## Child Care Quality: Does It Matter and Does It Need to Be Improved? By Deborah Lowe Vandell

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he quality of child care in the United States leaves room for improvement. Caregiver qualifications declined nationally, salaries did not improve during the 1990s, and teacher turnover is high. Research shows that quality matters. For example, substituting a poor quality caregiver with an excellent one improves a child's school readiness by 50%. Over time, kids with better preschool care are more likely to complete high school and college, earn higher wages, and commit fewer crimes. Higher quality care also increases the odds that parents will continue their education, keep their jobs, and work longer hours. The authors also discuss government's role in child care and why the private marketplace does not work as well for child care as for other industries.

This chapter reviews extensive research that finds over 6 in 10 children are being placed in "poor" or simply "fair" child care settings, having a potentially damaging impact on their development.

The chapter analyzes the need for non-parental child care in Wisconsin as well as the immediate, long-term, and extended roles that child care can play in a child's future. In addition, we will look at the child care connections to a parent's employment and education, and summarize the quality of child care in the United States.

Finally, in light of the statistics, what are the possible solutions and costs? Ultimately, the report aims to provide an answer to an important policy question: Is there an economic justification for public intervention to improve the quality of non-parental child care, especially for children from low-income families? The bulk of the evidence argues the answer is yes.

## Is Non-parental Child Care Needed in Wisconsin?

Child care provided by someone other than a parent is now the norm rather than the exception for young children in Wisconsin. Among children with employed mothers in Wisconsin, 76% under age five are in child care compared with only 57% nationwide.

And many children spend a great deal of time in that child care setting. Of all children under age 5, 39% spend more than 35 hours per week in child care. This number is only slightly lower (36%) for children under age three (Snyder & Adams, 2001).

With the implementation of welfare-to-work programs in nearly all states, the need for non-parental child care is growing—especially among low-income families.

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## Does the Quality of Care Matter to Children?

The answer to this question may seem obvious, but research shows the impact of quality is more far-reaching than one might guess.

The quality of child care is measured in two main ways—*process quality* and *structural characteristics*. *Process quality* is rated by observing what occurs in child care settings—from children's interactions with caregivers and peers to activities, and health and safety measures.

*Structural characteristics* are graded by noting the child-to-adult ratio, the size of each group of children, and the level of caregiver education and training.

These two quality indicators are often related. When child-to-adult ratios are lower (i.e., more adults per child), children generally appear less apathetic and distressed; caregivers also spend less time managing the classroom and offer more stimulating, supportive care. When staff is more highly trained and paid, children's activities are of higher quality, and caregivers are more responsive and less restrictive.

The age of the child is important in determining overall quality. For instance, the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care showed that group size and child-to-adult ratios were more critical than other factors in rating *process quality* for infants. However, caregiver education and training were stronger predictors of quality for preschoolers (NICHD Study of Early Child Care, 2000a).

#### Short-Term Effects of Child Care Quality

Quality, in process and structural terms, is important to children of all ages even in the short term. When *process quality* (rating of interactions, activities, health and safety) is higher, children appear happier, have closer relationships with caregivers, and perform better on thinking and language tests (Burchinal et al., 1996). In contrast, poor process quality appears to predict greater behavior problems (Peisner-Feinberg & Burchinal, 1997; Hausfather et al., 1997).

Child performance is also tied to *structural quality* (child–adult ratio, group size, and caregiver background). For example, when compared to caregiver settings, which provided fewer adults, children in classrooms with lower ratios

- ✤ were better able to understand, initiate, and participate in conversations,
- ✤ had better general knowledge,
- ✤ were more cooperative, and
- showed much less hostility and conflict in interactions.

In addition, preschoolers perform better on standardized tests when their caregivers are better educated and trained—for example, if they have at least an associate arts degree in a child-related field. When teachers are better trained, the children also have better language skills, are more persistent in completing tasks, and in general are better prepared for school (Vernon-Feagans et al., 1997; Clarke-Stewart et al., 2000).

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#### Long-Term Effects of Child Care Quality

The long-term effects of child care have been measured in a variety of ways. Research shows that children enrolled in higher-quality classrooms as preschoolers display better math skills through second grade. This impact is greater for children of less-educated mothers. According to kindergarten teachers, children whose child care providers were more involved and invested in them during the preschool years have fewer behavior problems (Howes, 1990).

Are these connections strong enough to be meaningful? To address this issue, NICHD researchers studied the relationship between the quality of the home environment and children's developmental outcomes. Their results showed home quality has roughly twice the impact of child care quality. However, the effects of child care quality for three-year-olds were both significant and meaningful (NICHD Early Child Care Research Network, 1999; NICHD Early Child Care Research Network, 2000b).

In estimating the impact of child care quality in the long term, researchers made a significant discovery. If the quality of a caregiver was raised from the lowest quality rating to the highest (among the settings observed), a child's school readiness would be expected to improve by 50%.

#### Extended Impact of Child Care Quality

Even though only a few studies have followed children into adulthood, it is notable that all find some evidence of long-term gains—particularly with lowincome, high-risk preschoolers.

The Carolina Abecedarian Project (Campbell & Ramey, 1995; Ramey et al., 2000), the Perry Preschool Project (Schweinhart et al., 1993), and the Chicago Child-Parent Center—directed by UW-Madison researcher Arthur Reynolds (Reynolds et al., 2000), are our best type of studies—randomly assigning families to treatment and control groups and tracking their progress over time.

Children in the Carolina project showed long-term gains in IQ scores, reading, and math. Follow-up at age 21 showed these individuals were on average older before having children and were more likely to have attended a four-year college than their peers.

By age 27, children in the Perry Project were less likely to have been arrested, and they had monthly earnings almost double their peers—\$1,219 versus \$766. Also, they were much less likely to be receiving public assistance—15% versus 32%.

Children in the Chicago study had significantly higher math and reading scores, and by age 20 were more likely to have completed high school and had lower rates of juvenile crime.

If caregiver quality was raised from the lowest to the highest, a child's school readiness improved by 50%.

## How Does the Quality of Child Care Affect a Parent's Employment and Education?

Evidence of a connection between quality of child care and a parent's employment is limited. However, research suggests when low-income families receive higher quality child care, mothers are more likely to keep their jobs, work more hours (Meyers, 1993), and increase their later educational attainment (Benasich et al., 1992; Ross & Paulsell, 1998).

When center-based care was provided for low birth-weight infants in the Infant Health and Development Program, mothers were more likely than their control group peers to be working. This effect was greater for less-educated women (Brooks-Gunn et al., 1994). An employee whose children are well-cared-for may also have higher productivity than those employees with children in lower quality settings (Blau & Philip, 1989).

By contrast, poor quality child care can cause a mother to quit a job. Nearly a third of teenage mothers participating in one experiment reported that unsatisfactory quality of child care led them to quit work or change hours or activities. When mothers reported that the ratio of children to adults in their children's child care was worse than recommended standards, they were twice as likely to drop out of the JOBS program and the labor force, than mothers who reported that their child care met the standard (Meyers, 1993).

## What is the Quality of Child Care in the United States?

In the United States, care is mostly fair, rarely excellent. The most reliable estimate on national quality is provided by the NICHD Study of Early Child Care in which 600 non-parental child care settings were studied in nine states (NICHD Early Child Care Research Network, 2000a). In this study, care was most often graded as fair. Only 11 percent of the settings were considered excellent. Poor-quality care was more likely in centers serving infants and toddlers (10 percent) than in centers serving older children (4 percent).

Extending these results to all American families, we estimate that for children under age three

- ✤ 8 percent of child care settings are poor,
- ✤ 53 percent are fair,
- ✤ 30 percent are good, and
- ✤ 9 percent are excellent.

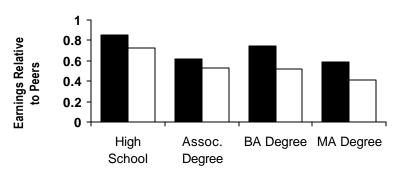
Researchers concluded that national child care is neither outstanding nor terrible, and plenty of room for improvement exists.

In terms of structural quality (child–adult ratio, group size, and caregiver background), only three states have child–adult ratios that meet the 3:1 standard recommended for infants by the American Academy of Pediatrics and the American Public Health Association (American Public Health Association, 1992). Some states permit ratios as great as six infants to every caregiver. Wisconsin has a 4:1 requirement.

The quality of child care in the United States is mostly fair, rarely excellent. Qualifications of caregivers are also reportedly on a decline nationally. This decline may be related to low wages (see Figure 1). In the 1990s, teachers averaged between \$13,125 and \$18,988 annually for full-time employment and assistant teachers earned just \$6–\$7 per hour. Salaries of child care workers ranged from 41% to 85% of their peers (over 25 years of age) in other professions. These salaries did not improve throughout the decade.

#### Figure 1:

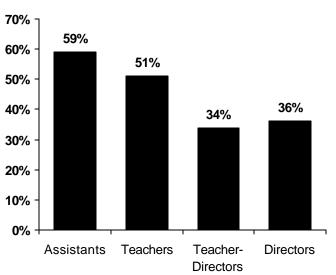
1997 Salary Comparisons: Median Child Care Teacher or Assistant Earnings vs. Peers in Other Professions

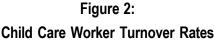


## High Paid Teachers/Assistants 1997 Low Paid Teachers/Assistants 1997

Source: U.S. Bureau of Census, 1999, and Whitebook, Sakai, and Howes, 1997.

Consequently, turnover has been high. (See Figure 2). A study that made two visits to child care centers 20 months apart found that during that period 51% of teachers and 59% of assistants had left their jobs (Whitebook, Sakai, & Howes, 1997).





Note: Figures include all staff at all centers; rates derived from 2 visits, 20 months apart to centers. Source: Whitebook, Sakai, and Howes, 1997

# Why Doesn't the Private Market Work as Well for Child Care as for Other Industries?

Economists who have studied child care agree that the private market does not work as well for child care as for other industries like shoes for three reasons. First is the lack of information. Parents find it difficult to compare the quality, cost, and availability of care, and they are unsure how to evaluate the information they do receive. Often, considerations of convenience, time, and location cause parents to limit their search. These problems are especially acute for low-income families and for those who need child care for odd work hours (Vandell, 1998).

Second, the market may fail for child care due to what economists call "externalities"—effects beyond the primary consumers. Parents may not consider overall benefits to society when choosing child care. These benefits may include

- lower costs for later education,
- reductions in crime,
- ✤ increased productivity, and
- lower need for social services.

Conceivably, unsafe and unhealthy child care may increase direct costs to both the family and society.

Third, child care market failure may result from an "imperfect capital market." Parents of young children tend to have low incomes relative to their permanent incomes, and may face borrowing constraints. These parents simply cannot afford to purchase high-quality child care.

Yet, cost is not the only obstacle for low-income families—odd work schedules also play a role. One third of working-poor mothers (incomes below poverty) and more than a quarter of working-class mothers (incomes below \$25,000) work weekends (Hofferth, 1995). Half of working-poor parents work a rotating schedule, yet only 10 percent of centers and 6 percent of family day care homes provide weekend care. When selecting child care, low-income families must choose from a seriously limited set of options (see Figure 3); almost three-fourths of children of working-poor parents are cared for by a parent or other relative.

Parents of young children often have low incomes and simply cannot afford high quality child care.

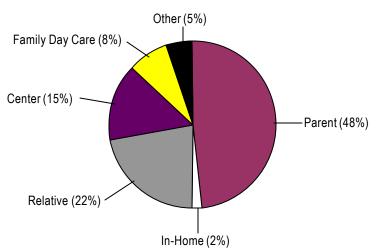


Figure 3: Child Care Arrangements for Low-Income Children under Age 5

Source: Phillips, 1995.

Unfortunately, economists say all these factors work together to prolong market failure—demand for high-quality care is too low, compensation is too low, and the more highly-trained seek employment elsewhere. As a result, quality declines, unless intervention occurs.

## Is Child Care a Proper Issue for Public Policy? Or Should the Private Market Handle It?

The question of whether child care is a proper issue for public policy is a matter of values and judgment, not research findings (Riley & Bogenschneider, 1999). Most Americans would agree that caring for children is primarily the responsibility of parents (Sylvester, 2001). Yet in recent polls, over 8 in 10 parents report that government could be doing something or a great deal to help them (Hewlett & West, 1998). Interest in government involvement in child care was triggered, in part, by welfare reform.

If welfare reform is to succeed, high-quality child care is a necessity. The recent change in welfare policy-establishing work requirements-means more lowincome parents must now find child care. In recent polls, Americans support more government spending for child care for low-income families (Sylvester, 2001). With this increase in demand, the issue of child care quality becomes even more important.

Many of the benefits of child care are like those of primary schooling—preparing children for the next level. Ultimately, society benefits from the mental, language, and behavioral competencies associated with higher-quality care.

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### How Can Government Improve Child Care?

A variety of public-sector interventions may be used to improve child care. They include

- ✤ information and referral,
- licensing requirements,
- placement activities,
- ✤ financial incentives,
- training for child care workers,
- tax credits for parents,
- ✤ incentives for employer-provided care,
- direct provision of care, and
- tuition subsidies.

Subsidies for families can help level the playing field for low-income parents. Subsidies for families can help level the playing field for low-income parents. A study of six community programs by the Urban Institute (Phillips, 1995) suggests that subsidy programs enabled parents to access care that was as high in quality as that chosen by better-off, unsubsidized parents. Still, problems remain. Although many incentive and subsidy programs exist, they are not widespread and states have been slow to make funds available.

At a minimum, some states have chosen to:

- provide information on available child care slots, hours of operation, structural quality, costs, and staff training,
- ✤ establish training programs,
- mandate minimum requirements—for example, reducing child–adult ratios and group sizes, and
- establish and enforce safety regulations and certification requirements.

More ambitiously, other states consider ways to recruit and retain highly qualified individuals in the early education field. Examples include providing

- tuition subsidies,
- incentives (i.e., those used for nurses, physicians, teachers during shortages), and
- ✤ salary increases.

## How Much Does Improving Child Care Quality Cost?

Defining the child care situation in terms of dollars is not an easy task. However, some research does exist. Studies using data from the General Accounting Office show that decreasing the average child-to-adult ratio by one increases costs by roughly 4.5%. Thus, if an average center with 50 children and an annual per child cost of \$6,500 reduces the child-to-staff ratio from 11:1 to 10:1, the cost per child increases by about \$306. A one-year increase in the average educational level of the staff demonstrates a 3.4% increase in total costs, including a 5.8% increase in wages.

There are significant relationships between cost and quality. In another study, improving center quality by 25% (from mediocre to good) increases total costs by 10%, or \$346 per child per year.

None of these studies include the investment that is likely to be the least expensive approach to improving quality: caregiver training, including in-service training. The evidence is clear that better-trained caregivers provide higher-quality care.

#### Summary

When it comes to child care in the United States and Wisconsin, there is room for improvement. Quality, on average, is only "poor" to "fair." The average group sizes and child-to-adult ratios often exceed recommended standards and the education background of child care workers is declining.

Market failure in the child care sector indicates a need for government intervention. Not only the child, but the family and society as a whole benefit from highquality care. Specifically, beneficiaries may include

- children attending schools with others whose behavior may be influenced by their child care setting,
- taxpayers who will save money through reductions in education costs,
- employers who benefit from more productive workers, and
- potentially citizens who gain through reduced crime and public assistance needs.

Finally, subsidizing child care for low-income families is consistent with the goals of the 1996 welfare reform and an ideology that seeks to encourage and reward work.

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