lists: those who had moved off cash aid entirely due to earnings during the period, and those who were still drawing cash aid but were enrolled in a work activity, including a job, and thus eligible for child care aid.

<sup>7</sup> Two-parent families were included. Child-only cases were excluded, since complete data on the parent was unavailable and the parent would not likely face work requirements.

<sup>8</sup> A total of 8,177 calls were made before our sampling quota was reached. Of these, just over 32% of the phone numbers were disconnected or not linked to the intended respondent.

<sup>9</sup> California Work Opportunity and Responsibility to Kids (CalWORKs program).

<sup>10</sup> We did not exclude parents who appeared ineligible from the phone interview variables, since this source yielded partial information, insufficient to definitely determine that they were no longer eligible.

<sup>11</sup> The percentages for those parents selecting family child care homes are similar to the patterns for center selectors.

<sup>12</sup> Spanish-speaking Latinos with a young focal child, age 0-5 (n=31), relied heavily on kith and kin (59%); only 10% had selected a center. English-speaking Asians (n=26) tended to select centers at a higher rate (19%), compared to Vietnamese speakers (5%).

<sup>13</sup> In addition, we assessed whether enrollment capacity in licensed FCCHs contributed to parents selection into the center-based sector, but this level<sub>2</sub> predictor never added to the model's explanatory power.

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