

State Estimates of Child Care Establishments: 2002

By Carolyn A. Hronis and Martin T. O'Connell

Abstract (150-word)

This poster session builds on earlier research examining the characteristics of child care establishments in the United States, differences across states, and factors affecting the availability of child care. We utilize data from the 2002 Economic Census and 2000 Decennial Census to examine three types of child care facilities, (1) non-employer businesses, (2) businesses with a payroll that pay income tax, and (3) businesses with payroll that do not pay income tax. Of the three types of businesses, non-employer child care centers comprise the majority of total child care centers. We find that the Midwest has the largest rates of child care centers per 1000 children under five, while the South has the lowest rates. Nationally, women's labor force participation, percentage of the population foreign-born, children's poverty rates, and the availability of alternative child care givers are related to the number of child care centers.

Historical Trends

The need for child care services has increased since the 1970s with an increase in the number of women in the workforce. The analyses of trends in the availability of child care facilities can reveal how the needs for child care services are being met, and have implications for families who cannot increase their earnings potential because an adult is unable to work for lack of child care options. In addition, it is important to understand where these services are underrepresented so that resources can be allocated to address family and labor force issues in different geographical areas.

This project is an extension of earlier research conducted by the Census Bureau analyzing trends in child care from 1987 to 1997. Child care centers with no paid employees comprised the majority of businesses in 1987, 1992, and 1997, a trend that we continue to observe in 2002. These small child care centers continue to be the main providers of child care available in this country (O'Neill & O'Connell 2001).

To compare the number of child care centers across states while controlling for state size and number of children, we calculated rates of child care centers per 1,000 children under the age 5 (center rate). Most child care centers cater to the under-five population due to school enrollment, which normally begins around five-years of age. To evaluate which states retained their child care centers and ranking across time, we checked for a correlation between the 1997 and 2002 center rates. These rates have a high correlation (0.91). This indicates that those states with a strong commitment to child care centers or a higher demand for services have continued to provide this service in the past 5 years.

Correlates of Child Care

In 2002, there were 688,000 child care establishments, up from 551,000 in 1997. Child care centers with no paid employees (619,000) constituted the majority of businesses in 2002. Taxable businesses with employees numbered 45,000 while the remaining 24,000 businesses with employees were tax exempt.

To explore the diversity between states in child care services, we identified a number of variables that may affect the demand for child care facilities. These include female labor force participation, percentage of the population foreign born, percentage of children living below the poverty line, percentage of teenagers between the ages of 16 and 19 who are not enrolled in school and not in the labor force, and the percentage of grandparents currently residing with their grandchildren. Of these five variables, the first four were also tested in research done by O'Neill and O'Connell for the 1992 Economic Census. The final variable regarding grandparents residing with their grandchildren is a new addition to the analyses based on data collected in the Census 2000 sample questionnaire.

The correlation results in this paper are based on observations for all fifty states and the District of Columbia. Looking first at the correlation results, women's labor force participation is positively correlated with the center rate. Because women are still largely primary caregivers, increased entrance into the workforce would create demand for outside child care. States with higher percentages of children in poverty are negatively correlated with the center rate. This may be attributed to a lack of family funds to pay for child care services. The presence of available teenagers and grandparents in the home is negatively correlated with the center rate. These other child care options decrease demand for child care centers. The percentage of the population foreign born is also negatively correlated with the center rate, indicating that a larger foreign born labor force may be available to provide child care services in the area.

State and County Variations in Child Care Establishments

In 2002, the Central and Midwestern states continued to have higher numbers of child care establishments per 1,000 children under five when compared with other regions. North Dakota had the highest rates in 2002, continuing a pattern established during the late 1980s and 1990s. As a region, the South had low rates of child care when compared with the rest of the country. In addition, specific areas in the West also have fewer child care establishments per 1,000 children, including Nevada, which has the lowest child care rate in the nation with 16.5 child care establishments per 1,000 children under 5.

We also examined correlation coefficients and a linear regression model for California, Ohio, and New York to examine how child care rates differ at the county level using the same independent variables as the models at the national level. We chose these states due to their large populations, numerous counties, and intra-state diversity. In addition, they represent diverse regions, allowing us to control for regional differences we cannot control for in the national sample. After eliminating counties lacking child care data and those containing fewer than 1,000 children, we had samples of between fifty and seventy-six counties.

The correlation models for these states yield results that are inconsistent with national level data, and, in the case of Ohio, statistically insignificant results. We

hypothesize that one reason for the inconsistencies between the state and national data may be due to the distance people travel in-state for work. If a parent works outside of the county they reside in, which is particularly common in metropolitan areas, they may also seek child care outside of the area. This may create inconsistencies in relating characteristics of workers in the county they work compared with the county in which they reside.

References

O'Neill, Grace and Martin O'Connell. 2001. "State Estimates of Child Care Establishments: 1977-1997." Population Working Paper Series No. 55. Population Division, U.S. Bureau of the Census. Washington, D.C.

Table One: Correlation Coefficients with Non-Employer Rate (weighted by number of children under five)

Independent Variables	Correlation Coefficients
Women in the Labor Force (%)	0.36**
Population Foreign-Born (%)	0.145
Children in Poverty (%)	-0.229
Available Teenagers (%)	-0.475**
Grandparents Living with Grandchildren (%)	-0.336*

*Significant at $p < 0.05$

**Significant at $p < 0.01$

Table Two: Linear Regression for Non-Employer Rate (weighted by number of children under five)

Variable	Parameter Estimate	Standardized Estimate
Women in Labor Force (%)	2.956*** (0.75)	0.709
Population Foreign-Born (%)	1.178*** (0.217)	0.755
Children in Poverty (%)	3.38*** (0.692)	1.043
Available Teenagers (%)	-4.176* (2.006)	-0.418
Grandparents Living with Grandchildren (%)	-8.45** (2.653)	-0.662
Intercept	-145.623** (51.486)	0

Standard Error in Parentheses

*Significant at $p < 0.5$

**Significant at $p < 0.01$

***Significant at $p < 0.001$