## Child Care & Early Education RESEARCH CONNECTIONS

## PARENT EMPLOYMENT AND THE USE OF CHILD CARE SUBSIDIES—TABLE OF METHODS AND FINDINGS

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Citation	Groups Studied	Research Question	Research Approach	Data Source	Validity	Reliability	Findings
Anderson, P. M., & Levine, P. B. (1999). Child care and mothers' employment decisions (NBER Working Paper Series No. 7058). Cambridge, MA: National Bureau of Economic Research. <www.childcarere- ccrca544="" location="" search.org=""></www.childcarere->	Women with children under age 13, from the years 1990, 1991, and 1993. Comparisons were made among women with different levels of education.	What are the likely effects of a reduction in child care expenses on women with different wage potentials?	Using SIPP data, the researchers first described the differences in child care utilization and cost among women with different levels of education, from which they inferred different wage potentials. The researchers then conducted analyses to determine the likely effects of changing the cost of child care on the labor force participation of women with different levels of education.	Four panels of the Survey of Income and Program Par- ticipation (SIPP), reflecting conditions in fall 1990, 1991, and 1993.	[No information provided.]	[No information provided.]	Reducing child care expenses resulted in the largest gains in employment for women who were the least educated. For single mothers without a high school degree, the employment rate moved from 25% to 33%. Such a gain is as large as or larger than is typically found in "successful" welfare-to-work programs. Even with these gains, however, levels of employment for the least-educated women are likely to remain far below those of other women.
Bainbridge, J., Meyers, M. K., & Waldfogel, J. (2003). Child care policy reform and the employment of single mothers. Social Science Quarterly, 84(4), 771-791. <www.child-careresearch.org ccrca4931="" lo-cation=""></www.child-careresearch.org>	All unmarried women between the ages of 19 and 44 who are not in school in the years between 1991 and 1996.	What are the likely effects of state child care subsidies and other policies, income, and tax policies on women's employment decisions?	The authors model the employment decisions of single mothers, taking into account their wage potential, local employment conditions, and other factors. The authors then include in the model statelevel measures of child care policies and income and tax policies to measure the effects of these policies on single women's employment.	U.S. Current Population Survey (CPS), March Annual Social and Economic Supplement for 1992 though 1997. State measures of child care policy were constructed from various administrative and published sources.	[No information provided.]	[No information provided.]	Separating the subsidies targeted to nonwelfare working poor families from those targeted to families receiving welfare, a \$1,000 annual increase in subsidies resulted in an 11% increase in the probability of employment for low-income families not receiving welfare.
Baum, C. L., II. (2002). A dynamic analysis of the effect of child care costs on the work decisions of low-income mothers with infants. <i>Demography</i> , 39(1), 139-164. <www.child-careresearch.org ccrca228="" lo-cation=""></www.child-careresearch.org>	Women who gave birth during the period 1988-1994, particularly women with incomes at or below the federal poverty line the year preceding the birth of their children.	What are the likely effects of child care costs on women's decisions to return to work after the birth of their children?	The author used the lon- gitudinal sample to model a woman's return to work after the birth of her child, and the likely effect that child care costs have on that decision.	The National Longitudinal Survey of Youth (NLSY).	[No information provided.]	[No information provided.]	Child care costs had a negative effect on the probability that mothers will begin to work after they have given birth. Child care costs are a larger barrier to work for low-income mothers than for non-low-income mothers. Subsidizing 30% of child care costs increases the percentage of low-income mothers who are working one year after they give birth from 41% to 48.5%. Two years after childbirth, a 30% subsidy increased the percentage of low-income mothers who work from 53.8% to 62%.

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Blau, D., & Tekin, E. (2001). The determinants and consequences of child care subsidies for single mothers (Discussion Paper No. 383). Bonn, Germany: Institute for the Study of Labor. <www.child-careresearch.org ccrca321="" location=""></www.child-careresearch.org>	Single mothers with children under age 13 in 1997.	How does subsidy receipt affect employment, school enrollment, job search, and welfare participation?	The NSAF is one of the few nationally representative surveys that includes information about subsidy receipt, so the authors do not have to simulate the effects of a subsidy by reducing child care expenses for parents, as is done in other analysis. The authors modeled the receipt of a child care subsidy and the relationship between subsidies and employment and cash assistance.	The 1997 National Survey of America's Families (NSAF).	[No information provided.]	[No information provided.]	Subsidy recipients were 5% more likely to be employed than nonrecipients, and 8% more likely to be in education and training than nonrecipients. Subsidy recipients were also 10% more likely to be on welfare, probably because subsidies were targeted to families on welfare. The authors state that, taken at face value, these figures suggest that subsidies encourage employment and school enrollment among welfare recipients but not among those who do not receive welfare.
Crosby, D. A., Gennetian, L. A., & Huston, A. C. (2001). Does child care as- sistance matter?: The effects of welfare and employment pro- grams on child care for preschool- and young school-aged children (The Next Generation Working Paper Series No. 3). New York: MDRC. <www.childcarere- ccrca7962="" location="" search.org=""></www.childcarere->	Women who participated in 13 welfare reform initiatives that occurred in the late 1980s and in the 1990s. At the point the women participated in the initiatives, their children included in the study were between the ages of 3 and 9 years old.	For families with preschool and young children, what are the effects on child care use of welfare reform initiatives that were designed to encourage employment and earnings? What are the effects of specific enhancements to the child care subsidy program, on employment?	The original studies were designed to evaluate the effects of the welfare reform initiatives on a range of parent and child outcomes. While families in both the treatment and control groups had access to at least some child care subsidies, the welfare reform interventions sometimes included a component designed to enhance some aspect of child care, such as resource and referral services for parents to help them locate the most appropriate child care arrangements. Therefore, the "treatment" group had access to this enhancement, while the "control" group did not. The authors reanalyzed the data from the original welfare studies to learn more about the intervention's effects on child care use more generally and to isolate the effects of the initiatives' child care enhancements.	Data collected for the 7 welfare reform studies that examined the 13 welfare reform initiatives.	[No information provided.]	[No information provided.]	The income and employment aspects of the welfare reform interventions affected families' child care use. The families that worked more used more child care. The child care enhancements that were part of some of the welfare reform interventions did not have effects on either employment behavior or the amount of child care used. The enhancements often affected the type of child care used; policies and practices designed specifically to inform parents about subsidized or regulated child care appeared to result in more use of formal and regulated care. These findings are the same as for the authors' similar analysis focusing on very young children.

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Danziger, S. K., Ananat, E. O., & Browning, K. G. (2003). Childcare subsidies and the transition from wel- fare to work (National Poverty Center Working Paper Series No. 03-11). Ann Arbor: University of Michigan, National Poverty Center. <www.childcarere- ccrca7118="" location="" search.org=""></www.childcarere->	Participants were subsidy-eligible women who received welfare in an urban Michigan county in February 1997.	What is the likely effect of subsidy receipt on work?	Face-to-face interviews were conducted with the women in fall 1997, 1998, and 1999. Child care questions were asked in Wave 3. The authors used a two-stage regression analysis to predict subsidy receipt and to estimate the effect of subsidy receipt on work. One set of comparisons was between families who used child care subsidies and families who used unsubsidized child care.	Data were from the first three waves of the Women's Employment Study (WES), a survey of welfare recipients in an urban Michigan county. A simple random sample was selected from eligible women who received welfare in the county in February 1997. For the present paper, a subsample of 529 subsidy-eligible families was used. Subsidy receipt data is self-reported. Work was operationalized as earnings and percent of months employed.	[No information provided.]	[No information provided.]	Families receiving child care subsidies had better work outcomes than all other families, both those who used unsubsidized care and those who did not use care at all. After controlling for demographic characteristics and advantages and barriers to work, respondents who received subsidies had worked more months in a one-year period and had earned more at Wave 3 of the study.
Gennetian, L. A., Crosby, D. A., & Huston, A. C. (2001). Does child care assistance matter?: The effects of welfare and employment programs on child care for very young children (The Next Generation Working Paper Series No. 2). New York: MDRC. <www.childcareresearch.org ccrca795="" location=""></www.childcareresearch.org>	Women who participated in 5 welfare reform initiatives that occurred in the late 1980s and in the 1990s. Children studied were under age 3 years.	For families with infants and toddlers, what are the effects on child care use of welfare reform initiatives that were designed to encourage employment and earnings? What are the effects of specific enhancements to the child care subsidy program on employment?	The original studies were designed to evaluate the effects of the welfare reform initiatives on a range of parent and child outcomes. While families in both the treatment and control groups of these studies had access to at least some child care subsidies, the welfare reform interventions sometimes included a component designed to enhance some aspect of child care, such as resource and referral services for parents to help them locate the most appropriate child care arrangements. The "treatment" group had access to this enhancement, while the "control" group did not. The authors reanalyzed the data from the original welfare studies to learn more about the intervention's effects on child care use more generally and to isolate the effects of initiatives' child care enhancements.	Data collected for the 5 studies that examined the effects of state welfare reform initiatives.	[No information provided.]	[No information provided.]	The income and employment aspects of the welfare reform interventions affected families' child care use. Not surprisingly, the families that worked more used more child care. The child care enhancements that were part of some of the welfare reform interventions did not have effects on either employment behavior or the amount of child care used. These enhancements did, however, affect the type used; policies and practices designed specifically to inform parents about subsidized or regulated child care, in fact, appeared to result in more use of formal and regulated care. These findings are the same as for a similar analysis focusing on older children.

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Han, W., & Waldfogel, J. (2001). Child care costs and women's employment: A comparison of single and married mothers with pre-school-aged children. Social Science Quarterly, 82(3), 552-568. <www.child-careresearch.org ccrca1330="" location=""></www.child-careresearch.org>	Women in the United States in 1991 through 1994. Comparisons were made between un- married and married mothers.	What are the likely effects of a reduction in child care costs on women's employment decisions? How do effects likely differ for married and unmarried mothers? How are licensing policies and practices associated with mothers' employment decisions? How is licensed capacity associated with these decisions?	The researchers develop a series of models to predict the effect of child care costs on women's employment decisions. They make comparisons between unmarried and married mothers. To demonstrate the size of the effects of costs on women's labor force participation, the researchers simulate the effects of reducing child care costs by 50 cents an hour and by \$1.00 an hour. They also developed indirect measures of quality and availability based on licensing information.	U.S. Current Population Survey (CPS), March Annual Social and Economic Supplement for 1991 through 1994, augmented with data to predict child care costs for working mothers from the Survey of Income and Program Participation (SIPP), state policy information about the welfare guarantee in each of the states (which could be some women's alternative to foregoing work), state-level indexes of child care regulation to take child care quality into account, and slots of center and family child care to take child care availability into account.	[No information provided.]	[No information provided.]	A 50 cent-per-hour subsidy would increase unmarried women's employment by 8-9% and married women's by 5%. A \$1 per-hour subsidy would increase unmarried women's employment by 19-20% and married women's by 12-13%. A higher regulatory index appears to have a positive effect on workforce decisions for married women, indicating that they are more likely to work if regulations are better, but no effect for unmarried women. An increase in the number of child care regulatory inspections appears to have a positive effect on the workforce participation of both married and unmarried women.
Houser, S., & Dickert-Conlin, S. (1998). The effects of after-tax wages, transfer payments, and child care expenses on labor market and transfer program participation (JCPR Working Paper No. 7). Chicago: Joint Center for Poverty Research. <www.childcareresearch.org ccrca586="" location=""></www.childcareresearch.org>	Single and married parents with children under age 18 in 1994.	What are the combined effects of changes in wages, transfer payments, and child care expenses on women's decisions about working and receiving benefits?	The authors constructed a microsimulation model to take into account the ways in which after-tax wages, benefit guarantees (EITC, AFDC, Food Stamps, Medicaid, and federal housing assistance), child care expenses, and other factors affected both decisions about working and receiving benefits. A decision about one of these factors has implications for the others; the model therefore takes them all into account.	The 1993 Survey of Income and Program Participation (SIPP).	[No information provided.]	[No information provided.]	The model found only very modest effects of child care subsidies on labor force participation. A child care subsidy equal to 50% of the price of care would increase the labor force participation of single parents by 4.2% and secondary earners by 4.1%.

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Jefferys, M., & Davis, E. E. (2004). Working in Minnesota: Parents' employment and earnings in the Child Care Assistance Program. St. Paul: Minnesota Child Care Policy Research Partnership. <www.childcareresearch.org ccrca4172="" location=""></www.childcareresearch.org>	Employed parents receiving child care subsidies in four Minnesota counties between January and March 2001.	What is the impact of subsidies on the labor force involvement of low-income families?	The study examined the industry employment patterns of working parents receiving child care subsidies. This paper replicates the approach profiled in Okuyama & Weber (2001), and expands on it by including data on provider payments, hours worked, and state job vacancy rates.	Administrative data on subsidized child care for families in four Minnesota counties were matched with administrative wage records. Employment sector data were used to classify the types of employment held by parents using subsidies in comparison to the overall workforce.	[No information provided.]	[No information provided.]	Parents receiving child care subsidies held jobs concentrated in four employment sectors: health care and social assistance, retail trade, accommodation and food service, and administrative and support services. 62% of subsidized parents held jobs in these four sectors, as compared to 33% of the total workforce. These industries have high job vacancy rates and pay low wages. Most subsidized parents' jobs are not full-time positions and do not earn income above the poverty level for a family of four.
Lee, B. J., Goerge, R., Reidy, M., Kreader, J. L., Georges, A., Wagmiller, R. L., Jr., et al. (2004). Child care subsidy use and employment outcomes of TANF mothers during the early years of welfare reform: A three-state study. Chicago: University of Chicago, Chapin Hall Center for Children. <www.child-careresearch.org ccrca4434="" lo-cation=""></www.child-careresearch.org>	Single mothers with children younger than age 13 who began receiving TANF in three states (Illinois, Maryland, and Massachusetts) from 1997 to 1999.	What is the relation between child care subsidy use and employment outcomes?	The study followed a series of TANF entry cohorts over time. The researchers used wage reporting data to learn about participants' employment and child care subsidy data to determine subsidy use. The authors conducted within-state and crossstate analyses to examine the role of subsidy use as it relates to employment duration.	The study linked individual-level state administrative data on child care subsidy use and TANF receipt with unemployment insurance wage reporting data in Illinois, Maryland, and Massachusetts.	[No information provided.]	[No information provided.]	Child care subsidy use is strongly correlated with employment retention. Even after controlling for a range of demographic characteristics, using a child care subsidy decreases the probability of ending employment over the study period, by 43% in Illinois, 31% in Maryland, and 25% in Massachusetts.

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Lemke, R. J., Witte, A. D., Queralt, M., & Witt, R. (2000). Child care and the welfare to work transition (NBER Working Paper Series No. 7583). Cambridge, MA: National Bureau of Economic Research. <www.childcarere-search.org ccrca775="" location=""></www.childcarere-search.org>	Families receiving subsidies in Massachusetts in 1996 and 1997 who were current or former welfare recipients.	What are the likely effects of changes in the child care market, and of changes in the availability of early care and education subsidies, on the work decisions of parents who are already receiving subsidies because they are in education and training programs or employed? How are differences in the stability and quality of care associated with decisions to work (as opposed to enrolling in education and training)?	The individuals in the study already received subsidies because they were either working or in education and training programs. The researchers used the data set constructed to conduct several simulations varying the amount of subsidies available, the availability of kindergarten, and local child care market conditions to see how these changes affected parents' decisions to work (as opposed to being enrolled in education and training) and the number of hours of work. They also developed indirect measures of stability and quality of care based on resource and referral data.	A 14-month, longitudinal data set constructed using monthly Massachusetts state administrative records on families receiving subsidies and/or cash assistance. These data were augmented with information from federal, state, and local sources about the child care market, the labor market, early care and education policies and programs (including kindergarten and prekindergarten), and welfare and other policies.	[No information provided.]	[No information provided.]	The full assessment of child care's impact on parents' work decisions must include factors related to availability and quality as well as cost. As found in other research, increased costs of child care decreased the probability that women would work. For instance, increasing the median weekly cost of child care from \$90 to \$180 reduced the probability of working by 4.5%. Child care stability and quality had larger effects on the probability that women would work than did cost. Both the child care market and the availability of subsidized child care and education had more impact on the probability of work than on the hours of work. Finally, current and former welfare recipients living in areas with full-day kindergarten were more likely to work than those who lived in areas with part-day kindergarten.
Meyers, M. K., Heintze, T., & Wolf, D. A. (1999). Child care subsidies and the employment of welfare recipi- ents (Working Paper No. 15). Berkeley: University of California, Berkeley, UC Data Archive & Technical Assistance. <www.childcarere- ccrca214="" location="" search.org=""></www.childcarere->	Women followed from 1992 to 1995 who were receiving cash assistance from four counties in California. The four counties included both rural and urban areas and represented about half the caseload on cash assistance in the state.	What are the likely effects of receiving subsidies on women's employment decisions, given the fact that for most families, the probability of actually receiving them is less than certain?	The researchers constructed a two-stage model. After first estimating the probability that a mother would receive a child subsidy if she used child care, the authors then analyzed the impact of this probability on her employment activities. (Other research has demonstrated the effects of lowering child care costs but has not examined the questions about which families receive subsidies and how the chance of receiving them affects employment outcomes.)	Survey respondents were selected in November 1992 from welfare administrative records from four California counties and followed up 18 and 36 months later.	[No information provided.]	[No information provided.]	If the probability of receiving a subsidy was set at 0, the likelihood of work was 21%. If the probability was set at 27% (which was the percent of families in the sample receiving subsidies), the likelihood of work more than doubled, to 49%.

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Okuyama, K., & Weber, R. B. (2001). A view from four states and the District of Columbia: Parents receiving child care subsidies: Where do they work? Albany, OR: Linn-Benton Community College, Family Resources and Education Division. <a href="https://www.childcarere-search.org/location/ccrca118">www.childcarere-search.org/location/ccrca118</a>	Employed parents using child care subsidies in multiple counties in four states and the District of Columbia in studies conducted between 1992 and 1998.	What are the employment patterns of workers receiving child care subsidies?	This paper summarizes the findings from seven studies of the employment patterns of low-income parents using child care subsidies. The studies employed the same general methodology. Using individual-level subsidy and employment data, they identified the types of employers for which parents using subsidies worked. They then compared these patterns of employment sector participation with that of the overall labor force.	The studies were conducted in four states (Florida, Alabama, Oregon, and California) and the District of Columbia; some were statewide, others were multicounty. The studies used subsidy data, employment data from subsidy or Unemployment Insurance programs, industrial codes for employers, and overall labor force employment data.	[No information provided.]	[No information provided.]	The retail and services industries employ the majority of subsidy-receiving workers. The retail industry is the most common employer in each geographic area studied, and service industries are the second most common employers. The employment patterns of subsidy recipients and the overall labor force are quite different, with subsidy recipients much more likely to be employed in retail or service industries than were other workers. Local labor market conditions determine the size and importance of industries other than retail and services.
Queralt, M., Witte, A. D., & Griesinger, H. (2000). Changing policies, changing impacts: Employment and earnings of child- care subsidy recipi- ents in the era of wel- fare reform. Social Service Review, 74(4), 588-619. <www.childcarere- ccrca265="" location="" search.org=""></www.childcarere->	Families receiving subsidies in Miami-Dade County between 1996 and 1998 who were current or former welfare recipients.	What are the effects of increases in the amount of subsidy spending per eligible child at the county level on the employment decisions of parents who are receiving subsidies because they are either employed or in education, training, or job preparation programs?	The individuals in the study already received subsidies because they were either working or in education and training programs. The researchers used the data sets constructed to explore the impact of early stages of welfare reform on the earnings of low-income working mothers (including the impact of increases in availability of child care subsidies).  This constituted a "natural experiment" in which welfare and subsidy policy changes occurred during the time period of the study, thus allowing the researchers to study the policy change over time.	A 24-month, longitudinal data set constructed using monthly state administrative records on families receiving subsidies and/ or cash assistance. These data were augmented with information from federal, state, and local sources about the child care market, the labor market, early care and education policies and programs (including kindergarten), and welfare and other policies.	[No information provided.]	[No information provided.]	Increases in subsidy program funding were associated with a significant increase in the number of TANF recipients entering into work from education and training programs, especially for those with fewer barriers to employment. The analysis indicated that earnings for former-TANF families in the sample increased as a result of subsidies, but only one of multiple analytic techniques resulted in a statistically significant finding. Co-payments to help cover child care costs might lead to declines in earnings, when they exceed 10 percent of family income.

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Tekin, E. (2004a). Child care subsidy receipt, employment, and child care choices of single mothers (NBER Working Paper Series No. 10459). Cambridge, MA: National Bureau of Economic Research. <www.childcareresearch.org ccrca4105="" location=""></www.childcareresearch.org>	Single mothers with at least one child under age 6.	What is the probable impact of actual child care subsidy receipt on the joint employment and child care type decisions of single mothers in the post-welfare reform period?	The authors examine the impact of actual subsidy receipt on employment and type of child care selected (centers, family day care homes, and relatives). They explore employment and child care choice jointly.	The 1999 National Survey of America's Families (NSAF).	[No information provided.]	[No information provided.]	Receipt of a child care subsidy increased the probability of mother's employment by 15.3 percentage points. Receipt of subsidies also increased mothers' probability to work and use of center care by 33 percentage points, and decreased their use of relative care by 16 percentage points.
Tekin, E. (2004b). Single mothers working at night: Standard work, child care subsidies, and implications for welfare reform (NBER Working Paper Series No. 10274). Cambridge, MA: National Bureau of Economic Research.	Single mothers with at least one child under age 13.	What is the probable impact of child care subsidies on the decision of single mothers to work standard hours, and does this impact differ between welfare recipients and nonrecipients?	This paper examines the capability of child care subsidies to help mothers find jobs with conventional schedules (daytime weekday hours) that usually pay higher wages and lead to better economic outcomes for families.	The 1999 National Survey of America's Families (NSAF).	[No information provided.]	[No information provided.]	Overall, single mothers (welfare and nonwelfare) who receive child care subsidies were 6.1 percentage points more likely to work standard hours than nonstandard hours. When examining this effect by welfare status, the size of the effect varied. Among welfare mothers, those who receive child care subsidies are 14 percentage points more likely to work standard hours (versus nonstandard hours). Among nonwelfare mothers, subsidy receipt increased the probability of standard work hours by only 1 percentage point.

This Table of Methods and Findings is part of the Reviews of Research series that synthesizes research on selected topics in child care and early education. For each topic, Reviews of Research provides an in-depth Literature Review and a summary Research Brief, as well as the companion Table of Methods and Findings from the literature reviewed. Copies of these items are available on the *Research Connections* web site: www.childcareresearch.org, a free and comprehensive resource for researchers and policymakers that promotes high-quality research in child care and early education and the use of that research in policymaking.

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