

**Child Care as a Barrier to Employment**  
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**January 2004**

**Introduction**

Child care arrangements have become increasingly important for low-income women since the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996. For most welfare recipients, PRWORA effectively eliminated the choice of whether or not to work by making welfare receipt conditional on work or participation in employment-related activities. Stricter work requirements have meant that more women are entering the workforce. As a result, greater numbers of children now require care.

Changes in the demand for child care as well as the resources available to subsidize child care have the potential to influence a woman's transition into work. This paper highlights research efforts by the Women's Employment Study to measure and analyze the relationship between child care and work transitions. The first section of the paper describes changes to federal child care resources since the passage of PRWORA. The next section introduces the measures used to create a "child care barrier" in the Women's Employment Study (WES). The final section presents descriptive data on the extent to which WES recipients experience a child care barrier, and analyses of the impact of receipt of a child care subsidy on work outcomes using the WES data.

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## **Changes to Child Care and Welfare under PRWORA**

Because stricter work requirements were presumed to raise the demand for child care, PRWORA increased federal funding to subsidize the purchase of child care. Annual child care funding was increased to \$20 billion – an increase of \$4 billion - for the period from 1997-2002. Funding was consolidated into a single stream administered through the Child Care and Development Block Grant (CCDBG). PRWORA also altered existing regulations by permitting states to design their own subsidy programs, and to increase child care spending by supplementing child care funds with Temporary Aid to Needy Families (TANF) funds.

As funding grew, the number of children served by federal funds also grew from 1 million in FY 1996 to 1.75 million in FY 2000. States became increasingly able to use TANF funds to supplement child care funds as TANF caseloads fell. Despite these positive increases, Greenberg et al. (2003) argue that many states remained unable to meet the demand for affordable and high quality child care, and estimate that only one out of seven eligible children received child care subsidies in FY 2000.

Since 2001, states have become increasingly unable to meet child care needs. Although Child Care and Development Fund funding levels increased to \$250 million in FY 2002, they decreased by approximately \$10 million in FY 2003. Additionally, many states faced difficulty supplementing child care funds with TANF funds and TANF caseload decline either slowed or stopped in most states after 2001 (Greenberg et al. 2003).

States are likely to face additional problems meeting child care needs in the future. Mezey et al. (2004) argue that the Administration's proposed budget for FY 2005 would essentially freeze child care funding through FY 2009, making it difficult for states to maintain

current levels of child care funding. This could result in at least 300,000 fewer children served in 2009 relative to 2003 (Mezey et al. 2004).

These changes are likely to affect the success of women's transitions into work. The next section describes efforts by researchers from the Women's Employment Study to measure and analyze the relationship between child care and work outcomes.

### **Barrier Construction and Measurement**

The Women's Employment Study is a panel study of a random sample of mothers who received cash welfare benefits in an urban Michigan county in February 1997 after the state began implementing its welfare reform policies. The study examines the ways in which a range of labor market, physical and mental health, and family problems affect a welfare recipient's ability to obtain and retain employment over time. A central goal of the study is to assess how the presence of any one of these barriers or combination of barriers affects a recipient's response to new welfare program mandates. To measure the impact of child care problems on work outcomes, child care questions were present in some form on each wave, though they differed between waves.

All Wave 1 respondents (N=753) were asked<sup>1</sup> a small number of questions about child care. They were asked if they had experienced concern regarding child care quality, location and safety of care provider, dependability, cost, and flexibility of care, and availability of relatives to help with care. They were also asked how many care arrangements they were currently using, about their overall level of satisfaction with current arrangements, and about work disruptions resulting from child care problems.

Questions in Waves 2 and 3 were more extensive, but most were asked only of respondents who had used care since the previous interview. This interferes with the creation of

an accurate barrier measure for two reasons. First, we can only identify problems among those who were able to use care—we cannot examine the problems of those whose problems were so severe that they were never able to use care at all. Second, respondents who use informal care such as father or other relative care may not identify it as “child care,” and we may therefore miss barriers among those using only these types of care.

At Wave 2, respondents who had used care between waves 1 and 2 were asked<sup>2</sup> about work interruptions due to child care, number of care arrangements, difficulty in arranging care, cost of care, and overall level of satisfaction. In addition, those who had experienced work interruptions were asked about problems with their care arrangements. Because only those who had work problems were asked about care problems, Wave 2 did not allow for a comparison between individuals with child care problems who had been unable to work and those with similar problems who managed to work. It was therefore impossible to determine the probability that a child care problem leads to lower work, and hence the relationship between child care problems and work outcomes.

The third wave of interviews incorporated questions<sup>3</sup> involving work disruptions, as well as other child care problems that might influence work outcomes. However, as in earlier waves, the structure of survey questions prevented the creation of a barrier variable that incorporated all respondents with child care problems. Specifically, third wave respondents with children under the age of 14 in the household (n=564) were grouped into three mutually-exclusive groups--(1) those who had used care in the past year, (2) those who had not used care but had tried to set up child care, and (3) those who had neither used nor tried to use care.

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<sup>1</sup> See questions B53 through B57 at <http://www.fordschool.umich.edu/research/poverty/wes/instrument/welfb.pdf>

<sup>2</sup> See Section BB at <http://www.fordschool.umich.edu/research/poverty/wes/instrument/wes2a-e.pdf>

<sup>3</sup> See Section BB at <http://www.fordschool.umich.edu/research/poverty/wes/instrument/welfb.pdf>

Those who used care (n=403) were asked questions involving: cost of care; type of care, including center/program, Head Start, father, relative, or non-relative; perceived quality and flexibility of care; and use of child care subsidies. Those who tried to set up care (n=10) were asked why they had been unable to secure child care. The remaining 148 respondents were skipped out of both series of questions.

This structure presented a problem, because whether or not a woman had used care was endogenous to whether or not she had problems receiving care. While 159 respondents with children under the age of 14 had not used care, only a handful reported trying to set up child care. This left 148 women who reported that they had neither used care nor tried to use care. It was unclear from the survey whether these 148 women did not report child care problems because they simply did not have a child care problem or because they anticipated a child care problem and thus never used care.

In the fourth wave, the survey avoided the problems of previous waves by asking more respondents a wider range of child care questions.<sup>4</sup> First, we determined whether respondents had used care over the past 12 months by asking whether their child(ren) had been cared for by: a center, nursery, or preschool; Head Start; an after-school program; the child(ren)'s father; another relative; or a non-relative. This approach avoided problems with respondents' interpretations of the term "child care."

Second, the Wave 4 questions distinguished between nonworking women who had experienced problems with care and women who were not working for reasons unrelated to child care. Specifically, all respondents with children under age 14 in the household were asked whether or not a "problem with finding someone or someplace to take care of your child/children prevented you from working, looking for work, or getting trained." This question allowed

researchers to separate nonworking women who were not working because they had a child care problem from nonworking women who did not have a child care problem. Nonworking respondents who indicated a child care problem were then asked a series of child care questions.

In Wave 4, all women with a child under 14 who indicated that someone other than themselves had cared for their child(ren) were asked about: the quantity and type of care used; cost and subsidization; problems experienced with care; perceived care quality; care and work flexibility; care-related work disruptions; and difficulty arranging care. In addition, those who had gone without care for some or all of the last year were asked about the type of problem that caused the lack of care.

#### **Wave 4 Child Care Barrier**

The Wave 4 child care barrier was designed to measure the extent to which a series of child care problems in the past year are correlated with a mother's work outcomes. Previous research identifies five types of child care problems that may interfere with parents' ability to work, including: (1) lack of perceived quality, (2) lack of flexibility, (3) high cost of care, (4) lack of access, and (5) lack of stability. (Kisker and Ross 1996; Hofferth and Collins 1996; Hofferth 1997). While researchers have hypothesized that each of these types of problems may pose a barrier to work, there has not been conclusive evidence in support of these claims, and other researchers have argued that some or all do not inhibit work. Our measurement of these problems allows examination of the relative effects of each type of problem and combinations of different problems. In our barrier construction, a WES respondent is coded as having a child care barrier if she has any one of the five problems; in later analysis, however, we hope to test what child care problems have the most serious effects on work.

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<sup>4</sup> See Section BB at [http://www.fordschool.umich.edu/research/poverty/wes/instrument/w4section\\_BB.pdf](http://www.fordschool.umich.edu/research/poverty/wes/instrument/w4section_BB.pdf)

In addition, a child care barrier may exist whether or not a respondent actually used care in the past year. Therefore, Wave 4 respondents who did not use care are coded as having a child care problem if they felt that the particular problem prevented them from going to work.

The following section briefly outlines research in each of the five areas, and presents information regarding the construction of each variable in the WES survey.

### *Lack of Perceived Quality*

Lack of perceived quality<sup>5</sup> may impact work outcomes both by influencing child health and development (Smolensky and Gootman, eds. 2001), or by directly affecting work outcomes. In terms of child health and development, children receive more individualized attention when caregivers are responsible for fewer children, and better-trained caregivers may be more responsive to children's needs (Helburn and Howes 1996; Cost, Quality, and Child Outcomes Study Team 1995). Howes and colleagues (1992) demonstrated that better structural care conditions are more likely to result in a child meeting developmental targets. High-quality care is also associated with better emotional development and improved cognitive skills, including problem-solving, language and math ability, and vocabulary (Love et al. 1996).

In terms of a mother's work outcomes, low quality child care may cause a mother to experience psychological stress (Ross and Paulsell 1998), which may interfere with work productivity (Scarr 1998), limit her ability to receive raises and promotions, or cause her to lose her job. Quality problems may cause women to take time off of work to secure more acceptable care. Such absences can lead to job loss (Ross and Paulsell 1998) and inconsistent work histories may reduce the likelihood of finding or keeping a good job.

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<sup>5</sup> In this context, "quality" refers to children's "interactions with the adults who care for them and their exposure to materials and activities that enhance learning" (Helburn and Howes 1996). Quality is often measured in terms of group size, caregiver to child ratio, and caregiver education and experience, in addition to measures of the work environment, including staff wages, turnover rate, and work commitment.

Some research also suggests that quality concerns may be particularly important for welfare mothers because their children tend to be disproportionately represented in lower-quality care (Capizzano et al. 2000). If low-income children are more likely to be in poor quality care then they will be more likely to experience the negative outcomes that might impede women's transition from welfare to work.

In the WES survey, questions related to lack of perceived quality measure whether or not the parent perceives the care provider as meeting the child's needs. For respondents who used care, this is captured through the "Parent Scale Measuring Quality of Child Care" (Emlen 2000). This scale includes five questions about the parents' perception of the safety and security of care, the warmth and affection demonstrated by the caregiver towards the child, the openness of the caregiver to new information and learning, the individual attention the child receives, and whether or not the care environment is interesting for the child. The respondent is coded as having a quality problem if the average response over the 5-question scale is below 3 (1 = 'never,' 2 = 'sometimes,' 3 = 'often,' 4 = 'always') for at least one of the children in care. The questions were worded in such a way that "never" and "sometimes" indicated low quality care, while "often" and "always" signified higher quality care. Respondents who have not used care are coded as having this problem if they were unable to get care because of poor quality, or if the parent or child 'didn't like the [child care] place or the caregiver.'

### *Lack of Flexibility*

Parents face a flexibility problem if it is extremely difficult to schedule work and child care. Flexibility refers to fact that regular hours of child care often conflict with schedules of low-income working parents who work at jobs with irregular hours. Hofferth found that

approximately one-third of low-income parents worked weekends, and nearly half worked rotating shifts (Hofferth 1995). However, a nationwide survey conducted by the GAO (1997) found that 12-35 percent of child care providers were open nonstandard hours. The majority of those offering nonstandard hours were family child care homes rather than centers, which the study argues have significantly greater capacity than homes. Because most child care providers offer care only during normal work hours, the inflexibility of child care arrangements, particularly higher quality center-based care, has the potential to become a barrier to work.

A respondent who used care is coded as having this problem if she could ‘never’ get care if her work schedule changed or if regular child care fell through *and* if she felt that she was ‘very likely’ to be warned or disciplined by a supervisor if she needed to take time off because regular care fell through. Because work schedules and care arrangements are not presumed to be perfectly flexible, a respondent is only coded as having a flexibility barrier if she could ‘never’ get care and was ‘very likely’ to be warned or disciplined. For a respondent who did not use care, a respondent is coded as having this problem if she was unable to find care because she ‘couldn’t find for times needed.’

### *High Cost of Care*

Previous research indicates that for low-income families, child care costs can represent a considerable barrier to employment. This may result from the fact that low-income families spend a greater percentage of their income on child care. In 1997, low-income families paid an average of 16 percent of their income on child care, while higher-earning families paid an average of 6 percent of income on care. Additionally, among low-income families, single parent families are also more likely than two-parent families to pay for child care (50% compared to

29%, respectively). Single parent families on average pay 16 percent of their earnings on child care, while two-parent families pay 7 percent. During the late 1990s, the nationwide average cost of care as a percentage of earnings was 9 percent (Giannarelli and Barsimantov 2000). These costs have the potential to influence work outcomes, as mothers who face lower child care costs are more likely to be employed (Meyers et al. 2001).

High cost of child care may therefore interfere with work outcomes. If a respondent used care, she is coded as having a high cost problem if she paid \$100 or more in out-of-pocket child care expenses in a typical week. This number represents twice the average cost of child care among women who paid for child care in wave 4. Although \$100 may represent different levels of hardship for women with different monthly incomes, it was necessary to avoid defining burdensome cost as a percentage of monthly income. If cost had been defined in terms of monthly income, the relationship between cost and work would have been difficult to assess because high cost would have been endogenous to income. If a respondent did not use care, she is coded as having the problem if she was unable to get care because it cost too much.

#### *Lack of Access to Care*

A lack of access problem refers to the fact that mothers may not be able to find care or the type of care needed. Previous research suggests that problems related to child care access and availability have the potential to affect the transition of low-income women into work (Blau 1991; Kisker and Ross 1997). Some of these problems include the fact that few child care centers are located near public transportation, and center care for infants and toddlers is least available in the poorest neighborhoods (Kisker and Ross 1997). In addition, a recent GAO study

found that since 2001, 23 states had made changes likely to decrease the availability of child care (GAO 2003). This suggests that problems related to availability are likely to persist.

WES respondents were coded as having an access problem if they could not find care at all or could not find the type of care needed. If a respondent used care in the past year, she was asked whether she could find care of the type needed or if the care was too far from work or home or she could not get to it. If she could not find care or the care was too far or difficult to get to, she was coded as having an access problem. Respondents who did not use care were coded as having an access problem if they were unable to get care because the care was too far from ‘work/home/couldn’t get there,’ or because they ‘couldn’t find care that accepts child of age/disability status.’

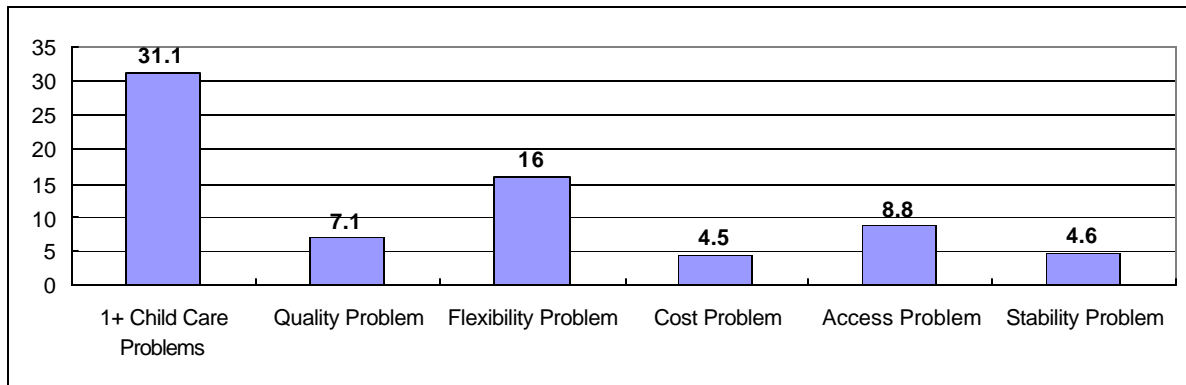
### *Lack of Stability*

Stability refers to multiple transitions between arrangements or unreliable caregivers. Because unstable care may cause a woman to miss work – and thereby hinder her ability to advance on the job or hold onto a job - stability has the potential to act as a barrier to work outcomes. For example, in her study of the California “GAIN” program, Meyers (1993) found that a disruption in child care due to changing from one program component to another was associated with a higher probability of leaving the program.

If a WES respondent faces frequent transitions between arrangements or unreliable caregivers, she may face a problem with stability. A respondent who used care is coded as having a stability problem if the average number of arrangements per child in the past year (total arrangements used divided by number of children in care) was greater than three; this will clearly be an underestimate of instability problems, since it measures only changes in arrangements, not

caregivers' individual unreliability. A respondent who did not use care faces a problem with stability if she was unable to get care because the caregiver was unreliable or unavailable.

**Descriptive Analysis**



In the 12 months before the wave 4 interview, 31.0% of the WES sample faced one or more child care problems (n=553). As the chart above indicates, 7.1% had a quality problem, 16.0% a flexibility problem, 4.5% a cost problem, 8.8% an access problem, and 4.6% a stability problem (non-mutually exclusive categories).

In addition, 17.1% experienced at least one care-related work problem. If the time a child spends in school is included as a type of care, the average number of hours of care per child over the past 12 months was 31.6 hours per week. If school is excluded, the average was 17.4 hours per week. The mean annual hours of child care per child also varied significantly by the age(s) of child(ren). Respondents with non-school age children (defined as five years or younger) used an average of 1290.91 hours of child care in the past 12 months. Respondents with no children between the ages of 0 and 5 used an average of 597.49 hours of care (not including time spent in school).

The table below depicts several work outcomes and demographic characteristics for wave 4 respondents with and without child care barriers. On average, those with a child care barrier do not have significantly worse outcomes—such as hours and months worked and household income—than those without a barrier. They do, however, differ on demographics; those with a barrier are significantly younger, have more children in the household, and use more care than those without a barrier.

**Table 1. Comparison of Respondents with and without a Child Care Barrier**

	<u>Respondent has child care barrier (n=172)</u>	<u>No child care barrier (n=381)</u>
Percent of respondents with child care barrier	31.1	68.9
Mean age of respondent	31.5***	35.4
Percent African American	53.5	55.4
Mean # of children in HH	2.41***	2.06
Percent of respondents with children less than 3 in HH	23.8*	16.8
Percent of respondents receiving child care subsidy	32.8	26.5
Average gross monthly income	\$1958.7	1880.9
Monthly out of pocket spending on child care, of those who paid	\$91.2***	48.4
Mean hours child care per child in past 12 months	1228.0***	746.2
Mean hours child care per child in past 12 months, including time spent in school	1934***	1532.4
Mean annual hours worked in past 12 months	1399.8	1421.3
Percent of months worked in past 12 months	71.7	68.2
Mean # of other barriers to employment	2.1	2.01

\*p < .10, \*\*p < .05, \*\*\*p < .01

Once we control for differences in demographics, other barriers, and other aspects of care (including type, quantity, and subsidy use), we do find significant differences between those with and without a barrier. As shown in Table 2, those with a barrier worked 7 percentage points

fewer of the months between Waves 3 and 4, and worked on average 222 fewer hours in the year prior to the Wave 4 interview.

**Table 2. OLS Regressions of the Effects of Child Care, Demographics, and Barriers on W4 Work Outcomes**

Independent variable (measured over 12 months prior to W4 interview unless otherwise noted)	Dependent Variable: % of months worked between W3 and W4	Dependent Variable: Hours worked in year prior to W4
Experienced child care barrier	-0.071 **	-221.873 **
Received child care subsidy	0.077 *	97.083
Used child care	0.161 ***	222.323
Mean hours child care per child	2.398E-04 ***	0.431 ***
Mean hours child care per child, squared	-4.499E-08 ***	-4.386E-05
Number of children aged 0-2 at W4	-0.107 ***	-251.560 ***
Number of children aged 3-5 at W4	-0.047 *	-20.715
Number of children aged 6-10 at W4	-0.057 ***	-124.840 ***
Number of children aged 11+ at W4	0.003	4.890
Used center care	-0.055	-150.793
Used after-school care	0.075	232.581
Used Head Start	0.048	169.401
Used father care	-0.006	-120.448
Used relative care	-0.026	-42.343
Used non-relative care	0.023	-30.735
Age at W4	0.003	2.335
Experienced physical health barrier	-0.127 ***	-310.256 ***
Less than high-school education	-0.082 **	-235.844 ***
Experienced child health barrier	-0.078 **	-243.700 **
Learning disability assessed at W3	-0.099 **	-231.720 **
Literacy barrier assessed at W3	-0.026	66.013
Race (White=0, Black=1)	0.001	53.740
Married/cohabitating at W4	0.048 *	115.857
Intercept	0.544 ***	1248.139 ***

## The Role of Child Care Subsidies

Access and use of child care subsidies may facilitate a mother's transition from welfare to work because subsidies can reduce both child care costs and child care problems. Using Wave 3 WES data, Danziger, Ananat, and Browning (2003) reviewed the role of child care subsidies and their effect on work outcomes. In Michigan, child care is subsidized after eligible families arrange it with a state-contracted child care center, family or group care home, relative or non-relative in-home provider. Families receiving subsidies must cover 5-80% of their own child care costs, based on type and area of care, and the age of the child (Danziger, Ananat, and Browning 2003).

The authors examine a sample of women who had at least one child under the age of 14, and who were income-eligible for Michigan subsidies (83.7% of the total sample) in the third wave of the survey. A respondent is coded as having a subsidy if she reported receiving help from the state in paying for at least one type of child care. A respondent is coded as having a problem with child care if she experienced any work disruptions due to child care, had stopped using child care, or had a high degree of parenting stress between the second and third waves of the survey.<sup>6</sup>

The authors documented that 42% of the income-eligible respondents with a child under age 14 received a subsidy. Additionally, subsidy users experienced similar amounts of work-related care problems, and were equally as likely to report parenting stress. Subsidy users, however, had worked a larger proportion of the months between Waves 2 and 3, and were less likely to have stopped using care between Waves 2 and 3.

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<sup>6</sup> Because the authors use data from the third wave of the survey, measures are not available to assess the five components of the wave 4 child care barrier discussed above.

Early analysis of the fourth wave of WES data indicates that receiving a subsidy in the year prior to the Wave 4 interview appears to have effects on work, child care costs, and use of care that are similar to those Danziger, Ananat, and Browning found in Wave 3. In addition, in Wave 4 receiving a subsidy is negatively related to having a child care barrier.

**Table 3. Comparison of Respondents with and without Child Care Subsidy**

	<u>R has subsidy (n=158)</u>	<u>No subsidy (n=418)</u>
Percent of respondents receiving subsidy <sup>a</sup>	27.4	72.6
Percent of respondents paying out-of-pocket child care costs	35.4***	20.1
Mean percent of monthly earnings spent on out-of-pocket child care costs, of those who paid child care	18.8	21.8
Mean percent of months worked in past 12 months	85.6***	62.8
Percent of respondents with child care barrier	35.7	29.1
Mean hours child care per child in past 12 months	1664.41***	585.71
Mean hours child care per child in past 12 months, including time spent in school	2301.2***	1394.9
Mean number of other barriers to employment	1.78**	2.13

\*\*\*p<.01, \*\*p<.05, \*p<.10

<sup>a</sup> Percentages include women with and without children under 14 in HH.

- Barnett, W. (1995). "Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes," *The Future of Children* 5(3).
- Blau, David M. ed. (1991). *The Economics of Child Care*. New York: Russell Sage Foundation.
- Capizzano, J. and Adams, G. (2000). "The Number of Child Care Arrangements Used by Children Under Five: Variation Across States." Washington, D.C.: Urban Institute. [http://newfederalism.urban.org/html/series\\_b/b12/b12.html](http://newfederalism.urban.org/html/series_b/b12/b12.html)
- Capizzano, J., Adams, G. and Sonenstein, F. (2000). "Child Care Arrangements for Children Under Five: Variation Across States." Washington, D.C.: Urban Institute. [http://newfederalism.urban.org/html/series\\_b/b7.html](http://newfederalism.urban.org/html/series_b/b7.html)
- Cost, Quality, and Child Outcomes Study Team (1995). "Cost, Quality, and Child Outcomes in Child Care Centers: Public Report." Denver: University of Colorado at Denver.
- Danziger, Sandra K., Ananat, Elizabeth, and Browning, Kimberly G. (2003). "Child Care Subsidies and Child Care Problems: Effects on the Transition from Welfare to Work."
- Emlen, Arthur C. Koren, Paul E., and Schultze, Kathryn H. (2000). "A Packet of Scales for Measuring Quality of Child Care From a Parent's Point of View." The Oregon Child Care Research Partnership. Available at: <http://www.hhs.oregonstate.edu/familypolicy/occrp/publications/2000-A-Packet-of-Scales.pdf>
- Frede, E. (1996). "The Role of Program Quality in Producing Early Childhood Program Benefits," *The Future of Children* 5(3).
- Galinsky, E., Howes, C., Kontos, S., and Shinn, M. (1994). *The Study of Children in Family Child Care and Relative Care*. New York: Families and Work Institute.
- Giannarelli, Linda and Barsimantov, James (2000). "Child Care Expenses of America's Families," Washington, D.C.: The Urban Institute.
- Greenberg, M., Mezey, J., and Schumacher, R. "Child Care Funding: The Story Since 1996, The Challenges in Reauthorization." Center for Law and Social Policy. Available at: [http://www.clasp.org/DMS/Documents/1047310227.65/CCFunding\\_Presentation\\_030503.pdf](http://www.clasp.org/DMS/Documents/1047310227.65/CCFunding_Presentation_030503.pdf)
- Helburn, S. and Howes, C. (1996). "Child Care Cost and Quality," *The Future of Children* 6(2).
- Henly, J. and Lyons, S. (1998). "The Child Care Arrangements of Employed Welfare Recipients and Other Low-Income Working Women." University of Chicago working paper.
- Hofferth, S. (1995). "Caring for Children at the Poverty Line," *Children and Youth Services Review* 17.

Hofferth, S., Brayfield, A., Deich, S., and Holcomb, P. (1991). *National Child Care Survey, 1990*. Washington, D.C.: Urban Institute Press.

Hofferth, S., and Collins, N. (1996). "Child Care and Employment Turnover," *Child Care Bulletin 11*.

Howes, C., Phillips, D.A., and Whitebook, M. (1992). "Thresholds of Quality: Implications for the Social Development of Children in Center-Based Child Care." *Child Development*, 63, 449-460.

Kimmel, J. (1995). "The Effectiveness of Child-Care Subsidies in Encouraging the Welfare-to-Work Transition of Low-Income Single Mothers," *The American Economic Review* 85(2).

Kisker, E. and C. Ross (1997). "Arranging Child Care," *The Future of Children*, 7(1):99-109.

Love, J., Schochet, P., and Meckstroth, A. (1996). "Are They in Any Real Danger? What Research Does – And Doesn't – Tell Us About Child Care Quality and Children's Well-Being." Princeton, NJ: Mathematica Policy Research, Inc.

Meyers, Marcia K., Han, Wen-Jui, Waldfogel, Jane, and Garkinkel, Irwin (2001). "Child Care in the Wake of Welfare Reform: The Impact of Government Subsidies on the Economic Well-Being of Single-Mother Families." *Social Service Review*, 75, 29-59.

Mezey, J., Parrott, S., Greenberg, M., and Fremstad, S. (February 10, 2004). "Reversing Direction on Welfare Reform: President's Budget Cuts Child Care for More Than 300,000 Children." Center on Budget and Policy Priorities. Available at: <http://www.cbpp.org/2-10-04wel.pdf>

Ross, C. and Paulsell, D. (1998). "Sustaining Employment Among Low-Income Parents: The Role of Quality in Child Care." Princeton, NJ: Mathematica Policy Research, Inc.

Scarr, S. (1998). "American Child Care Today," *American Psychologist* 53(2).

Smolensky, Eugene and Gootman, Jennifer Appleton, eds. (2003). *Working Families and Growing Kids*. Washington, D.C.: National Research Council Institute of Medicine.

United States General Accounting Office (1997). "Welfare Reform: Implications of Increased Work Participation for Child Care." Washington, D.C.: U.S. GAO (GAO/HEHS-97-75).

United States General Accounting Office (2003). "Child Care: Recent State Policy Changes Affecting the Availability of Assistance for Low-Income Families." Washington, D.C.: U.S. GAO (GAO-03-558)