

Child Care Arrangements in Urban and Rural Areas

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Abstract

This paper compares non-parental care arrangements of pre-school age children in urban and rural areas of the United States using data from the 2005 National Household Education Survey (NHES), Early Childhood Program Participation Survey (ECPP). Data from the NHES show that among preschool-age children, those in rural areas are about as likely as those in urban areas to receive care from someone other than their parents on a weekly basis. The NHES data also show that when rural children participate in non-parental care they are more likely than urban children to receive this care from relatives and are less likely to receive care in center programs. Additionally, rural children are in families that, on average, made fewer out-of-pocket contributions toward the cost of their care. However, it is difficult to interpret these differences since the cost of living in these areas may differ.

Introduction

Recent policy discussions involving ways to improve the well-being of young children and their families have placed increased attention on the importance of child care and early education programs. Research suggests that, although parental influences are important, the quality of non-parental care arrangements has long lasting effects on child development (Belsky, Vandell, Burchinal, Clarke-Stewart, McCartney, & Owen, 2007; Vandell & Wolfe, 2000; Zaslow, Halle, Guzman, Lavelle, Dombrowski, Berry, & Dent, 2006). Research also suggests that access to child care may be a factor in the employment and earning patterns of families, especially those with limited incomes and those transitioning from government assistance programs into the workforce (Schaefer, Kreader, & Collins, 2006).

While the body of literature regarding the relationship between non-parental care and child development has increased considerably over recent years, it is still a growing field with remaining knowledge gaps. One area where additional research could be beneficial is analysis on child care arrangements and early education programs in rural areas. As discussed later in the paper, families residing in rural areas, on average, have smaller household incomes and live in less densely populated areas than urban families. These differences could potentially influence the availability of certain types of non-parental care in rural areas if child care providers are unable to attract enough families with the desire, transportation, and financial resources to participate in them. Lower population densities might also be related to the quality of some care arrangements if rural child care providers are unable to offer high enough salaries to attract more highly qualified caregivers.

Using data from the National Household Education Survey (NHES), this paper furthers our understanding of child care and geography by comparing and contrasting the non-parental care arrangements of children living in urban and rural areas of the United States.

Literature Review

This section reviews the results of several research studies. They were chosen because they examined differences in urban and rural child care arrangements from a national perspective, which makes their results more comparable to the findings from the NHES than studies that only examined populations from specific localities or regions. Comparisons across the studies presented in this section, though important, should be done cautiously because they utilized different research designs. For example, the studies examined different age groupings of children, defined urban and rural areas differently, and categorized types of care settings differently. In addition, some of the studies presented in this section examined all pre-school age children, while others focused on children with working mothers.

Two of the most thorough studies examining child care arrangements were completed in the early 1990s; the National Child Care Survey (Hofferth, Brayfield, Deich, & Holcomb, 1991) and the Profile of Child Care Settings (Kisker, Hofferth, Phillips, & Farquhar, 1991). The National Child Care Survey (NCCS) examined a nationally representative sample of U.S. families with children and produced an extensive set of descriptive findings, including a series of tables on the child care arrangements of pre-school age children under age five. The 1990 Profile of Child Care Settings Study examined a nationally representative sample of center directors and regulated home-based care providers.

Several additional studies have compared child care in urban and rural areas. Two of these used data from the Survey of Income and Program Participation (SIPP), which included a national sampling design and a series of questions regarding the child care arrangements of children. The two studies using the SIPP cited in this paper examined the child care arrangements of children under age 5 during the time that their mothers worked (Casper, 1996; Smith, 2006). In addition to the SIPP, a study by Grace et al. (2006) examined a national sample of children between 6 and 22 months of age using data from the Early Childhood Longitudinal Study (ECLS-B). Unlike the two studies analyzing SIPP data, this study examined the care arrangements of all children, including those without employed mothers. Another key difference between this study and the other studies reviewed in this section is that the population sampled for the ECLS-B included children between 6 and 22 months of age, whereas several of the other studies examined children age 0 to 4. Finally, a study by Swenson (2007) compared the characteristics and caseload sizes of urban and rural children served by the Child Care and Development Fund (CCDF) using administrative records.

The literature has consistently shown that non-parental care is common for both urban and rural children, but it has not shown a clear pattern as to whether urban or rural children are more likely to receive this care. Early findings from the NCCS showed that rural children under age 5 with working mothers were less likely to receive care from non-parental sources compared to those in urban areas (Hofferth et al., 1991). However, later studies using SIPP data collected in 1993 and 2002 did not show substantial differences in participation in non-parental care when comparing children in metropolitan and non-metropolitan areas (Casper, 1996; Smith, 2006). In contrast, the rural children sampled for the ECLS-B between 6 and 22 months of age were more likely than non-rural children to be cared for in regular non-parental arrangements (Grace et al., 2006).

Researchers of child care and human services policies often argue that center-based child care is less prevalent in rural areas. Previous research has provided some evidence for this argument, although not all studies have shown this pattern. Early findings from the NCCS showed that rural children under age 5 with working mothers were less likely to be cared for in center arrangements than urban and suburban children (Hofferth et al., 1991). Swenson (2007) also showed lower participation in center-based care among rural children subsidized by the CCDF compared to similar urban children. Additional unpublished tabulations by the author also showed that participation in center-based care among subsidized non-metropolitan children was correlated with the amount of urban influence associated with their resident counties. In other words, participation in center-based care was more common in non-metropolitan counties containing large towns and in counties adjacent to metropolitan counties than other non-metropolitan counties.

In contrast, findings from the SIPP data collected in 2002 did not show large differences between metropolitan and non-metropolitan children under age 5 in participation in similar arrangements referred to as “organized care” (Smith, 2006).¹ Similarly, findings from the ECLS-B did not show statistical differences in the use of center-based care between urban and rural children (Grace et al., 2006). However, it is difficult to compare the findings from the ECLS-B with the other studies reviewed above because center-based care is less common among the age group sampled by the ECLS-B (between 6 and 22 months) than among older pre-school age children.

¹ As cited in Smith (2006), organized care was defined as care that “is provided in day care centers, nursery schools, preschools, federal Head Start programs, and kindergarten.” Informal non-relative care included “family day care providers, in-home babysitters or nannies, neighbors, friends, and other non-relatives providing care either in the child’s or provider’s home.”

For children participating in non-parental care, the literature does not show a clear pattern as to whether the amount of time they spend in care each week is the same in urban and rural areas. A study using the NCCS showed that rural pre-school age children with employed mothers were in care for less hours per week than urban children (Hofferth et al., 1991), while a study using SIPP data collected in 2002 (Smith, 2006) showed rural children being in care for slightly more hours per week than urban children. Another study that examined the ELCS-B did not find substantial urban/rural differences in weekly hours in care for pre-school age children (Grace et al., 2006).

The number of children in care per adult provider is sometimes used when describing the environments of care arrangements. The literature is limited in its showing of urban and rural differences concerning this topic. As showed by Kisker, Hofferth, Phillips, & Farquhar (1991), the 1990 Profile of Child Care Settings found that, compared to urban areas, the average number of children enrolled per setting in rural areas was statistically smaller for center-based programs, but not different for regulated home-based programs.² Grace et al. (2006) did not find statistically significant differences in the mean number of children per adult caregiver for relative care and center-based care, but found that rural children in non-relative care had higher children-per-adult ratios than similar children in non-rural settings.

One area in which the literature has shown consistent results is in the area of child care costs; child care is less expensive in rural areas compared to urban areas. This pattern has also been shown with studies using the NCCS and data collected for the SIPP in 2002 (Hofferth et al., 1991; Smith, 2006).

Urban and Rural Economics

Prior literature has compared the economies of urban and rural areas. According to data from the U.S. Census Bureau, household incomes in non-metropolitan areas, on average, are lower than household incomes in metropolitan areas (DeNavas-Walt, Proctor, & Lee, 2006). Additionally, wages are generally lower and poverty rates are higher in rural areas (DeNavas et al., 2006; USDA, 2004; USDA, 2007). However, unemployment has historically been somewhat similar in urban and rural areas (USDA, 2006; Strong, Grosso, Burwick, Jethwani, & Ponza, 2005). Another economic issue to consider when comparing urban and rural child care costs is the potential for differences in the cost of living in those areas. Although rural areas are generally thought of as being lower-cost places to live compared to urban areas, there is an active debate among economists as to whether this is actually the case and if so, how it should be considered in measures of economic affluence (Weber, Jensen, Miller, Mosley, & Fisher, 2005).

In addition to general economic conditions, urban and rural differences in the labor force participation of parents with young children are important to note. Early results from the 2005 NHES show that children are more likely to participate in non-parental care when their mothers are employed or are enrolled in school, and when they live in one-parent families (Iruka & Carver, 2006). Data from the 2005 American Community Survey (ACS) provide information comparing labor force participation of the parents of urban and rural children under age 6, which

² Additionally, the study showed that average teacher wages in center programs were lower in rural areas compared to urban and suburban areas, although turnover in rural centers was lower than in urban and suburban centers.

is helpful in thinking about child care needs.³ These data show that urban and rural children generally lived in families that participated in the labor force. For example, in both urban and rural areas about 6 out of 10 children lived in families⁴ where at least one parent living in the household participated in the labor force the previous year. For children in single-parent families, only about 1 out of 4 children lived in families where the adult parent did not participate in the labor force at all the prior year. However, when examining families with two parents, a higher percentage of rural children had both of their parents in the labor force the previous year than urban children (56 percent compared to 52 percent).⁵

Research Framework

Although the research described in the previous section provides valuable insights into the non-parental child care arrangements of rural children, there is a need for additional analysis. One reason for additional analyses is that two of the most thorough national data collection efforts focusing on child care were conducted over 15 years ago: the National Child Care Survey (Hofferth et al., 1990) and the Profile of Child Care Settings (Kisker et al., 1990). It is unclear whether the urban and rural differences shown in these studies are still representative of rural and urban areas because their data were collected before federal spending on child care subsidies increased significantly throughout the 1990s and before the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, welfare reform legislation that facilitated the transition of many single low-income mothers into the labor force (Besharov & Higney, 2006; U.S. Department of Health and Human Services, 2007).

A second reason to invite additional research on rural child care is that findings sometimes vary across different data collection efforts because they use dissimilar survey methodologies (Besharov, Morrow, & Fengyan, 2006) or classify urban and rural areas differently. This paper increases our understanding of how child care arrangements in rural areas compare to those in urban areas of the United States by examining data from the 2005 National Household Education Survey (NHES), Early Childhood Program Participation Survey (ECPP). Since some of the research findings discussed in the previous section do not show consistent patterns across different studies and data sources, this paper hopes to provide additional information that can provide new results to this discussion and clarify which results appear to be consistent across multiple studies. It will also introduce some new topics not previously examined such as the physical locations of center programs.

Data and Methodology

The NHES used telephone interviews to collect data from the parents of a nationally representative sample of children age 6 and under that had not yet enrolled in kindergarten (Hagedorn, Montaquilla, Carver, O'Donnell, & Chapman, 2005). The 2005 version of the ECPP was the fifth such collection effort and focused on non-parental child care arrangements including care by relatives, care by persons not related to the children, and care in day care centers and

³ Author's tabulations from the American Community Survey, Table B23008, accessed through the American Fact Finder at http://factfinder.census.gov/home/saff/main.html?_lang=en. The figures in this paragraph exclude children that did not live with either parent.

⁴ Includes both one and two-parent families.

⁵ Rural children were also more likely to be in two-parent families than urban children (76 percent compared to 67 percent).

programs, including Head Start and pre-kindergarten programs. Since 6 year old preschoolers are uncommon (NHES, 2005), they are not included in this particular analysis. After these adjustments, records from 7,198 children were examined (6,066 urban and 1,132 rural).⁶

The public-use version of the NHES contains flags to identify the urban and rural status of the children in the sample, as defined by the urban and rural makeup of the zip codes in which they reside. This methodology is based on classifications used by the Census Bureau; zip codes are considered urban if they are located within urban areas (UA) or clusters (UC), and zip codes that are not defined as urban under this definition are classified as rural. When zip codes contain both urban and rural areas within their borders, the urban/rural classification is determined by the larger of the two populations (Hagedorn, et al., 2005). Hence, zip codes that have more rural residents than urban residents are considered rural, and zip codes containing more urban residents than rural residents are considered urban.

Since zip codes are much smaller than counties, this classification system is able to classify neighborhoods as being urban or rural status more accurately than many other categorization systems. However, this sorting system differs from many county-based systems, including the metropolitan/non-metropolitan system used by the Office of Management and Budget (OMB), in that it does not consider employment commuting patterns for its classifications. The end result is that the NHES classifies as rural some children living in sparsely populated counties relatively near urban centers that would be classified as urban or metropolitan in other data sets. It is also important to note that the urban/rural classification is based on the zip code in which the children reside, which may differ from the urban/rural status of the zip code in which the care is provided.

Results

This section presents findings from the 2005 NHES, ECPP by comparing the characteristics of child care and early education arrangements of children under age 6 that have not yet enrolled in kindergarten in urban and rural areas. Care arrangements that did not occur at least once a week were excluded.⁷ Many of the figures in this section present separate calculations by type of non-parental care arrangement as defined below. These types of arrangements may or may not require fees from the family receiving the care.

- Relative care is provided by a relative of the child and may take place in the child's home or in another location. Relatives include siblings, grandparents, aunts and uncles, and other non-parental family members.
- Non-Relative care includes care by non-relatives in the child's home or in another location. Arrangements sometimes called "family care" fit into this category.
- Center Programs include Head Start, pre-kindergarten, day care centers, and other early education programs. They may be located in places such as schools, public buildings, and buildings designed primarily for child care purposes.

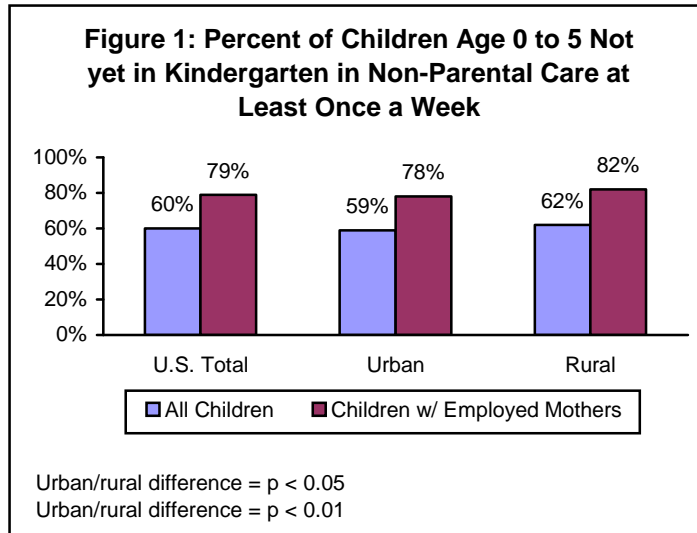
⁶ Only 413 records for 5 year old children were in the sample because children of this age are often in kindergarten and thus excluded from the NHES, ECPP.

⁷ Urban/rural differences are considered statistically significant in the text if the row percentages are $p < .05$ based on T-tests. The standard errors were calculated using the "Jackknife" method with WestVar software in order to adjust for the design effects of the NHES. For more information on the sampling design of the NHES, see Hagedorn, M., Montaquilla, J., Carver, P., & O'Donnell, K. (2006) *National Household Education Surveys Program of 2005: Public-Use Data File User's Manual, Volume II*. U.S. Department of Education, National Center for Education Statistics. The standard errors for the analysis can be found at ([Reuben, put the Web link here](#))

Participation in Non-Parental Care

The NHES shows that rural children age 0 to 5 were about as likely as urban children to receive care from someone other than their parents at least once a week, as shown in **Figure 1**.⁸

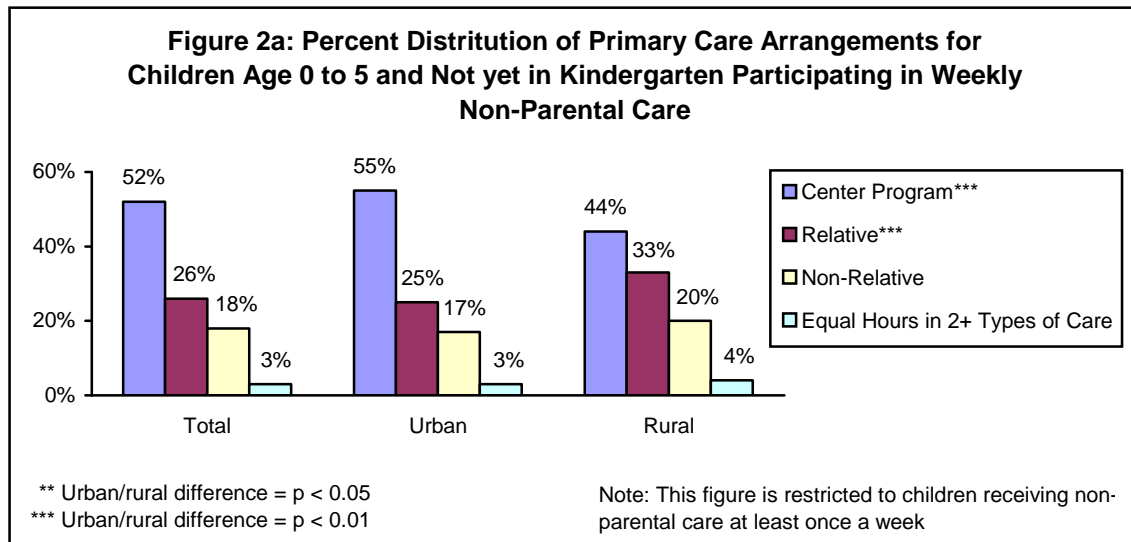
Examples of non-parental providers include: grandparents, older siblings, day care centers, pre-kindergarten programs, and care from friends, neighbors, and other non-relatives. In both urban and rural areas, about 6 in 10 preschool age children received non-parental care at least once a week. About 8 in 10 children with employed mothers were cared for in non-parental care settings on a weekly basis.⁹



Child Care Arrangements

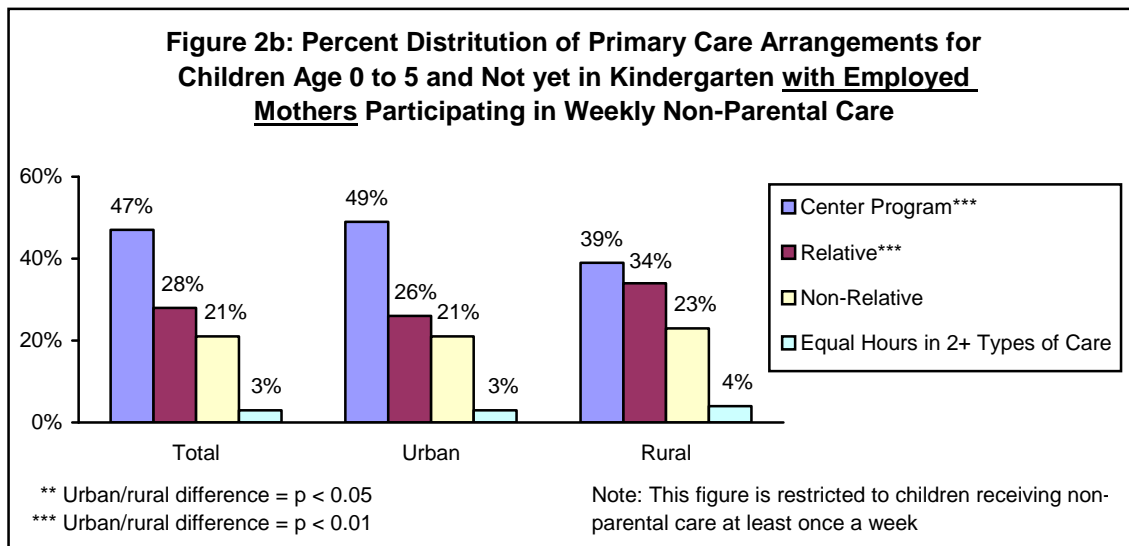
Figure 2a and **Figure 2b** present the distribution of children across three types of primary non-parental care arrangements for all children and for those with mothers employed at least part-

time. As stated earlier, the definition of center programs used by the NHES included Head Start, pre-kindergarten, day care centers, and other early education programs. Compared to children residing in urban areas, the NHES showed that rural children were more likely to be cared for by relatives and less likely to participate in center programs. However, despite these differences, more children were cared for in center programs than in any other type of care in both urban and rural areas. The NHES did not find statistical differences in the use of non-relative care for urban and rural children.



⁸ Additional tables on child care arrangements are shown in the **Appendix**.

⁹ Employed mothers in this paper include biological mothers, step-mothers, foster mothers, and guardians.



Hours in Care

Figure 3a presents NHES data for the average number of hours children participated in care each week for three types of non-parental arrangements. The averages include primary and all secondary care arrangements that regularly occurred at least once a week.¹⁰ Children that received care from multiple arrangements may be in more than one category. In all three types of care, the averages were not statistically different between urban and rural children.

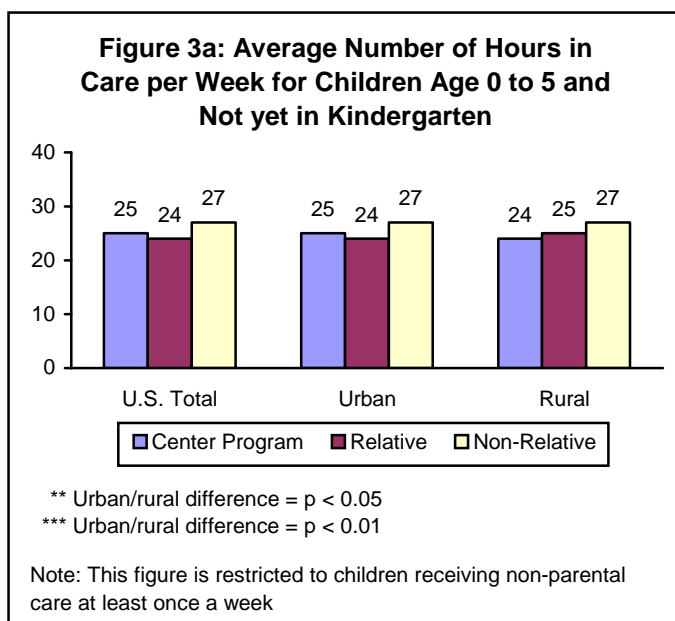
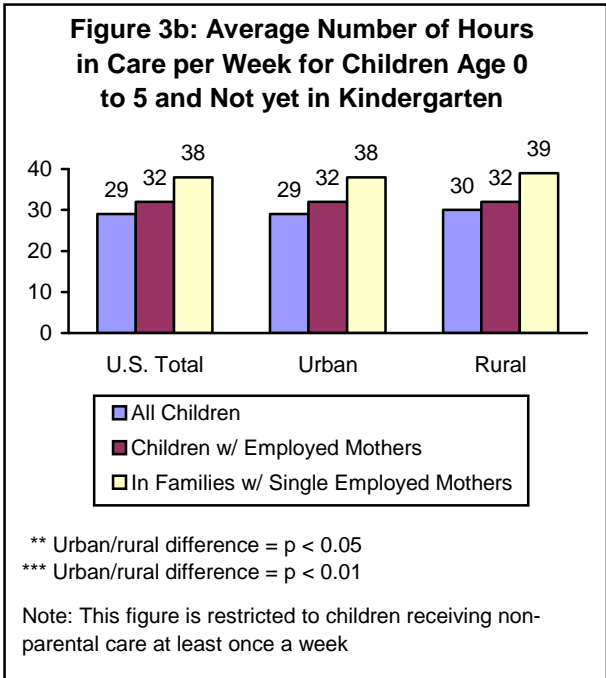


Figure 3b¹¹ presents additional comparisons of the average number of hours in care each week for all children, children living in families with mothers employed at least part-time, and for children living in families headed by single mothers employed at least part time. Like the findings shown in the previous figure, the averages presented in **Figure 3b** were not statistically different between urban and rural children across all three categorizations. Nationally, the average number of hours in care for all children, children with employed mothers, and children with employed single mothers was 29, 32 and 38 hours respectively.

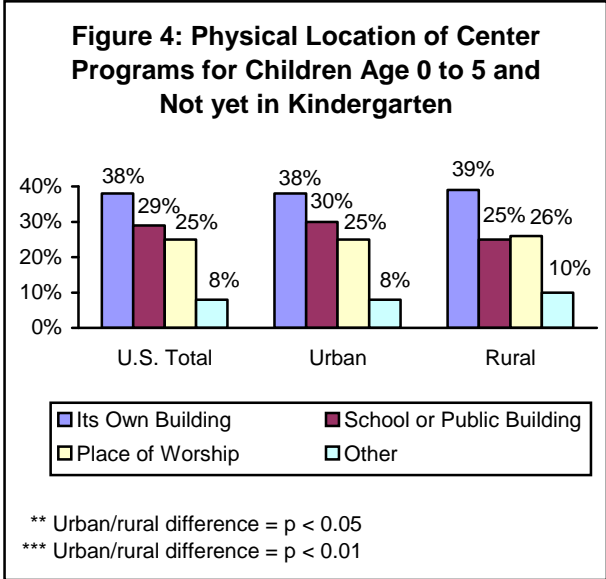
¹⁰ When children received regular care in more than one arrangement of a given type the hours for each arrangement of that type were summed to create the total time in care for **Figure 3a** and **Figure 3b**.

¹¹ The numbers in **Figure 3b** include hours in care from all types of care arrangements and are higher than those presented in **Figure 3a**. Children may be in more than one category in these figures.



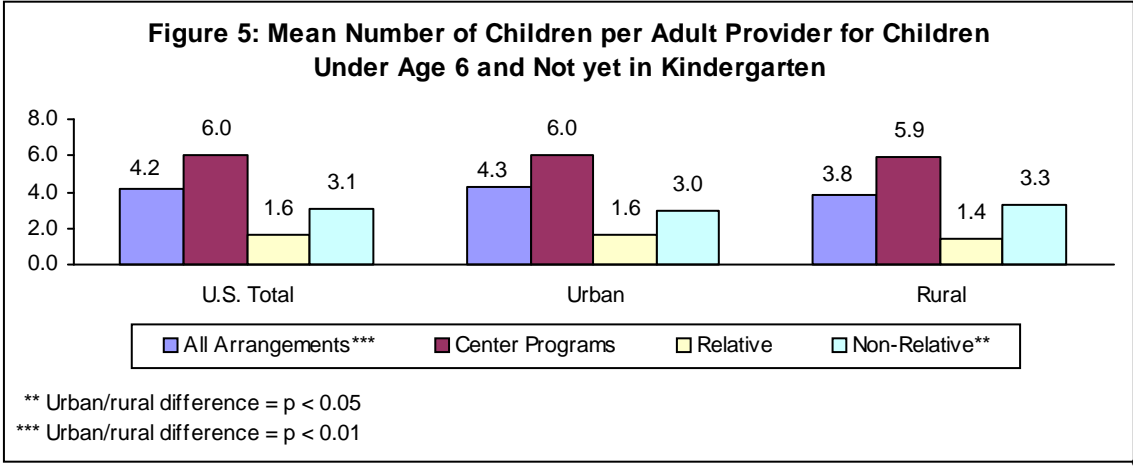
Location of Center Programs

Care in Center programs can be provided in a variety of physical locations such as public and private schools, public buildings, places of worship, and in buildings designed primarily for providing care services to children. The NHES showed that when children received care at centers, urban and rural children received this care in similar types of locations. As shown in **Figure 4**, about a quarter of the children in center programs received care in places of worship and almost 4 in 10 received care in the provider’s own buildings used primarily for child care. Over a quarter of all children participated in center programs located in schools (public and private) or public buildings.



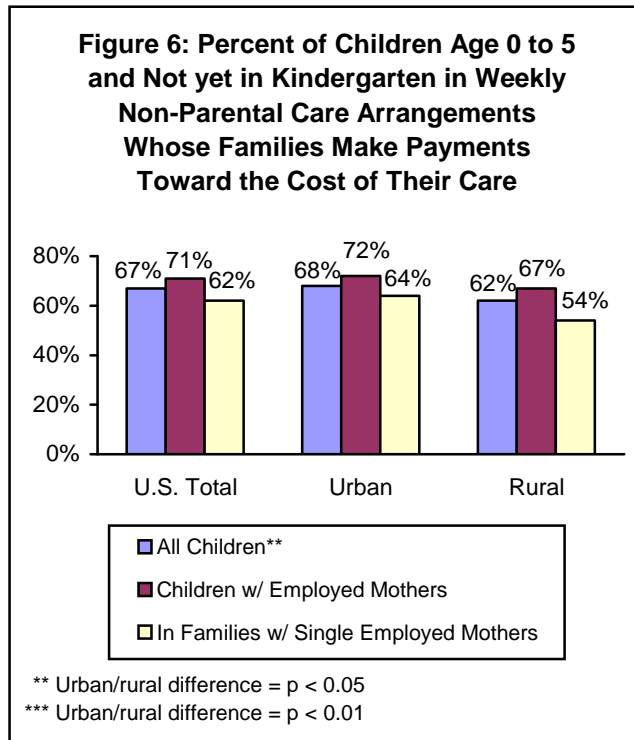
Number of Children per Adult Provider

The number of children in care for each adult provider is sometimes used when describing the environments of care arrangements. **Figure 5** displays the mean number of children per adult care provider across several types of non-parental arrangements. The NHES results did not show statistical differences for center programs and relatives, but did show statistical differences in these means for children receiving care from non-relatives.



Out-of-Pocket Expenses

In addition to providing descriptions of child care arrangements, the NHES also shows the amount of out-of-pocket expenses paid by their families. Unlike the expenses shown on some surveys, the amounts shown on the NHES represent the amount the families paid for each child, instead of the total amount the families paid for all children in the household.¹²



As shown in **Figure 6**, urban children were more likely than rural children to be in families that made out-of-pocket contributions toward the cost of their care; 62 percent of rural children and 68 percent of urban children lived in families that made out-of-pocket payments for child care.¹³ Rural children were also less likely to live in families that made high out-of-pocket contributions toward the price of care. For example, compared to rural children with employed mothers, urban children with employed mothers were more than twice as likely to live in families contributing at least \$100 weekly and were more than three times as likely to live in families that contributed at least \$150 weekly towards the price of their care when they participated in non-parental care (see **Figure 7**).

Table 1 and **Table 2** provide additional NHES tabulations on the price of child care in urban and rural areas by showing the average hourly and weekly out-of-pocket expenses for children that lived in families that contributed at least part of the costs of care. Compared to fees paid by families in urban areas, average fees paid were smaller across all types of care arrangements in rural areas. For example, the average hourly amount paid per child for rural children was \$0.79 per hour lower for relative care, \$1.55 per hour lower for non-relative care, and \$.98 per hour lower in center programs than average payments for urban children. The average fees paid for rural children also remained smaller than urban children when examining payments made by different types of families, as shown in **Table 2**. For example, the families of urban children with employed mothers paid \$.94 more per hour for child care than families of rural children.

¹² In some cases, parents reported expenses for more than one child. In these circumstances, out-of-pocket expenses were calculated by dividing the total payments by the number of children for whom care was paid. If a child received care in more than one arrangement, the costs of each arrangement were summed to obtain a total weekly dollar amount. Costs per hour were obtained by dividing the total weekly cost paid by the total number of hours children spent in all arrangements in a week.

¹³ The percentages shown in **Figure 6** may be higher than percentages reported in other studies because they include only children that participated in weekly non-parental care. Children are excluded if they did not participate in non-parental care.

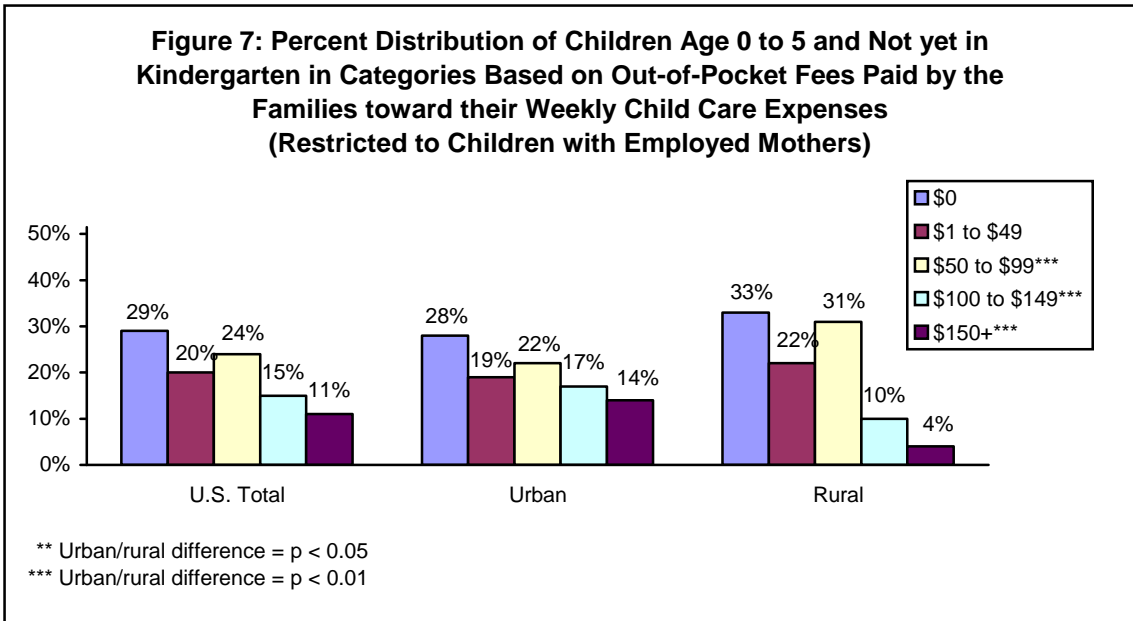


Table 1: Average Hourly Out-of-Pocket Expenses Paid per Child Age 0 to 5 and Not yet in Kindergarten for Weekly Non-Parental Care¹⁴

	Urban	Rural	U.S. Total
Hourly Expenses			
Relative**	\$2.51	\$1.72	\$2.34
Non-Relative***	\$4.13	\$2.58	\$3.73
Center Program***	\$4.17	\$3.19	\$4.00

** Urban/rural difference = $p < 0.05$
 *** Urban/rural difference = $p < 0.01$

¹⁴ The averages presented here include all children that received non-parental care and lived in families that made out-of-pocket payments toward the cost of care, regardless of whether or not the children's parents were employed.

Table 2: Average Weekly and Hourly Out-of-Pocket Expenses Paid Per Child Age 0 to 5 and Not yet in Kindergarten for Weekly Non-Parental Care

	Urban	Rural	U.S. Total
Hourly Expenses			
All Children***	\$3.53	\$2.50	\$3.32
Children with Employed Mothers***	\$3.42	\$2.48	\$3.22
Children with Employed Single Mothers**	\$2.04	\$1.47	\$1.96
Weekly Expenses			
All Children***	\$88.12	\$63.79	\$83.19
Children with Employed Mothers***	\$97.74	\$70.05	\$91.87
Children with Employed Single Mothers**	\$68.23	\$51.81	\$65.87

** Urban/rural difference = $p < 0.05$

*** Urban/rural difference = $p < 0.01$

Discussion

This analysis from the NHES showed that compared to urban children, rural children:

- were about as likely to be in non-parental care
- were less likely to be in center programs and more likely to be cared for by relatives
- were in care for as many hours each week, on average
- were in care arrangements with similar child to adult ratios
- lived in families that made fewer out-of-pocket contributions toward the cost of their care

The findings from the NHES are an important contribution to the literature, especially since previous studies comparing child care in urban and rural areas have not always been consistent. One of these findings is that the likelihood that children participated in non-parental care was not shown to be statistically different between urban and rural areas in the NHES. This finding is important because previous findings from the NCCS and the SIPP were not consistent; the NCCS showed lower participation among rural children while the SIPP did not show statistical urban/rural differences. While it is possible that the results from the NCCS reflected demographics that have since changed, it is important to note that data collected just a few years after the NCCS for the 1993 SIPP panel also did not show differences in participation in non-parental care between urban and rural areas, suggesting that the different research results may be more methodological in nature. Furthermore, additional findings from the young (between 6 and 22 months of age) children included in the ECLS-B data showed that rural children were more likely than urban children to be in non-parental arrangements. Therefore, this study strengthens the argument that pre-school age children in rural areas are as likely as urban children to receive care from non-parental sources.

Another important finding from this study concerns participation of rural children in center programs. These findings are important because the perceived lack of center-based care is a frequently discussed subject by researchers and again, previous research from the NCCS and the SIPP showed conflicting findings. The NHES shows that when rural children are cared for in non-parental settings, they are less likely than urban children to receive care from center programs and are more likely to receive care from relatives. The lack of participation in center programs is consistent with the early findings based on the NCCS, but differs from the findings shown from two studies using data from the SIPP.

One possibility the NHES and SIPP show different participation patterns in center programs is that the NHES and the SIPP used different classification systems to define urban and rural children; the NHES was based on the distribution of urban and rural people within zip codes, while the SIPP classified counties as metropolitan and non-metropolitan based on population centers and workforce commuting patterns. While the rural populations sampled for the NHES and the SIPP overlap considerably, previous comparisons of various urban and rural typologies have shown that their differences are large enough to affect some types of analyses (Isserman, 2005). A second consideration in trying to understand these differences is that the NHES and the SIPP collected data at different times of the year and presented questions to respondents somewhat differently. While the impact of these methodological differences are difficult to measure, it is important to note that the SIPP showed lower levels of participation in center programs than what has been shown in other data sources (Besharov et al., 2006).

Another potential reason why the SIPP showed lower levels of participation in center programs is that it restricted its sample to care arrangements while the children's mothers were working. Children attending center programs when their mothers were not employed were not included. The NHES shows that children of unemployed mothers participating in weekly non-parental care were much more likely to be in center programs than children of employed mothers (Iruka & Carver, 2006) and the NHES's inclusion of them likely increased the percentage participating in center programs over other data sources.

While researchers often highlight the lower levels of center program participation among rural populations, the importance of center programs should not be overlooked when looking for ways to improve the quality of care in these areas. The NHES showed that over 4 in 10 rural children that received weekly non-parental care participated in center care as their primary arrangement, which was a higher rate than their participation in relative care. However, center programs may not be available to all rural children. Since the NHES does not show whether center care arrangements are located near the residences of the children or in urban areas near their parents' places of business, it is more difficult to analyze the accessibility of centers to rural children that do not live near larger population centers.

The NHES also shows that families of rural pre-school aged children made fewer out-of-pocket contributions toward the cost of care than families of urban children. These findings are consistent with previous research, which has consistently shown higher child care prices in urban areas. However, the lack of a consensus on urban/rural cost-of-living differences makes it difficult to make statements about whether the financial burden of child care is greater in urban or rural areas of the country.

Any comparisons between urban and rural populations should be examined with some caution. Like urban areas, rural areas are intrinsically diverse, varying economically and demographically, and the results presented in this paper are only representative at the national level. Despite this

lack of homogeneity, rural areas generally share a couple of characteristics; they have low population densities and they often have limited access to services located in urban areas. Therefore, it is important to continue to document any differences, if they exist, between factors affecting children in urban and rural areas in order to help federal policymakers enact policies that have the highest potential to be successfully implemented in all geographical areas.

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Appendix: Additional Tables

Table Appendix – 1: Percent Distribution of Primary Care Arrangements for Children under Age 5 and Not yet Enrolled in Kindergarten in Weekly Non-Parental Care

	Relative***	Non-Relative	Center***	Equal Hours in 2+ Types of Care	Total
Urban	25%	18%	54%	3%	100%
Rural	34%	21%	41%	4%	100%
Total	27%	19%	51%	3%	100%

** Urban/rural difference = $p < 0.05$ *** Urban/rural difference = $p < 0.01$

Note: The percentages in this table are mutually exclusive and are restricted to children that participated in weekly non-parental care.

Table Appendix – 2a: Percentage of Children under Age 6 and Not yet Enrolled in Kindergarten in Various Types of Non-Parental Care Arrangements (Includes Secondary Arrangements)

	Relative***	Non-Relative	Center**	Uses Multiple Arrangements	Any Weekly Care
Urban	20%	13%	37%	9%	59%
Rural	26%	15%	32%	11%	62%
Total	21%	13%	36%	10%	60%

** Urban/rural difference = $p < 0.05$ *** Urban/rural difference = $p < 0.01$

Note: Children may be in more than one category.

Table Appendix – 2b: Percentage of Children under Age 5 and Not yet Enrolled in Kindergarten in Various Types of Non-Parental Care Arrangements (Includes Secondary Arrangements)

	Relative***	Non-Relative	Center***	Uses Multiple Arrangements	Any Weekly Care
Urban	20%	13%	35%	9%	58%
Rural	26%	16%	29%	10%	60%
Total	21%	14%	34%	9%	59%

** Urban/rural difference = $p < 0.05$ *** Urban/rural difference = $p < 0.01$

Note: Children may be in more than one category.