



U.S. Department of Education
Institute of Education Sciences
NCES 2006-039

Child Care and Early Education Arrangements of Infants, Toddlers, and Preschoolers: 2001

Statistical Analysis Report





U.S. Department of Education
Institute of Education Sciences
NCES 2006-039

Child Care and Early Education Arrangements of Infants, Toddlers, and Preschoolers: 2001

Statistical Analysis Report

November 2005

Gail M. Mulligan
**National Center for
Education Statistics**

DeeAnn Brimhall
**Education Statistics
Services Institute**

Jerry West*
**National Center for
Education Statistics**

Christopher Chapman
Project Officer
**National Center for
Education Statistics**

*with NCES at the time he coauthored this report. He is currently with Mathematica Policy Research, Inc.

U.S. Department of Education

Margaret Spellings
Secretary

Institute of Education Sciences

Grover J. Whitehurst
Director

National Center for Education Statistics

Mark Schneider
Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high-priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high-quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public. Unless specifically noted, all information contained herein is in the public domain.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to

National Center for Education Statistics
Institute of Education Sciences
U.S. Department of Education
1990 K Street NW
Washington, DC 20006-5651

November 2005

The NCES World Wide Web Home Page address is <http://nces.ed.gov>.

The NCES World Wide Web Electronic Catalog is <http://nces.ed.gov/pubsearch>.

Suggested Citation

Mulligan, G. M., Brimhall, D., and West, J. (2005). *Child Care and Early Education Arrangements of Infants, Toddlers, and Preschoolers: 2001* (NCES 2006-039). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

For ordering information on this report, write to

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794-1398

or call toll free 1-877-4ED-Pubs or order online at <http://www.edpubs.org>.

Content Contact

Gail Mulligan
(202) 502-7491
gail.mulligan@ed.gov

Executive Summary

Information pertaining to children's early childhood experiences has been gathered as part of the National Household Education Surveys Program (NHES) for over a decade. A primary purpose of NHES's early childhood surveys is to obtain information about the time young children spend outside the care of their parents. NHES's Early Childhood Program Participation Survey (ECP) asks parents and guardians about any nonparental care and education arrangements their children may have. Information is collected on various characteristics of these arrangements, including who provides the care, the location of the care, and how much families pay for it.

Parents are asked about the care and education their children receive in a variety of settings. Home-based arrangements include care that takes place in a child's own home or in the home of someone else. This care may be provided by a relative (other than the child's parents) or a nonrelative. Nonrelative care includes care provided by babysitters, nannies, and family day care providers. In the NHES survey, as well as this report, such care arrangements in home-based settings are referred to as relative care and nonrelative care. Center-based care is that which provides children with care and education in a nonresidential setting. These arrangements include day care centers, nursery schools, prekindergartens, and other types of early childhood education programs such as Head Start.

Each of these settings includes elements of care and education, although the reasons children are in care and the educational nature of the care can vary within and across arrangement types. The NHES does not distinguish between participation for educational enrichment and participation resulting from parents' need for child care. Also, in the NHES, center-based arrangements that occur in more strictly educational settings (i.e., prekindergartens) and those that occur in day care centers are not distinguished from one another. For ease of presentation, the report often refers to these arrangements as nonparental care rather than nonparental care and education. However, the reader should keep in mind that the degree to which education is a central feature of the arrangement, as well as the reasons why children participate in such arrangements, can vary.

This report is the latest in a series of NCES reports on young children's nonparental care and education arrangements. It presents the most recent data available for children under the age of 6, taken from the 2001 administration of the ECP. Interviews were conducted with parents or guardians of 6,741 children under age 6 who were not yet enrolled in kindergarten.¹ The overall

¹ Interviews were also conducted with parents of eight 6-year-olds who were not yet enrolled in kindergarten. Due to their small number, these 6-year-olds are excluded from these analyses.

response rate for the ECPP parent interview was 59.9 percent.² When weighted to reflect national totals, these data represent the child care and early educational experiences of approximately 20.3 million children under the age of 6 who are not yet enrolled in kindergarten or higher grades.

As in previous NHES reports on this topic, variations in participation rates by characteristics of children (age and race/ethnicity) and their families (household income and mother's education and employment status) are examined. Unique to this report is its consideration of variations in participation rates by poverty status and geographic region. In addition, it provides a more in-depth examination of differences among children of different age groups than previous reports.

All differences cited in this report are significant at the .05 level using Student's *t* statistic. Trend tests, or bivariate regressions, are used to examine the general relationships between the various characteristics of child care and both household income and mother's education level. Additionally, the discussion is limited to differences of at least 5 percentage points when percentage estimates are compared. When mean estimates are compared, the discussion is limited to differences where the effect size, as calculated using Cohen's *d* statistic (Cohen 1988), is .2 or larger.

During the spring of 2001, 60 percent of children under the age of 6 who had yet to enter kindergarten were receiving some type of care or education, or both, on a weekly basis from persons other than their parents (table 1). This translates to about 12.2 million infants (children under the age of 1), toddlers (1- and 2-year-olds), and preschoolers (3- to 5-year-olds) who had at least one weekly nonparental care arrangement.

Overall, children's participation in nonparental care and education increases with child's age and mother's education (table 2). There is a relationship between income and participation, such that children living in households with incomes over \$50,000 are more likely to receive nonparental care than children in homes with lower incomes (65-72 percent compared to 53-57 percent). With a participation rate of 72 percent, children in homes with incomes greater than \$75,000 are most likely to receive this care, compared to children in lower-income households. Also, children whose mothers work outside the home, either part time or full time, are more likely than children whose mothers are not in the labor force to receive nonparental care (70 and 85 percent vs. 31 percent). Among Black, White, and Hispanic children, Black children are most likely to be cared for by someone other than their parents on a weekly basis and Hispanic children are least likely (73, 60, and 48 percent for Black, White, and Hispanic children, respectively). This report expands on previous NHES studies to show that children living below

² This overall response rate for the ECPP parent interview is the product of a Screener response rate and the ECPP unit response rate. The NHES includes a Screener survey in which information about household composition is collected and then used to sample children within households. In 2001, the response rate for the Screener was 69.2 percent. The unit response rate for the ECPP Survey, based on the percentage of children who were sampled and had parents who completed the survey, was 86.6 percent. Analysis of nonresponse bias conducted for the 1999 NHES, which is similar to the 2001 NHES in terms of its target populations and contact procedures, showed no evidence of bias in estimates produced from the 1999 NHES data. Also, weights assigned to each case and used in analyses are designed to reduce potential bias due to nonresponse. Additional information regarding nonresponse bias and weighting procedures in the NHES can be found in the technical notes section of this report.

the poverty threshold and children living in the West are less likely than their counterparts to be cared for by someone other than their parents on a weekly basis.

Many of the same characteristics associated with participation in nonparental care and education arrangements for the overall population of children under the age of 6 and not yet enrolled in kindergarten are also associated with participation rates for infants, toddlers, and preschoolers when examined as separate age groups (tables 2-A, 2-B, and 2-C). For example, Black infants, toddlers, and preschoolers are all more likely than their White and Hispanic counterparts to receive nonparental care. Also, the general trend for children in each age group is for participation rates in nonparental care to increase as mothers' education level increases. However, while income and poverty status are related to participation for toddlers and preschoolers, such relationships are not detected among infants.

This report also looks at the characteristics associated with participation in the three specific types of nonparental care described above: relative, nonrelative, and center-based care (table 2). A larger percentage of children overall receive nonparental care in centers than from relatives or nonrelatives (33 percent compared to 22 and 16 percent, respectively). However, some children are more likely than others to receive certain types of care. For example, older children are more likely than younger children to be in center-based care; 73 percent of 5-year-olds have center-based arrangements, compared to 8 percent of infants. Children living at or above the poverty threshold are more likely than those living below the poverty threshold to receive nonrelative (17 vs. 9 percent) or center-based care (35 vs. 27 percent), while they are less likely to receive care from relatives (21 vs. 26 percent). Also, patterns of participation related to income and mothers' education for relative care arrangements differ from the patterns of participation related to these characteristics for nonrelative and center-based arrangements.

Some variations in the overall relationships between the examined characteristics and type of care emerge when children within particular age groups are compared to one another. Twenty one percent of infants are cared for by a relative on a weekly basis, compared to 14 percent who are cared for by a nonrelative and 8 percent who are cared for in a center. There are no detectable differences in the participation rates of toddlers, as a group, in the different types of care. Preschoolers are more likely to receive care in center-based arrangements than in either relative or nonrelative arrangements (56 percent vs. 21 and 13 percent, respectively).

When infants, toddlers, and preschoolers are considered separately, participation rates in different types of care vary by geographic region as well. For example, 4 percent of infants living in the West participate in center-based care arrangements, compared to 10 percent of infants living in the South and 9 percent of infants living in Midwest. Preschoolers living in the West are less likely than preschoolers living in any other area of the country to receive center-based care (47 percent vs. 55-63 percent). Among toddlers, participation in center-based care is highest for those living in the South (26 percent vs. 17-20 percent).

Focusing on the location of care, the NHES data show that children receiving nonparental care in a home-based setting are more likely to be cared for in someone else's home than in their own, regardless of whether the care is provided by a relative or a nonrelative (figure 4). Those children who are cared for in a center-based setting are most likely to receive that care in a center

located in its own building,³ compared to other locations, such as a school, community center, or library (table 4). Among children in center-based care, care provided in public or private schools is more common when children come from homes with lower incomes, when they are poor, when they belong to a racial or ethnic minority group, and when their mothers have lower levels of education. Also among children in center-based care, the participation rate in care located in a church, synagogue, or other place of worship is highest for White children, and increases with household income and mothers' education.

Children receiving nonparental care on a weekly basis spend 31 hours, on average, in the care of someone other than their parents (table 5). Additionally, children with nonrelative care arrangements spend more time in them than children in center-based care do (about 28 hours per week compared to about 25 hours per week). The children who spend the most time in nonparental care arrangements tend to be Black, come from families with lower household incomes, have mothers with lower levels of education or who work, and live in the South. A consistent relationship between child age and time spent in nonparental care emerged only for center-based arrangements; younger children spend more time than older children being cared for in a center (ranging from a high of about 32 hours per week for infants and 1-year-olds compared to a low of about 21 hours per week for 5-year-olds). A somewhat similar, though not as consistent, pattern was found for nonrelative care arrangements; toddlers spend more time in nonrelative care arrangements than 4- and 5-year-olds (about 30 hours per week compared to 25 and 24 hours per week, respectively).

The report also examines the out-of-pocket expenses for nonparental care paid by families of children who had care arrangements and whose parents reported that they paid something for care.⁴ These out-of-pocket expenses vary by type of care arrangement, as well as by child, family, and community characteristics. On average, families spend \$69 a week and \$3 an hour for care for their children (tables 6-A and 6-B).⁵ Relative care is the least costly, both weekly (about \$48 per week) and hourly (\$1.93 per hour), for families of children under the age of 6. Among those who do report having out-of-pocket expenses for care: families with younger children pay more on a weekly basis than do families with older children; higher-income families pay more than do lower-income families (and families who do not live in poverty pay more than do families living in poverty); families in which mothers are better-educated pay more on a weekly basis than do families with less educated mothers; families in which mothers work full-

³ The survey question specifically asked parents whether the center their children attended was located in "its own building." This category excludes private homes, place of worships, schools, colleges, universities, community centers, libraries, etc. Location refers strictly to the place where the care was provided and not the type of care provider or sponsorship. For example, if a religious group provided care in a building that was not a place of worship, the care would be considered as having been provided in a center located its own building, rather than in a place of worship. Alternatively, care located in a place of worship was not necessarily provided by the religious group to whom the place of worship belonged.

⁴ The NHES only ascertains the amount families pay for care themselves, apart from any financial assistance they may receive from others. Therefore, the data presented here may not represent the total cost of care.

⁵ There are different ways in which child care costs can be measured, including cost per week and cost per hour. The former measure may be largely a function of time spent in care. Therefore, the latter measure may be a more accurate indicator of which type of care is more costly and for whom, independent of care hours. Both cost estimates for the sample of children whose families pay for child care are discussed in this report.

time pay more than do families in which mothers do not work full-time; and families living in the Northeast and West pay more on a weekly basis than do families living in the Midwest and South.

In sum, findings from this report using the most recent data available from the NHES support previous research showing that children's participation in nonparental care and education arrangements is related to a variety of factors. Children of different ages and racial or ethnic backgrounds, in different economic situations, with mothers of varying educational levels and employment statuses, and who live in different areas of the country exhibit differences with respect to whether or not they have any weekly child care arrangements. Their families also report differences in the location and providers of child care. Additionally, the time children spend in nonparental care, and the amount their families pay for it, are related to many of the same factors associated with participation in nonparental care and education, including those which are unique to this report, poverty status and geographic region.

Acknowledgments

The authors would like to acknowledge the many people who contributed to the production of this report. Westat, Inc. has collected the data upon which this report is based since 1991. Many people have provided invaluable comments and suggestions that improved the quality of this report. They include: Bill Hussar, Edie McArthur, Carol Chelemer, Val Plisko, and Marilyn Seastrom at the National Center for Education Statistics; Mike Planty, Young Chun, Margaret Noonan, Ramani Kotaru, and Zack McLain at the Education Statistics Services Institute; and Lisa Bridges and the anonymous reviewers from the Institute of Education Sciences. Any remaining errors or problems in this report are the sole responsibility of the authors.

Contents

	Page
Executive Summary	iii
Acknowledgments	viii
List of Tables	x
List of Figures	xi
Background	1
Participation in Nonparental Care and Education Arrangements	3
Total Participation	3
Overall Participation Among Children of Different Ages	8
Participation in Different Types of Care and Education Arrangements	16
Participation in Various Types of Arrangements Among All Children.....	16
Participation in Various Types of Arrangements Among Children of Different Ages.....	18
Infants	18
Toddlers	20
Preschoolers	21
Location of Nonparental Care Arrangements	22
Home-based Arrangements	22
Center-based Arrangements	27
Average Time Spent in Nonparental Care Arrangements	32
Average Out-of-Pocket Expenses for Nonparental Care	37
Summary	45
Methodology and Technical Notes	47
References	51

List of Tables

Table	Page
Table 1. Percent of children under 6 years old with weekly nonparental care arrangements, by type of arrangement: 1995, 1999, 2001	1
Table 2. Percent of children under 6 years old with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001	6
Table 2-A. Percent of infants with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001	10
Table 2-B. Percent of toddlers with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001	12
Table 2-C. Percent of preschoolers with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001	14
Table 3. Percent of children under 6 years old with weekly relative or nonrelative care arrangements, by location and child and family characteristics: 2001.....	25
Table 4. Percent of children under 6 years old with weekly center-based care arrangements, by location and child and family characteristics: 2001.....	30
Table 5. Average number of hours per week children under 6 years old with at least one weekly nonparental care arrangement spend in those arrangements, by type of arrangement and child and family characteristics: 2001	35
Table 6-A. Average amount households of children under 6 years old spend for nonparental care arrangements per week, by type of arrangement and child and family characteristics: 2001.....	41
Table 6-B. Average amount households of children under 6 years old spend for nonparental care arrangements per hour, by type of arrangement and child and family characteristics: 2001.....	43

List of Figures

Figure	Page
Figure 1. Percent of children under 6 years old and not yet in kindergarten with weekly nonparental care arrangements, by age: 2001.....	8
Figure 2. Percent of children under 6 years old and not yet in kindergarten with weekly nonparental care arrangements, by type of arrangement: 2001.....	16
Figure 3. Percent of children under 6 years old and not yet in kindergarten with weekly nonparental care arrangements, by type of arrangement and age: 2001.....	19
Figure 4. Percent of children under 6 years old and not yet in kindergarten with weekly relative or nonrelative care arrangements, by location of arrangement: 2001.....	23
Figure 5. Percent of children under 6 years old and not yet in kindergarten with weekly center-based care arrangements, by location of arrangement: 2001	27
Figure 6. Average number of hours per week children under 6 years old and not yet in kindergarten spend in nonparental care arrangements, by mother's employment status: 2001.....	34
Figure 7. Average amount households of children under 6 years old and not yet in kindergarten spend for nonparental care arrangements per week, by age: 2001.....	38

Background

Between 1995 and 2001, the percentage of children under age 6 who were not yet enrolled in kindergarten and were being cared for on a regular basis by individuals other than their parents fluctuated slightly, between 59 percent and 61 percent (table 1). In 1995, 1999, and 2001, these children were more likely to be cared for in a center than by either a relative or nonrelative. Additionally, outside of center-based care, more children were cared for by a relative than by a nonrelative in 1999 and 2001.

Table 1. Percent of children under 6 years old with weekly nonparental care arrangements, by type of arrangement: 1995, 1999, 2001

Survey year	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
			Relative		Nonrelative		Center ¹			
	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
1995	59	0.9	20	0.5	18	0.6	30	0.6	41	0.9
1999	61	0.7	22	0.6	16	0.6	34	0.5	39	0.7
2001	60	0.6	22	0.6	16	0.5	33	0.5	40	0.6

¹ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey. The percentages of children in specific types of care do not sum to the percentage of children with at least one weekly nonparental care arrangement, because some children had more than one type of arrangement. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 1995, 1999, and 2001.

This information comes from the National Household Education Surveys Program (NHES), which the National Center for Education Statistics (NCES) has been conducting for over a decade in an effort to collect and disseminate information pertaining to children's early childhood experiences. A primary purpose of NHES's early childhood surveys is to gather information about the time young children spend outside the care of their parents. Specifically, the surveys ask parents and guardians about any nonparental care and education arrangements their children may have. Information is collected on various characteristics of these arrangements, including who provides the care, the location of the care, and how much families pay for it.

Parents are asked about the care and education their children receive in a variety of settings. Home-based arrangements include care that takes place in a child's own home or in the home of someone else. This care may be provided by a relative (other than the child's parents) or a nonrelative. Nonrelative care includes care provided by babysitters, nannies, and family day care providers. In the NHES survey, as well as this report, such care arrangements in home-based settings are referred to as relative care and nonrelative care. Center-based care is that

which provides children with care and education in a nonresidential setting. These arrangements include day care centers, nursery schools, prekindergartens, and other types of early childhood education programs such as Head Start.

Each of these settings includes elements of care and education, although the reasons children are in care and the educational nature of the care can vary within and across arrangement types. The NHES does not distinguish between participation for educational enrichment and participation resulting from parents' need for child care. Also, in the NHES, center-based arrangements that occur in more strictly educational settings (e.g., prekindergartens) and those that occur in day care centers are not distinguished from one another. For ease of presentation, the report often refers to these arrangements as nonparental care rather than nonparental care and education. However, the reader should keep in mind that the degree to which education is a central feature of the arrangement, as well as the reasons why children participate in such arrangements, can vary.

Data from the first administration of NHES's early childhood survey in 1991 were used to present a national picture of participation in nonparental care and education arrangements prior to kindergarten among first and second graders (West et al. 1992). Subsequent reports have used NHES data to examine the child care and early educational program participation of children under 6 years of age (West, Germino Hausken, and Collins 1993; West, Wright, and Germino Hausken 1995), as well as the before- and after-school activities of children in their first few years of formal schooling (Brimhall, Reaney, and West 1999). Research using NHES:1995 data provided detailed information on the characteristics of child care arrangements in the United States (Hofferth et al. 1998). NHES data also serve as a source of early childhood indicators for several major Federal reports, including *America's Children*, *The Condition of Education*, and *Statistical Abstract of the United States*. In addition, researchers have taken advantage of the NHES data to investigate various issues related to nonparental child care and education, including patterns of preschool and day care usage by families of different racial and ethnic backgrounds (Early and Burchinal 2001; Fuller et al. 1996) and families of disabled children (Huang and Van Horn 1995).

This report is the latest in a series of NCES reports on young children's nonparental care and education arrangements. It presents the most recent data available for children under the age of 6, taken from the Early Childhood Program Participation Survey (ECPP) of the 2001 NHES. Information in this report was obtained through interviews with 6,741 parents or guardians of children under age 6 who were not yet enrolled in kindergarten.¹ When weighted to reflect national totals, these data represent the child care and early educational experiences of approximately 20.3 million children under the age of 6 who are not yet enrolled in kindergarten or higher grades. The unit response rate of the ECPP Survey, based on the percentage of children who were sampled and had parents who completed the survey, was 86.6 percent. The NHES also contains a Screener survey in which information about household composition is collected and then used to sample children within households. The response rate for the Screener was 69.2

¹ Interviews were also conducted with parents of eight 6-year-olds who were not yet enrolled in kindergarten. Due to their small number, these 6-year-olds are excluded from these analyses.

percent. The overall response rate for the ECPP parent interview, which is the product of the Screener response rate and the ECPP unit response rate, was 59.9 percent.²

As in previous NHES reports on this topic, variations in participation rates in nonparental care arrangements by characteristics of children (age and race/ethnicity) and their families (household income and mother's education and employment status) are examined. Unique to this report is its consideration of variations in participation rates by poverty status and geographic region. In addition, it provides a more in-depth examination of differences among children of different age groups than previous reports.

The report begins with a description of overall participation in nonparental child care and education arrangements, with consideration given to how participation rates vary by selected child, family, and community characteristics. This description is followed by an examination of participation among children in three different age groups: infants (children under the age of 1), toddlers (1- and 2-year-olds), and preschoolers (3- to 5-year-olds). Then, participation rates in the three different types of care (relative, nonrelative, and center-based care) are described individually. The report concludes with a look at how the child, family, and community characteristics described above are related to the time children spend in nonparental care each week and to the amount families pay for care. The methodology and technical notes section at the end of the report provides detail about the NHES survey methodology, response rates, survey error, and the statistical tests used to analyze the NHES data.

All differences cited in this report are significant at the .05 level using Student's *t* statistic. Trend tests, or bivariate regressions, are used to examine the general relationships between the various characteristics of child care and both household income and mother's education level. Additionally, the discussion is limited to differences of at least 5 percentage points when percentage estimates are compared. When mean estimates are compared, the discussion is limited to differences where the effect size, as calculated using Cohen's *d* statistic (Cohen 1988), is .2 or larger.

Participation in Nonparental Care and Education Arrangements

Total Participation

This section presents overall estimates of the percentage of children who have various child care and early education arrangements, as well as differences in participation related to the child, family, and community characteristics described above. There are many ways of calculating children's participation rates in child care and early education arrangements. This report uses a prevalence rate, which represents the percent of children receiving nonparental care in each type of arrangement on a weekly basis. In calculating this rate, no consideration is given to either the number of hours a child spends in one setting as compared to another or to a

² Analysis of nonresponse bias conducted for the 1999 NHES, which is similar to the 2001 NHES in terms of its target populations and contact procedures, showed no evidence of bias in estimates produced from the 1999 NHES data. Also, weights assigned to each case and used in analyses are designed to reduce potential bias due to nonresponse. Additional information regarding nonresponse bias and weighting procedures in the NHES can be found in the technical notes section of this report.

parent's activities (e.g., whether or not a child's mother works) while the child is in nonparental care. Moreover, a child may be counted under several arrangements if he or she spends time in more than one setting. Thus, the rates reported here will differ from rates based on children's primary care arrangement (i.e., the arrangement where the child spends the greatest number of hours). The results discussed below show that the majority of children have weekly nonparental care arrangements, and the patterns of participation vary by all of the child, family, and community characteristics included in this report.

During the spring of 2001, 60 percent of children under the age of 6 who had yet to enter kindergarten were receiving some type of care or education, or both, on a weekly basis from persons other than their parents (table 2). This translates to about 12.2 million infants, toddlers, and preschool children who had at least one weekly nonparental care arrangement.

Patterns of participation by race/ethnicity are consistent with the findings from previous studies (West, Germino Hausken, and Collins 1993; West, Wright, and Germino Hausken 1995) showing that Hispanic children³ are less likely to receive nonparental care than either White or Black children (table 2).⁴ About 48 percent of Hispanic children, compared with 60 percent of White children and 73 percent of Black children, receive care on a weekly basis from persons other than their parents. White children also are less likely than Black children to receive such care.

There is a relationship between income and participation, such that children living in households with incomes over \$50,000 are more likely to receive nonparental care than children in homes with lower incomes (65-72 percent compared to 53-57 percent). With a participation rate of 72 percent, children in homes with incomes greater than \$75,000 are most likely to receive this care.

Previous studies using NHES data have found a similar relationship between income and participation but did not consider how living in poverty may be related to receipt of nonparental care (e.g., West, Germino Hausken, and Collins 1993; West, Wright, and Germino Hausken 1995). Examination of participation rates by poverty status increases understanding of the use of nonparental care by the families of those children who are most economically disadvantaged. The federal government uses a set of poverty thresholds that indicate the annual incomes households must receive to meet their needs. This official measure of poverty is updated annually for inflation using the Consumer Price Index and takes both household size and composition into account. Households with incomes below the poverty threshold corresponding to their size and composition are considered poor. For example, in 2001 a family of four with two dependent children under age 18 earning less than \$17,960 was considered poor (Proctor and Dalaker 2002). The 2001 NHES data show that children living below the poverty threshold are less likely to have nonparental care arrangements than children living at or above the poverty threshold (53 percent vs. 62 percent).

³ Hispanic children may be of any racial background. The terms "White" and "Black" are used to describe "White, non-Hispanic" and "Black, non-Hispanic" children.

⁴ Although estimates for children of other, non-Hispanic racial/ethnic backgrounds are included in the tables, comparisons between these children and White, Black, and Hispanic children are not discussed. This is a diverse group, and child care characteristics are likely to vary among the children of different races/ethnicities within it.

Studies consistently show that children are more likely to have nonparental care and education arrangements when their mothers have higher levels of education and when they work (e.g., Brimhall, Reaney, and West 1999; Singer et al. 1998; Smith 2002). These relationships are also found in analyses of the 2001 NHES data. Children whose mothers did not complete high school or earn a GED are least likely to receive nonparental care (43 percent), while children whose mothers have a graduate or professional degree are most likely (74 percent). Eighty-five percent of children whose mothers work full time (35 hours or more per week) and 70 percent of children whose mothers work part time (less than 35 hours per week) receive care on a weekly basis from a nonparent caregiver. This contrasts with 31 percent of children whose mothers are not in the labor force.⁵

A smaller percentage of children who live in the western part of the United States (54 percent) receive nonparental care on a weekly basis than do children who live in the Northeast, South, or Midwest (63 percent, 62 percent, and 62 percent, respectively).⁶

⁵ Although children whose mothers are currently looking for work are included in the tables, comparisons between these children and children whose mothers have other employment statuses are not discussed.

⁶ These geographic regions correspond to those used by the Census Bureau. States and the District of Columbia are categorized by the Census Bureau into regions in the following manner: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

Table 2. Percent of children under 6 years old with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	20,252	60	0.6	22	0.6	16	0.5	33	0.5	40	0.6
Age ²											
Less than one	3,868	40	1.5	21	1.2	14	1.1	8	0.9	60	1.5
One year old	3,902	53	1.7	22	1.3	20	1.2	16	1.3	47	1.7
Two years old	3,931	59	1.7	23	1.4	18	1.4	25	1.4	41	1.7
Three years old	3,795	65	1.3	22	1.3	14	1.1	43	1.2	35	1.3
Four years old	3,861	79	1.1	21	1.3	13	1.0	65	1.3	21	1.1
Five years old	896	82	2.5	20	2.7	13	2.1	73	2.7	18	2.5
Race/ethnicity											
White, non-Hispanic	12,353	60	0.9	19	0.7	18	0.7	35	0.7	40	0.9
Black, non-Hispanic	2,987	73	2.4	33	2.3	12	1.2	40	1.9	27	2.4
Hispanic	3,693	48	1.6	23	1.3	11	1.0	21	0.9	52	1.6
Other	1,219	64	3.0	22	2.5	15	2.2	37	2.6	36	3.0
Household income											
\$10,000 or less	2,279	53	3.1	30	2.9	9	1.4	24	2.0	47	3.1
\$10,001 to \$20,000	2,717	55	2.1	21	1.7	12	1.3	30	1.6	45	2.1
\$20,001 to \$30,000	2,716	53	2.1	24	1.9	12	1.3	26	1.5	47	2.1
\$30,001 to \$40,000	2,322	57	2.1	25	1.8	14	1.4	29	1.8	43	2.1
\$40,001 to \$50,000	2,029	55	2.6	21	1.8	17	1.6	25	2.0	45	2.6
\$50,001 to \$75,000	4,120	65	1.5	21	1.2	20	1.2	36	1.4	35	1.5
More than \$75,000	4,069	72	1.5	15	1.0	21	1.2	48	1.4	28	1.5
Poverty status ³											
At or above poverty threshold	15,996	62	0.7	21	0.6	17	0.5	35	0.6	38	0.7
Below poverty threshold	4,255	53	2.0	26	1.9	9	1.0	27	1.2	47	2.0
Mother's level of education ⁴											
Less than high school	2,385	43	2.7	20	2.2	8	1.0	21	2.0	57	2.7
High school / GED	5,986	56	1.6	25	1.3	13	0.9	27	1.2	44	1.6
Vocational/technical or some college	5,882	63	1.3	24	1.2	15	0.9	35	1.3	37	1.3
Bachelor's degree	3,940	65	1.5	17	1.3	20	1.2	41	1.4	35	1.5
Graduate or professional degree	1,689	74	2.4	14	1.7	31	2.3	44	2.3	26	2.4

See notes at end of table.

Table 2. Percent of children under 6 years old with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001–Continued

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Mother's employment status ⁴											
35 hours or more per week	7,573	85	0.9	33	1.0	26	0.9	42	1.0	15	0.9
Less than 35 hours per week	4,064	70	1.6	30	1.5	19	1.3	35	1.4	30	1.6
Looking for work	989	41	3.6	16	2.9	8	1.7	23	2.6	59	3.6
Not in the labor force	7,257	31	1.1	6	0.6	4	0.5	24	0.9	69	1.1
Geographic region											
Northeast	3,717	63	1.8	25	1.5	16	1.3	35	1.2	37	1.8
South	6,802	62	1.3	21	1.1	13	0.8	36	1.1	38	1.3
Midwest	4,845	62	1.3	21	1.2	21	1.2	33	1.2	38	1.3
West	4,888	54	1.6	20	1.4	15	0.9	27	1.4	46	1.6

¹ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

² Age is calculated as of December 31, 2000.

³ Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

⁴ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

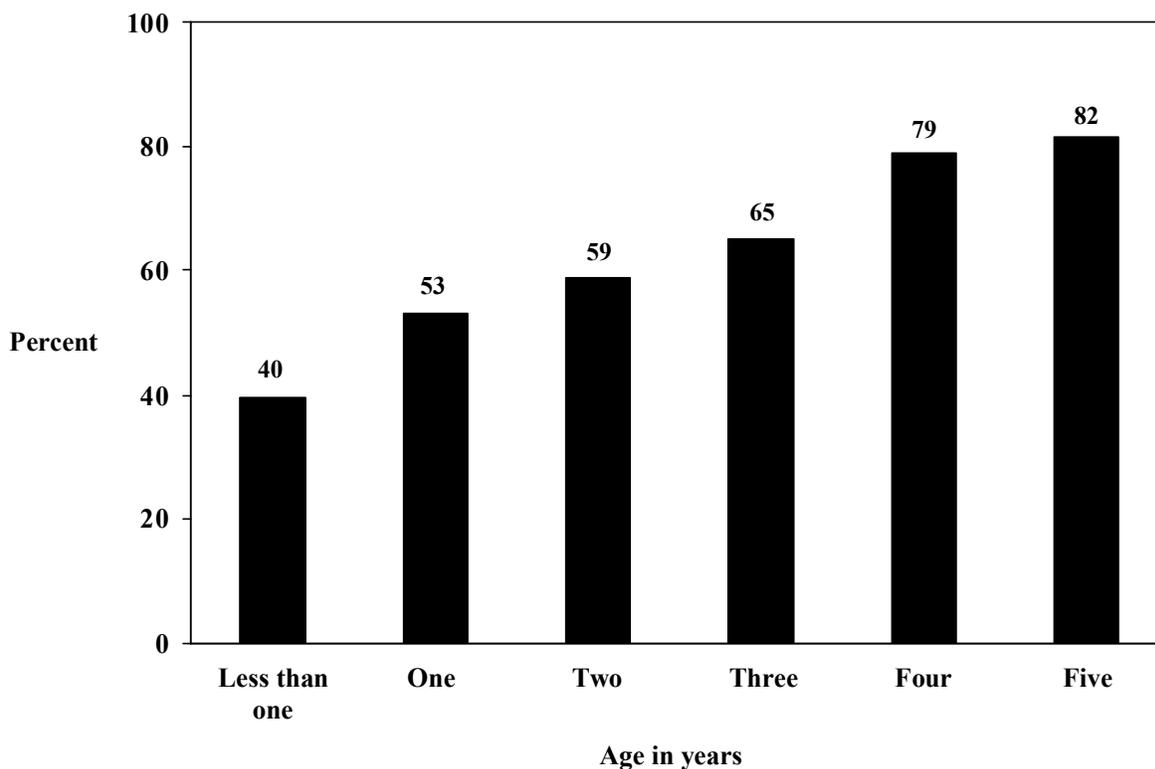
NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey. Detail may not sum to totals because of rounding. The percentages of children in specific types of care do not sum to the percentage of children with at least one weekly nonparental care arrangement, because some children had more than one type of arrangement. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Overall Participation Among Children of Different Ages

As shown in figure 1, the percentage of children receiving nonparental care consistently increases with the age of the child, up to age four. Children under the age of one are the least likely to receive nonparental care on a weekly basis (40 percent), while 4- and 5-year-olds are the most likely (79 and 82 percent, respectively). The following section describes similarities and differences in the relationships between participation and child, family, and community characteristics for infants (under age one), toddlers (ages 1 and 2), and preschoolers (ages 3-5). Findings are presented for each of these groups separately in tables 2-A (infants), 2-B (toddlers), and 2-C (preschoolers).⁷ These findings show that, within each age group, participation is related to most, if not all, of the characteristics examined in this report, but the specific patterns of relationships sometimes vary across age groups.

Figure 1. Percent of children under 6 years old and not yet in kindergarten with weekly nonparental care arrangements, by age: 2001



NOTE: Age is calculated as of December 31, 2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

⁷ Results in these tables pertain to subsamples of the total population. In these smaller samples, it is more difficult to obtain statistical significance when making comparisons between groups. For this reason, differences that appear large or similar to differences found within the total population may not be found to be statistically significant.

Consistent with the relationship between race/ethnicity and nonparental care found in the total population of children under the age of 6 and not yet enrolled in kindergarten, Black infants, toddlers, and preschoolers are all more likely than their White and Hispanic counterparts to receive nonparental care. Additionally, White toddlers and preschoolers are more likely than their Hispanic peers to receive care from someone other than their parents (56 and 74 percent for Whites, compared to 41 and 60 percent for Hispanics).

The relationship between income and participation is more consistent for toddlers and preschoolers than it is for infants. Between 47 and 52 percent of toddlers in homes with incomes of \$30,000 or less receive nonparental care, compared to between 61 and 67 percent of toddlers in homes with incomes over \$50,000. The participation rates for preschoolers living in households with incomes of \$50,000 or less are lower than the rates for preschoolers in households with incomes greater than \$50,000 (63-67 percent compared to 79-87 percent). In addition, preschoolers from homes with incomes greater than \$75,000 are the most likely to receive nonparental care (87 percent), compared to other preschoolers.

Toddlers and preschoolers living below the poverty threshold are less likely to have nonparental care arrangements (47 and 65 percent, respectively) than their peers living at or above the poverty threshold (58 and 75 percent, respectively). A relationship between poverty status and participation was not detected among infants.

Similar to the pattern found in the overall population of children included in this study, the general trend for children in each age group is for participation rates in nonparental care to increase as mother's education level increases, with those children whose mothers do not have a high school diploma or GED being less likely to receive nonparental care than children whose mothers have a bachelor's or advanced degree (28 percent compared to 43 and 49 percent, respectively, for infants; 35 percent compared to 61 and 76 percent, respectively, for toddlers; and 57 percent compared to 80 and 88 percent, respectively, for preschoolers).

Children in each age group whose mothers work are more likely to be cared for by someone other than their parents than are children whose mothers are not in the labor force. In addition, toddlers and preschoolers whose mothers work full time participate at higher rates (87 and 90 percent, respectively) than toddlers and preschoolers whose mothers work part time (63 and 80 percent, respectively).

Within each age group, children who live in the West generally have lower participation rates than children living in other areas of the country. Specifically, infants in the West are less likely than infants in the Northeast and Midwest to receive nonparental care (33 percent compared to 46 and 45 percent). Toddlers who live in the West and Northeast are less likely than toddlers who live in the South to receive such care (51 and 53 percent compared to 62 percent). Preschoolers who live in the western part of the United States are less likely than their peers in every other geographic region to receive nonparental care on a weekly basis (66 percent compared to 74-79 percent for other regions).

Table 2-A. Percent of infants with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	3,868	40	1.5	21	1.2	14	1.1	8	0.9	60	1.5
Race/ethnicity											
White, non-Hispanic	2,382	39	2.0	18	1.6	17	1.6	7	1.2	61	2.0
Black, non-Hispanic	569	50	4.7	31	3.9	11	3.1	11	2.9	50	4.7
Hispanic	694	33	3.5	24	3.0	7	1.8	4	1.2	67	3.5
Other	223	44	8.6	23	6.0	10	4.4	14	6.4	56	8.6
Household income											
\$10,000 or less	430	36	6.6	25	5.1	10	3.5	4	2.6	64	6.6
\$10,001 to \$20,000	496	33	4.3	20	3.5	8	2.3	6	2.3	67	4.3
\$20,001 to \$30,000	524	38	5.0	28	4.3	9	3.0	4	1.4	62	5.0
\$30,001 to \$40,000	451	40	5.0	22	4.2	16	4.3	9	2.4	60	5.0
\$40,001 to \$50,000	425	40	5.3	23	3.9	13	3.3	5	2.5	60	5.3
\$50,001 to \$75,000	790	40	3.8	19	2.6	17	2.7	7	1.8	60	3.8
More than \$75,000	753	46	3.8	17	2.8	20	3.1	15	2.8	54	3.8
Poverty status ²											
At or above poverty threshold	3,093	41	1.7	21	1.4	15	1.3	8	1.0	59	1.7
Below poverty threshold	775	36	4.3	24	3.4	9	2.2	5	1.9	64	4.3
Mother's level of education ³											
Less than high school	476	28	5.0	14	3.6	7	2.1	8	3.0	72	5.0
High school / GED	1,046	40	3.6	27	3.3	10	2.0	6	1.3	60	3.6
Vocational/technical or some college	1,143	39	3.0	25	2.5	10	1.7	6	1.4	61	3.0
Bachelor's degree	768	43	3.2	15	2.3	22	3.2	11	2.3	57	3.2
Graduate or professional degree	409	49	5.2	15	3.8	26	4.4	11	3.5	51	5.2

See notes at end of table.

Table 2-A. Percent of infants with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Mother's employment status ³											
35 hours or more per week	1,287	67	2.8	32	2.6	25	2.4	15	1.9	33	2.8
Less than 35 hours per week	748	63	3.5	42	4.3	23	3.3	6	1.8	37	3.5
Looking for work	219	13	4.6	8	4.0	2	1.3	3	1.9	87	4.6
Not in the labor force	1,588	10	1.9	5	1.1	2	0.8	4	1.2	90	1.9
Geographic region											
Northeast	684	46	4.2	28	3.6	14	2.8	6	1.8	54	4.2
South	1,429	37	2.7	19	2.1	11	1.6	10	1.7	63	2.7
Midwest	896	45	3.2	21	3.0	20	2.9	9	2.3	55	3.2
West	859	33	3.3	19	2.5	12	2.5	4	1.3	67	3.3

¹Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

²Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

³Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children less than one year old as of December 31, 2000. Detail may not sum to totals because of rounding. The percentages of children in specific types of care do not sum to the percentage of children with at least one weekly nonparental care arrangement, because some children had more than one type of arrangement. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Table 2-B. Percent of toddlers with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	7,833	56	1.2	23	0.9	19	0.9	21	0.9	44	1.2
Age											
One year old	3,902	53	1.7	22	1.3	20	1.2	16	1.3	47	1.7
Two years old	3,931	59	1.7	23	1.4	18	1.4	25	1.4	41	1.7
Race/ethnicity											
White, non-Hispanic	4,658	56	1.5	20	1.2	21	1.2	21	1.1	44	1.5
Black, non-Hispanic	1,167	72	4.2	31	3.3	18	2.6	30	3.3	28	4.2
Hispanic	1,493	41	2.3	22	1.9	14	1.5	9	1.3	59	2.3
Other	514	63	4.5	24	3.4	21	3.6	23	3.9	37	4.5
Household income											
\$10,000 or less	898	47	5.0	27	4.3	13	2.6	13	2.9	53	5.0
\$10,001 to \$20,000	1,066	52	3.5	21	2.5	16	2.7	19	1.9	48	3.5
\$20,001 to \$30,000	1,057	47	3.2	22	2.6	16	2.1	14	2.2	53	3.2
\$30,001 to \$40,000	894	55	3.4	28	2.6	13	2.1	18	2.5	45	3.4
\$40,001 to \$50,000	783	53	3.4	22	2.7	20	2.9	18	3.0	47	3.4
\$50,001 to \$75,000	1,607	61	2.4	24	2.2	23	2.1	22	1.9	39	2.4
More than \$75,000	1,529	67	2.4	17	1.7	27	2.1	32	2.2	33	2.4
Poverty status ²											
At or above poverty threshold	6,174	58	1.2	22	1.0	21	1.0	22	0.9	42	1.2
Below poverty threshold	1,658	47	3.5	25	2.9	13	2.0	15	2.0	53	3.5
Mother's level of education ³											
Less than high school	913	35	3.5	18	2.8	11	2.2	9	2.1	65	3.5
High school / GED	2,227	51	2.6	25	1.9	16	1.8	15	2.0	49	2.6
Vocational/technical or some college	2,333	60	2.0	24	2.0	19	1.7	22	1.7	40	2.0
Bachelor's degree	1,619	61	2.5	20	2.0	21	2.0	29	2.3	39	2.5
Graduate or professional degree	596	76	3.5	17	3.2	39	3.5	33	4.1	24	3.5

See notes at end of table.

Table 2-B. Percent of toddlers with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Mother's employment status ³											
35 hours or more per week	2,902	87	1.1	36	1.6	31	1.6	30	1.6	13	1.1
Less than 35 hours per week	1,552	63	2.7	30	2.5	23	2.2	20	1.8	37	2.7
Looking for work	374	41	5.5	17	4.5	14	3.7	14	3.2	59	5.5
Not in the labor force	2,860	22	1.8	5	0.8	6	0.9	13	1.3	78	1.8
Geographic region											
Northeast	1,412	53	2.9	24	2.1	19	2.1	17	2.1	47	2.9
South	2,605	62	1.9	22	1.8	18	1.5	26	1.7	38	1.9
Midwest	1,803	56	2.9	21	1.7	23	2.0	20	2.0	44	2.9
West	2,013	51	2.8	23	2.1	18	1.9	17	1.7	49	2.8

¹ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

² Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

³ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children ages one and two as of December 31, 2000. Detail may not sum to totals because of rounding. The percentages of children in specific types of care do not sum to the percentage of children with at least one weekly nonparental care arrangement, because some children had more than one type of arrangement. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Table 2-C. Percent of preschoolers with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	8,551	73	0.7	21	0.9	13	0.7	56	0.6	27	0.7
Age											
Three years old	3,795	65	1.3	22	1.3	14	1.1	43	1.2	35	1.3
Four years old	3,861	79	1.1	21	1.3	13	1.0	65	1.3	21	1.1
Five years old	896	82	2.5	20	2.7	13	2.1	73	2.7	18	2.5
Race/ethnicity											
White, non-Hispanic	5,313	74	1.0	18	0.9	16	1.0	59	0.9	26	1.0
Black, non-Hispanic	1,251	84	2.2	35	3.4	8	1.6	62	2.7	16	2.2
Hispanic	1,506	60	2.0	22	1.9	11	1.4	40	1.9	40	2.0
Other	482	75	3.9	20	3.4	11	2.7	62	4.1	25	3.9
Household income											
\$10,000 or less	951	67	3.8	35	4.6	6	1.8	44	3.4	33	3.8
\$10,001 to \$20,000	1,156	67	2.4	22	2.4	10	1.5	50	2.9	33	2.4
\$20,001 to \$30,000	1,134	66	3.0	22	2.5	10	1.6	49	2.5	34	3.0
\$30,001 to \$40,000	978	67	3.0	23	2.4	12	2.2	48	3.3	33	3.0
\$40,001 to \$50,000	822	63	3.6	20	2.5	15	1.9	43	3.3	37	3.6
\$50,001 to \$75,000	1,724	79	1.7	20	1.5	18	1.8	62	2.2	21	1.7
More than \$75,000	1,788	87	1.5	14	1.4	17	1.5	75	1.8	13	1.5
Poverty status ²											
At or above poverty threshold	6,729	75	0.8	20	0.9	15	0.8	59	0.7	25	0.8
Below poverty threshold	1,822	65	2.4	28	2.6	7	1.2	46	2.1	35	2.4
Mother's level of education ³											
Less than high school	996	57	3.6	24	3.1	5	1.1	38	3.3	43	3.6
High school / GED	2,712	68	1.7	24	1.5	11	1.3	46	1.5	32	1.7
Vocational/technical or some college	2,406	77	1.5	23	1.6	13	1.2	62	1.8	23	1.5
Bachelor's degree	1,553	80	1.9	15	1.6	17	1.7	68	2.2	20	1.9
Graduate or professional degree	685	88	2.5	10	1.7	26	3.1	75	3.0	12	2.5

See notes at end of table.

Table 2-C. Percent of preschoolers with weekly nonparental care arrangements, by type of arrangement and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	At least one weekly nonparental care arrangement		Type of weekly nonparental care arrangement						No weekly nonparental care arrangement	
				Relative		Nonrelative		Center ¹			
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Mother's employment status ³											
35 hours or more per week	3,384	90	0.9	30	1.5	22	1.3	63	1.5	10	0.9
Less than 35 hours per week	1,764	80	1.7	26	2.0	15	1.5	61	1.9	20	1.7
Looking for work	396	55	5.5	19	5.0	5	1.8	43	5.3	45	5.5
Not in the labor force	2,809	51	1.7	7	1.0	4	0.7	47	1.6	49	1.7
Geographic region											
Northeast	1,620	79	2.2	25	2.5	13	1.7	63	2.3	21	2.2
South	2,768	74	1.6	21	1.6	10	1.1	59	1.4	26	1.6
Midwest	2,146	75	1.7	21	1.8	20	1.7	55	1.8	25	1.7
West	2,017	66	2.1	18	1.7	12	1.3	47	2.2	34	2.1

¹ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

² Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

³ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children ages three through five, as of December 31, 2000, who had not yet entered kindergarten at the time of the survey. The percentages of children in specific types of care do not sum to the percentage of children with at least one weekly nonparental care arrangement, because some children had more than one type of arrangement. s.e. is standard error.

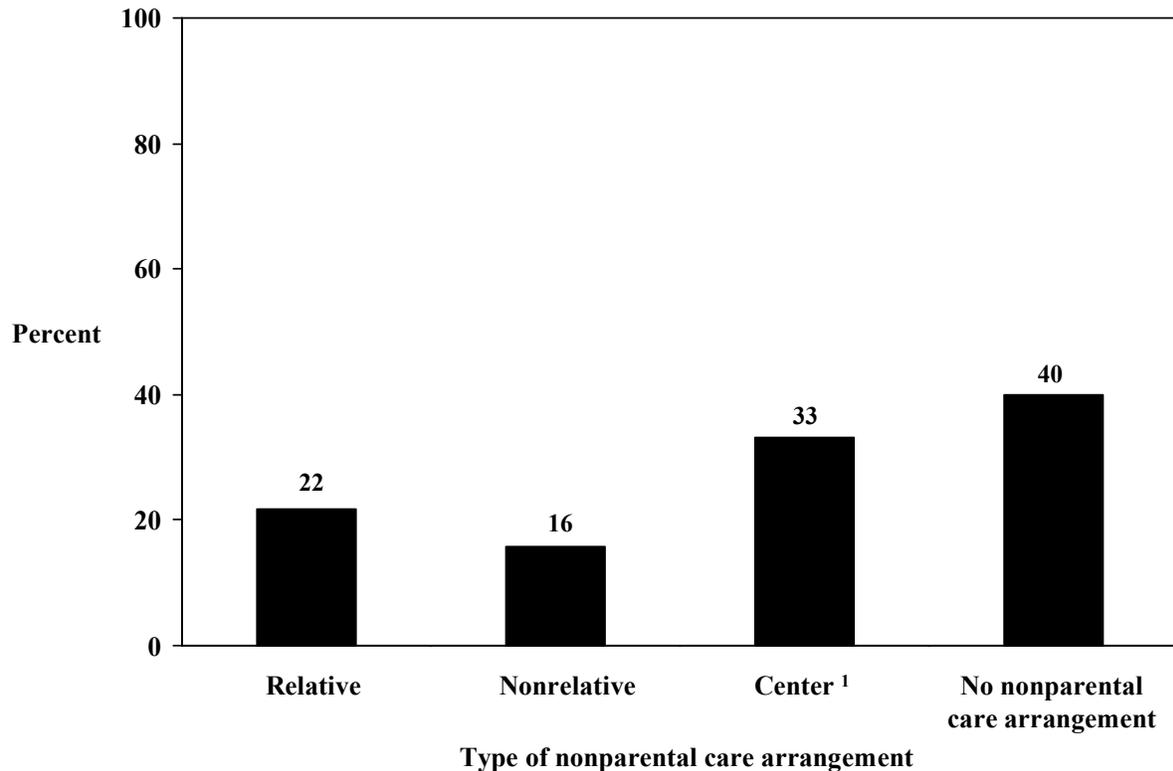
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Participation in Different Types of Care and Education Arrangements

Participation in Various Types of Arrangements Among All Children

As noted above, children can receive care from a variety of people and organizations in a variety of locations. Figure 2 shows the percentages of children under the age of 6 who receive home-based care from relatives and nonrelatives, as well as the percentage of children who have center-based arrangements. For this group of children as a whole, the participation rate is highest for center-based arrangements (33 percent). Additionally, a larger percentage of children are cared for by a relative than by a nonrelative (22 vs. 16 percent).

Figure 2. Percent of children under 6 years old and not yet in kindergarten with weekly nonparental care arrangements, by type of arrangement: 2001



¹ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

NOTE: Age is calculated as of December 31, 2000. Percentages by type of care sum to more than 100 percent, because some children participated in more than one type of nonparental arrangement on a weekly basis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Rates of participation in these three types of care differ in some cases among children with different demographic characteristics. As will be discussed in this section, such differences are sometimes evident when comparing groups of children differing in household income, mothers' education, race/ethnicity, and geographic region in which they reside.

Similar to findings from the 1995 NHES (West, Wright, and Germino Hausken 1995), these data show that the setting in which children receive nonparental care is related to child's age. Older children are more likely than younger children to be in center-based care (table 2). One-year-olds are more likely to be cared for by a nonrelative than are infants, 3-, 4-, or 5-year-olds (20 percent compared to 13 to 14 percent). Two-year-olds also are more likely than 4- or 5-year-olds to receive nonrelative care (18 vs. 13 percent).

Black children under the age of 6 are more likely than White or Hispanic children to participate in relative or center-based care (33 and 40 percent for relative and center based care for Black children, compared to 19 and 35 percent and 23 and 21 percent for White and Hispanic children, respectively). White children are more likely than Black or Hispanic children to receive care from a nonrelative (18 percent vs. 12 and 11 percent, respectively). Hispanic children have the lowest rate of participation in center-based care (21 percent), compared to Black and White children (40 and 35 percent, respectively). Consistent with the overall pattern for all children under the age of 6 who have not yet entered kindergarten, White and Black children are more likely to receive center-based care than relative or nonrelative care. This is not true for Hispanic children. While they are less likely to have nonrelative care arrangements (11 percent), compared to relative or center-based arrangements (23 and 21 percent, respectively), there are no measurable differences in the percentage of Hispanic children who are cared for by relatives and the percentage who are cared for in centers.

Participation in nonrelative care is higher for children in households with incomes greater than \$50,000 than it is for children in households with incomes of \$30,000 or less (20-21 percent compared with 9-12 percent, respectively); similar differences are evident for center-based care arrangements (36-48 percent compared with 24-30 percent, respectively). In contrast, children in households with incomes greater than \$75,000 are less likely than children living in lower-income households to be cared for by a relative (15 percent compared to 21 to 30 percent).

The participation rates for each type of care by poverty status follow the same general patterns. Children living at or above the poverty threshold are more likely than those living below the poverty threshold to receive nonrelative (17 vs. 9 percent) or center-based care (35 vs. 27 percent), while they are less likely to receive care from relatives (21 vs. 26 percent). Additionally, consistent with the overall pattern for all children, those living at or above the poverty threshold are more likely to receive center-based care than relative or nonrelative care (35 percent vs. 21 and 17 percent, respectively). Children living below the poverty threshold are less likely to have nonrelative care arrangements, compared to relative or center-based arrangements (9 percent vs. 26 and 27 percent, respectively), but there are no measurable differences in the percentage of poor children who are cared for by relatives and the percentage who are cared for in centers.

Children's participation in nonrelative and center-based arrangements increases with mother's education. The relationship of mother's education to children's participation is less clear for relative care arrangements, but participation in relative care tends to decrease as mother's education increases. Children whose mothers have a high school diploma, GED, vocational/technical diploma or some college are more likely than children whose mothers have a bachelor's degree or higher to be cared for by relatives (24 to 25 percent compared to 14 to 17 percent). Additionally, children whose mothers did not complete high school are more likely than children whose mothers have an advanced degree to receive relative care (20 vs. 14 percent). In contrast, children whose mothers did not complete high school are less likely than children whose mothers have a high school diploma or GED to receive relative care (20 vs. 25 percent).

Children whose mothers work are more likely to receive care of any type than children whose mothers are not in the labor force. Children whose mothers work full time also are more likely to receive nonrelative or center-based care (26 and 42 percent) than those whose mothers work part time (19 and 35 percent).

Comparisons of participation rates in different types of care across regions show that children living in the Northeast are the most likely to receive care from a relative (25 percent), children living in the Midwest are the most likely to receive care from a nonrelative (21 percent), and children living in the West are the least likely to receive care in a center-based setting (27 percent).

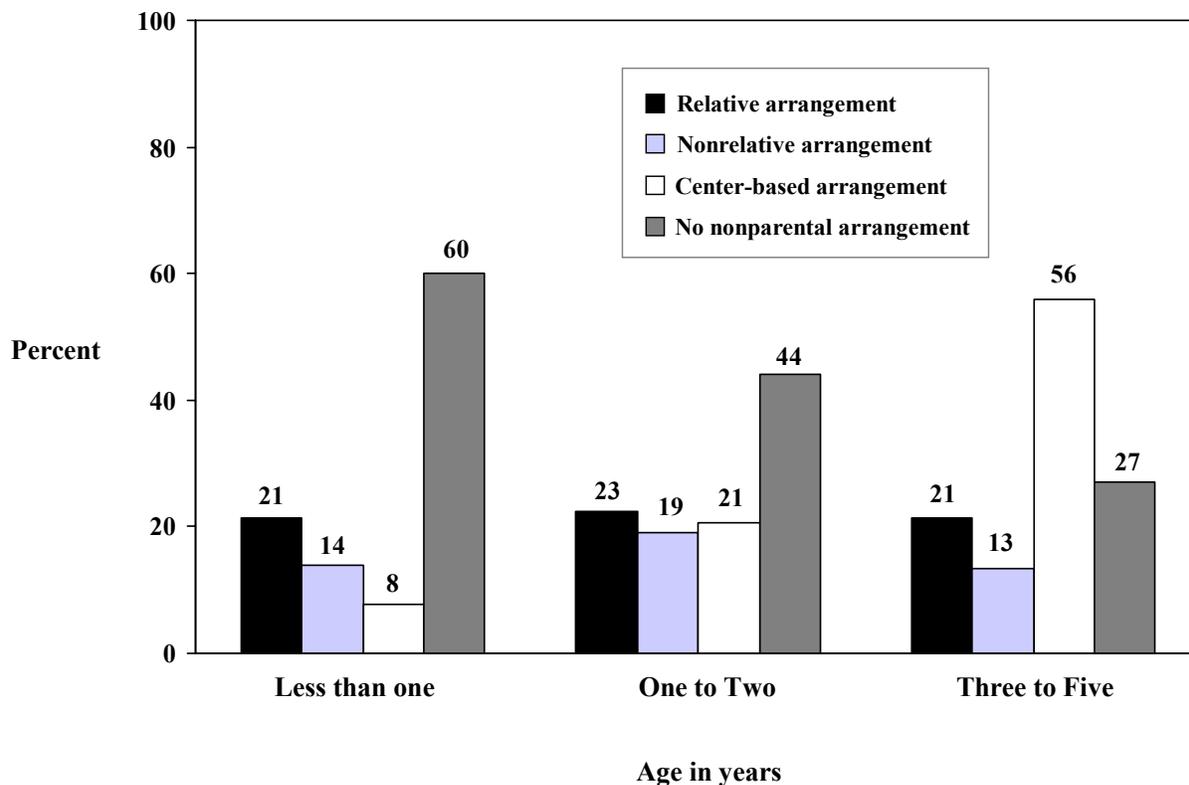
To summarize these findings, participation rates for the three types of care examined in this report vary among children with different demographic characteristics. Generally, nonrelative and center-based care are most common for children in higher-income homes, including those living at or above the poverty threshold, and for children with better-educated mothers. Nonrelative care is also most common for White children and children living in the Midwest, while center-based care is most common for Black children and least common for children who live in the Western region of the United States, compared to other children. Relative care is more common among Black children, children living below the poverty threshold, children with less-educated mothers, and children who live in the Northeastern region of the United States, compared to other children.

Participation in Various Types of Arrangements Among Children of Different Ages

Variations in the overall relationships between the examined characteristics and type of care emerge when children within particular age groups are compared to one another. Below, participation rates in different types of care among children with different characteristics are examined separately for infants, toddlers, and preschoolers.

Infants Twenty one percent of children under the age of one are cared for by a relative on a weekly basis, compared to 14 percent who are cared for by a nonrelative and 8 percent who are cared for in a center (figure 3 and table 2-A). These participation rates also indicate that nonrelative care arrangements are more common for this group of children than are center-based arrangements.

Figure 3. Percent of children under 6 years old and not yet in kindergarten with weekly nonparental care arrangements, by type of arrangement and age: 2001



NOTE: Age is calculated as of December 31, 2000. Percentages by type of care sum to more than 100 percent, because some children participated in more than one type of nonparental arrangement on a weekly basis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Among infants, there are differences within the types of care by race/ethnicity. Black infants are more likely than White infants to receive care from a relative (31 vs. 18 percent), while White infants are more likely than Hispanic infants to receive care from a nonrelative (17 vs. 7 percent). With a participation rate of 4 percent, Hispanic infants are less likely than Black infants (11 percent) to be cared for in a center.

There are no distinctive patterns in infant participation rates by household income for relative care. With the exception of infants in households with incomes between \$30,001 and \$40,000, infants in households with incomes greater than \$75,000 are more likely than other infants to receive center-based care (15 percent compared to 4-9 percent). In addition, infants in households with incomes above \$75,000 have higher rates of participation in nonrelative care than do infants in households with incomes of \$30,000 or less (20 percent compared to 8-10 percent). Looking at poverty status, infants who reside in households living at or above the poverty threshold are more likely to be cared for by a nonrelative than infants living below the poverty threshold (15 vs. 9 percent).

Participation in relative care arrangements is more common for infants whose mothers have a high school diploma or equivalent, a vocational/technical diploma or some college (25-27 percent) than it is for infants whose mothers have less than a high school education (14 percent) or a bachelor's degree or higher (15 percent). Participation in nonrelative arrangements is greater for infants whose mothers have a bachelor's degree or higher (22-26 percent) compared to infants whose mothers have lower levels of education (7-10 percent). There is no clear pattern by mother's education for infants' participation in center-based care arrangements.

Infants whose mothers are not in the labor force are less likely to have relative or nonrelative care arrangements than infants who have mothers in the labor force. Infants whose mothers work full time are the most likely to be cared for in a center (15 percent) compared to infants whose mothers are not in the labor force or are working part time (4 and 6 percent, respectively).

Infant participation rates for care in different settings vary by geographic region. Infants who live in the Northeast are more likely to be cared for by relatives than infants living in the South or the West (28 percent vs. 19 percent each). Infants in the Midwest are more likely than infants living in the South and West to have nonrelative care arrangements (20 percent vs. 11 and 12 percent). Also, infants living in the South and Midwest are more likely than infants living in the West to participate in center-based care arrangements (10 and 9 percent compared to 4 percent).

Toddlers On average, between 19 and 23 percent of toddlers participate in each type of care (figure 3 and table 2-B). However, as table 2-B indicates, 1-year-olds are less likely to be cared for in a center than by a relative (16 vs. 22 percent). Two-year-olds are less likely to receive care from a nonrelative than in a center (18 vs. 25 percent).

When looking at participation rates by race/ethnicity (table 2-B), Black toddlers are more likely than White or Hispanic toddlers to be cared for by a relative (31 percent vs. 20 and 22 percent, respectively) or to receive center-based care (30 percent vs. 21 and 9 percent, respectively). Hispanic toddlers are less likely than White toddlers to be cared for by a nonrelative (14 vs. 21 percent) or in a center-based setting (9 vs. 21 percent).

Care from nonrelatives or in center-based settings is more common for toddlers in households with incomes over \$75,000 compared to toddlers in homes with incomes of \$40,000 or less. In addition, toddlers in households with incomes over \$75,000 are more likely to receive center-based care than toddlers in households with lower incomes (32 percent compared to 13-22 percent). Similarly, toddlers living at or above the poverty threshold are more likely than toddlers living below the poverty threshold to have nonrelative or center-based care arrangements (21 and 22 percent compared to 13 and 15 percent).

As mother's education increases, toddlers' participation in nonrelative and center-based care arrangements increases. Toddlers whose mothers work full time are more likely to be cared for by a relative, by a nonrelative, or in a center on a weekly basis than toddlers with mothers of any other employment status. Toddlers whose mothers work part time also are more likely to receive care in each of these three settings than toddlers whose mothers are not in the labor force.

Some differences were found in toddler participation rates across geographic regions for center-based care. Toddlers living in the South are more likely to be cared for in a center than toddlers living in any other area of the country (26 percent compared to 17-20 percent).

Preschoolers Three- to five-year-olds are more likely to receive care in center-based arrangements than in either relative or nonrelative arrangements (56 percent vs. 21 and 13 percent, respectively) (figure 3 and table 2-C). They are also more likely to have relative care arrangements than nonrelative care arrangements.

For relative care, the participation rate is highest for Black preschoolers (35 percent) and lowest for White preschoolers (18 percent). In contrast, White preschoolers are more likely than Black or Hispanic preschoolers to be cared for by a nonrelative (16 percent vs. 8 and 11 percent). For center-based care arrangements, the participation rate for Hispanic preschoolers (40 percent) is lower than the participation rates for White and Black preschoolers (59 and 62 percent, respectively).

Preschoolers in households with incomes of \$10,000 or less are more likely than other preschoolers to receive care from a relative (35 percent compared to 14-23 percent), while preschoolers in households with incomes over \$75,000 are more likely than other preschoolers to receive care in centers (75 percent compared to 43-62 percent). Preschoolers in households with incomes over \$75,000 are less likely to be cared for by a relative than are preschoolers in households with incomes of \$30,000 or less (14 percent compared with 22-35 percent), but are more likely to be cared for by a nonrelative (17 percent compared with 6-10 percent).

With respect to poverty status, preschoolers living at or above the poverty threshold are less likely than preschoolers living below the poverty threshold to be cared for by a relative (20 vs. 28 percent). Conversely, they are more likely than preschoolers living below the poverty threshold to be cared for by a nonrelative or in a center-based setting (15 vs. 7 percent for nonrelative care and 59 vs. 46 percent for center-based care).

Preschoolers whose mothers have a bachelor's or advanced degree are less likely to be cared for by relatives (15 and 10 percent, respectively) than preschoolers whose mothers have lower levels of education (between 23 and 24 percent). In contrast, as mother's level of education increases, preschoolers are more likely to be cared for by a nonrelative or in a center.

While 51 percent of preschoolers whose mothers are not in the labor force have a weekly nonparental care arrangement, they are less likely than preschoolers whose mothers work to participate in each of the three types of arrangements (7 percent compared with 26-30 percent for relative care, 4 percent compared with 15-22 percent for nonrelative care, and 47 percent compared with 61-63 percent for center-based care). Preschoolers whose mothers work part time are less likely to be cared for by a nonrelative (15 percent) than preschoolers whose mothers work full time (22 percent).

Preschoolers living in the Midwest are more likely to be cared for by a nonrelative (20 percent) than children living in other geographic regions (10-13 percent). Care from relatives is more common for preschoolers in the Northeast (25 percent) than it is for their counterparts in the West (18 percent). With a participation rate of 47 percent, preschoolers living in the West

are less likely to receive center-based care than preschoolers living in the Northeast, South, or Midwest (63, 59, and 55 percent, respectively). Additionally, the participation rate for center-based care for preschoolers living in the Northeast is higher than the rate for preschoolers living in the Midwest.

Location of Nonparental Care Arrangements

As previously mentioned, children may receive nonparental care and education in either home-based or center-based settings. In the discussion that follows, this report first looks at how participation rates differ among children receiving care in different types of home-based settings, i.e., in relative and nonrelative care arrangements. Specifically, focus is placed on the receipt of care in a child's own home versus receipt of care in a home other than the child's. The second part of this section examines participation in center-based arrangements with a focus on the different locations in which center-based care can be provided. Some of the more common locations are places of worship (e.g., churches and synagogues), schools, and centers located in their own building.⁸

Home-based Arrangements

Table 3, which pertains only to children under 6 years old receiving relative or nonrelative care in a home-based setting, presents estimates of the percent of these children that are cared for in their own home or in someone else's home. Consistent with previous research (West et al. 1992; West, Wright, and Germino Hausken 1995), these NHES data show that nonparental care is more likely to be provided in a home other than the child's regardless of whether the care is provided by a relative or a nonrelative (figure 4). Approximately 81 percent of children under the age of 6 who receive nonrelative care receive it in a home other than their own, compared with 21 percent who receive it in their own home. For children with relative care arrangements, the comparable percentages are 66 percent (other home) and 44 percent (own home).

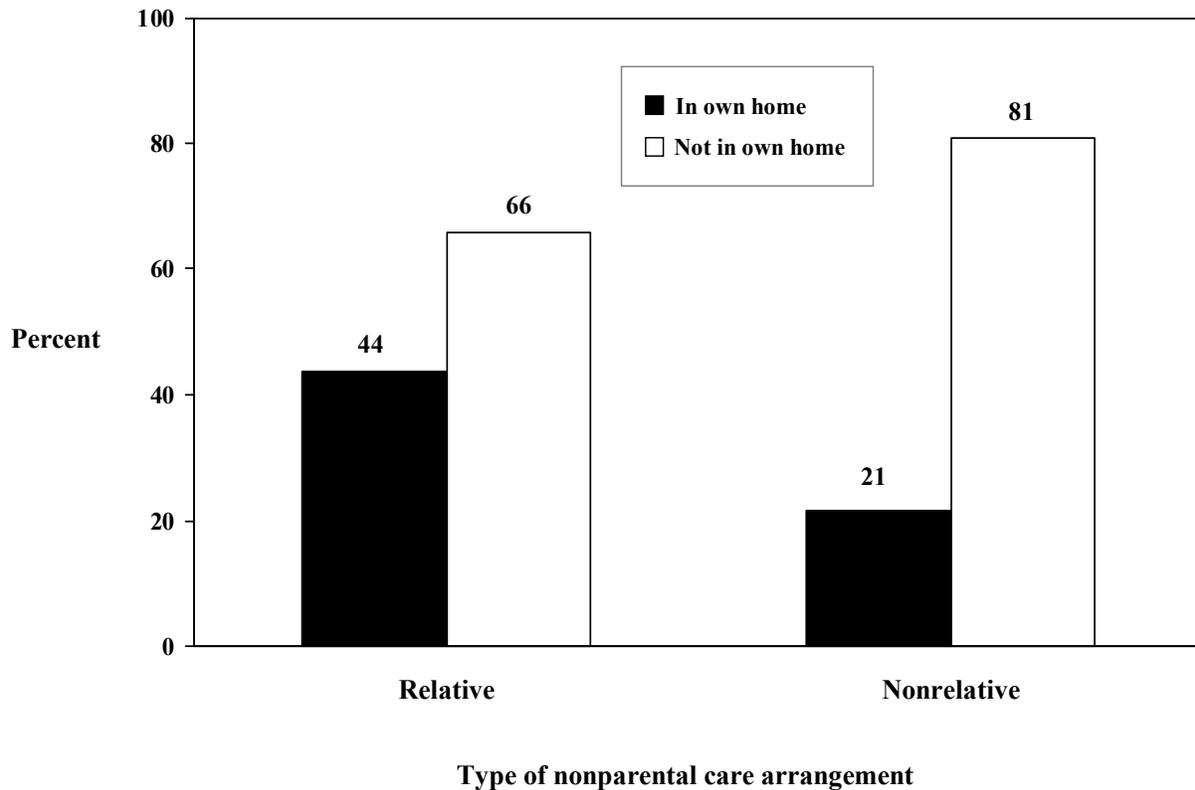
There is one group of children for whom this general pattern does not hold. Children whose mothers are not in the labor force and have nonrelative care arrangements are more likely to receive that care in their own home than in the home of someone else (67 vs. 35 percent).

Some groups of children are more likely than others to receive care in their own home. Analyses of differences by race/ethnicity show that among children who receive care from relatives, Hispanic children, compared to White children, are more likely to receive that care in their own home (50 vs. 40 percent) and less likely to receive it in someone else's home (57 vs. 71 percent). Among children who receive care from nonrelatives, White and Hispanic children are more likely than Black children to receive such care in their own home (23 and 21 percent vs.

⁸ The survey question specifically asked parents whether the center their children attended was located in "its own building." This category excludes private homes, places of worship, schools, colleges, universities, community centers, libraries, etc. Location refers strictly to the place where the care was provided and not the type of care provider or sponsorship. For example, if a religious group provided care in a building that was not a place of worship, the care would be considered as having been provided in a center located its own building, rather than in a place of worship. Alternatively, a care arrangement located in a place of worship was not necessarily provided by the religious group to whom the place of worship belonged.

7 percent) and are less likely to receive it in a home other than their own (80 and 82 percent vs. 94 percent).

Figure 4. Percent of children under 6 years old and not yet in kindergarten with weekly relative or nonrelative care arrangements, by location of arrangement: 2001



NOTE: Age is calculated as of December 31, 2000. Percentages by type of care sum to more than 100 percent because some children are cared for by caregivers in both locations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

There are no clear patterns in home-based participation rates by location of care as income increases or decreases, with one exception: children with nonrelative care arrangements who live in households with incomes greater than \$75,000 are more likely to be cared for by a nonrelative in their own home (40 percent) and less likely to be cared for by a nonrelative in someone else's home (62 percent) than are children from every other income category except those in households with incomes of \$10,000 or less (6-26 percent for nonrelative care in own home; 74-96 percent for nonrelative care in other person's home). Fifty-five percent of children living below the poverty threshold who are cared for by relatives receive that care in their own home, compared to 40 percent of children living at or above the poverty threshold who are cared for by relatives.

Children with relative care arrangements whose mothers have an advanced degree are more likely than children whose mothers have a high school diploma, GED, or vocational/technical diploma to receive relative care in their own home (57 percent compared to 37-43 percent). Nonrelative care arrangements in a child's own home are less common for children whose mothers have a high school diploma, GED, vocational/technical diploma or some college (about 13 percent of such children have such arrangements) than they are for children whose mothers have levels of education that are either higher (i.e., a bachelor's or advanced degree) or lower (i.e., less than high school).

While the majority of children with nonrelative care arrangements whose mothers work part time receive that care in someone else's home (77 percent), they are less likely to do so than children with nonrelative care arrangements whose mothers work full time (90 percent). In contrast, they are more likely than children whose mothers work full-time to receive that nonrelative care in their own home (27 vs. 12 percent). Children with nonrelative care arrangements whose mothers are not in the labor force are more likely to have that care provided in their own home (67 percent) than are children with nonrelative care arrangements whose mothers work part time or full time. Also, children with relative care arrangements whose mothers are not in the labor force are more likely to receive care from a relative in their own home (57 percent) than are children with relative care arrangements whose mothers work full time (40 percent).

Children with relative care arrangements living in the Midwest are the least likely to receive such care in their own home (33 percent) and the most likely to be cared for in someone else's home (75 percent), compared to children with relative care arrangements living in other regions (between 44 and 52 percent for care in own home; between 60 and 65 percent for care in someone else's home). Among children receiving nonrelative care, children living in the Northeast are the most likely to have that care provided in their own home (39 percent compared to 12-25 percent in other regions) and the least likely to have that care provided in someone else's home (64 percent compared to 81-90 percent in other regions). Additionally, children with nonrelative care arrangements living in the West are more likely to be cared for in their own home than are children with nonrelative care arrangements living in the Midwest (25 vs. 12 percent).

Table 3. Percent of children under 6 years old with weekly relative or nonrelative care arrangements, by location and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	Relative arrangement				Nonrelative arrangement			
		Own home		Not in own home		Own home		Not in own home	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	7,155	44	1.7	66	1.5	21	1.6	81	1.5
Age ¹									
Less than one	1,260	43	3.8	66	3.5	19	3.6	83	3.3
One year old	1,547	43	3.2	70	2.9	22	2.9	79	2.9
Two years old	1,518	39	3.5	68	3.6	22	3.0	80	2.7
Three years old	1,297	46	3.5	63	3.6	20	3.3	83	3.2
Four years old	1,262	48	3.7	63	3.3	24	3.2	81	3.2
Five years old	272	38	7.8	69	7.7	22	7.7	81	7.5
Race/ethnicity									
White, non-Hispanic	4,178	40	2.2	71	1.9	23	1.9	80	1.8
Black, non-Hispanic	1,327	43	3.8	65	3.7	7	2.5	94	2.3
Hispanic	1,207	50	2.8	57	3.1	21	3.3	82	3.2
Other	444	55	5.5	56	5.7	38	8.3	62	8.3
Household income									
\$10,000 or less	853	42	6.5	64	5.8	26	7.6	74	7.6
\$10,001 to \$20,000	880	49	4.3	59	3.9	21	4.8	82	4.7
\$20,001 to \$30,000	909	50	3.9	61	4.3	6	2.2	96	1.8
\$30,001 to \$40,000	829	33	3.8	75	3.5	11	3.8	91	3.2
\$40,001 to \$50,000	722	34	4.6	75	4.1	12	3.5	88	3.5
\$50,001 to \$75,000	1,588	45	3.1	68	3.1	14	2.7	90	2.4
More than \$75,000	1,374	48	3.8	63	3.6	40	3.6	62	3.5
Poverty status ²									
At or above poverty threshold	5,711	40	1.8	70	1.6	21	1.6	81	1.5
Below poverty threshold	1,445	55	4.5	54	4.0	22	5.2	79	5.2
Mother's level of education ³									
Less than high school	643	55	5.7	51	5.2	30	7.6	72	7.8
High school / GED	2,108	43	3.1	67	2.8	13	2.5	89	2.3
Vocational/technical or some college	2,212	37	2.7	73	2.7	13	2.3	89	2.1
Bachelor's degree	1,308	46	3.6	68	3.7	24	3.4	79	3.2
Graduate or professional degree	684	57	6.1	48	5.9	42	4.6	61	4.5

See notes at end of table.

Table 3. Percent of children under 6 years old with weekly relative or nonrelative care arrangements, by location and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	Relative arrangement				Nonrelative arrangement			
		Own home		Not in own home		Own home		Not in own home	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Mother's employment status ³									
35 hours or more per week	4,185	40	2.0	69	2.0	12	1.6	90	1.4
Less than 35 hours per week	1,862	46	3.6	68	3.0	27	3.2	77	3.0
Looking for work	227	48	9.7	56	9.6	‡	‡	‡	‡
Not in the labor force	681	57	5.6	47	5.9	67	6.0	35	6.1
Geographic region									
Northeast	1,417	52	3.9	60	4.1	39	4.8	64	4.6
South	2,258	44	2.7	65	2.7	18	2.4	82	2.5
Midwest	1,880	33	3.1	75	2.9	12	2.3	90	2.3
West	1,601	47	2.9	64	3.3	25	3.4	81	2.8

‡ Reporting standards not met.

¹ Age is calculated as of December 31, 2000.

² Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

³ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

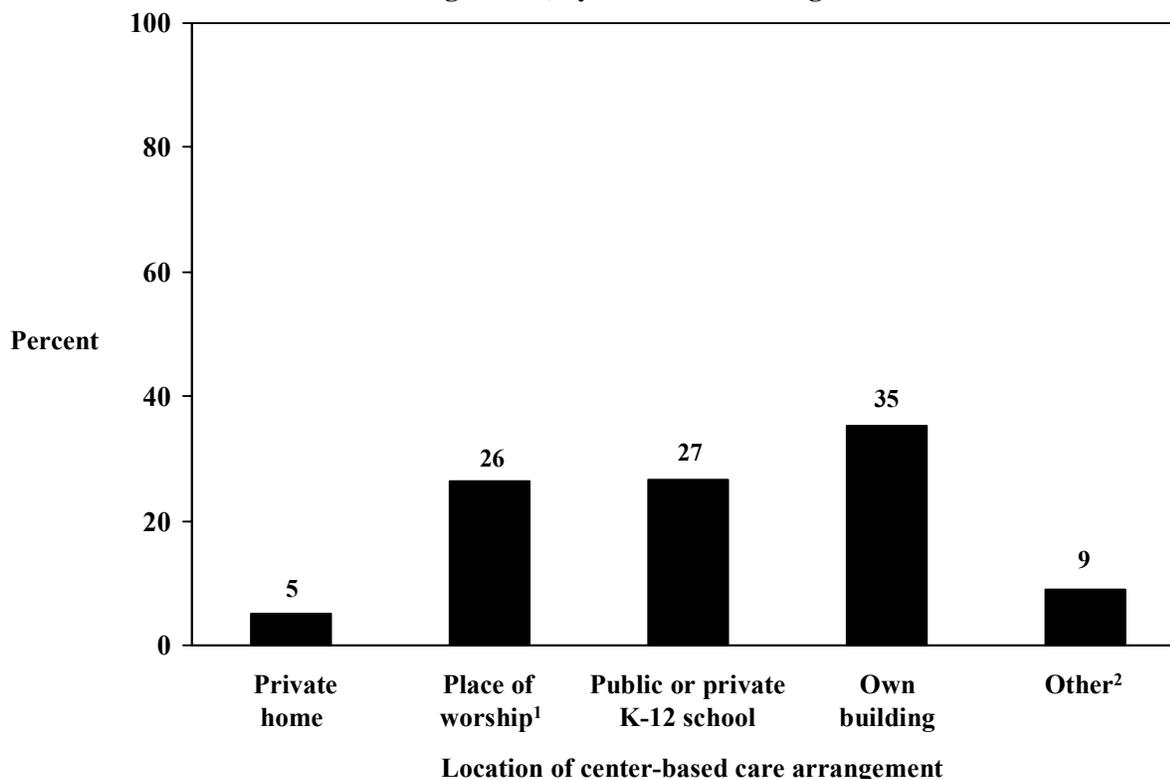
NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey and who had at least one relative or nonrelative care arrangement. Children with only center-based care arrangements or who had no nonparental care arrangements are excluded. Detail may not sum to totals because of rounding. Percentages by type of care sum to more than 100 percent, because some children are cared for by caregivers in both locations. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Center-based Arrangements

As noted above, and as shown in table 4 and figure 5, which pertain only to children receiving center-based care on a weekly basis, overall, children in center-based care are more likely to receive this care in a center located in its own building than in any other location.⁹

Figure 5. Percent of children under 6 years old and not yet in kindergarten with weekly center-based care arrangements, by location of arrangement: 2001



¹ Includes churches, synagogues, and other places of worship.

² Includes locations such as a university, a community center, and a library.

NOTE: Age is calculated as of December 31, 2000. Percentages by location of care sum to more than 100 percent because some children received center-based care in more than one location. Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

⁹ Table 4 and figure 5 report statistics for care arrangements classified as center-based care in a private home. It is likely that the questionnaire structure results in some arrangements being classified this way, rather than as nonrelative care, which the NHES defines as care by a nonrelative in a private home. Respondents specifically are told not to report participation in preschool programs as a nonrelative care arrangement, regardless of whether that preschool is operated in a private residence or a center-based setting. Therefore, arrangements classified as center-based in private homes most likely are preschools located in homes that may also serve as residences or in buildings that have both residential and commercial space. It may also be that some parents misidentified family day care as center-based care. A third possibility is that parents who use care arrangements in private homes for enrichment purposes, as opposed to a strict need for child care, may not consider this to be child care, per se, and therefore would be more likely to classify it as preschool (a center-based arrangement as defined in the NHES) than as care provided by a nonrelative in a private home.

When consideration is given to the location of center-based care for children of different ages, some differences from this overall pattern emerge. While children two-years-old and younger are more likely to receive center-based care in a center located in its own building than in any other location, the same is not true for older children. Among 3- and 5-year-olds, no differences were detected in the participation rates for center-based care provided in its own building and care provided in churches, synagogues, or other places of worship. The most common locations for center-based care among 4-year-olds are centers in their own buildings and schools. Five-year-olds who are not yet enrolled in kindergarten are more likely to receive center-based care in public or private schools than in any other location.

Among children in center-based care, comparisons of children of different ages to one another show that 1- and 2-year-olds are less likely than older children to receive center-based care in public or private schools. One-year-olds are more likely than older children to have care provided in a center located in its own building (55 percent compared to 23-45 percent). In contrast, 5-year-olds are less likely than younger children to attend centers in their own buildings and more likely to attend programs in public or private schools. Three-year-olds are more likely than children of all other ages, except 2-year-olds, to receive center-based care in churches, synagogues, or other places of worship (31 percent compared to 19-25 percent).

Black children who receive center-based care are more likely to attend centers in their own building than in any other location (43 percent compared to 7-30 percent for other locations). Among Hispanics, the most common location in which they receive center-based care is a public or private school (70 percent compared to 3-28 percent for other locations). Comparing children of different racial and ethnic backgrounds in center-based care to one another, the data show that White children are more likely than Black or Hispanic children to receive center-based care in a church, synagogue, or other place of worship (32 percent vs. 16 percent each). They are more likely than Hispanic children and less likely than Black children to receive this care in a center located in its own building (34 percent compared to 28 percent for Hispanics and 43 percent for Blacks). Also, with a participation rate of 23 percent, White children in center-based care are less likely than Black or Hispanic children in center-based care (30 and 70 percent, respectively) to receive that care in a public or private school. Compared to Hispanic children in center-based care, Black children who receive center-based care are more likely to be cared for in a center in its own building and are less likely to attend programs in public or private schools.

As household income increases, children's participation rate in center-based care located in a church, synagogue, or other place of worship also increases. The opposite is true for care that takes place in a public or private elementary or secondary school—i.e., children's participation rate decreases as household income increases. The setting in which children living at or above the poverty threshold are most likely to receive center-based care is a center's own building (35 percent compared to 5-30 percent for other locations). Compared to children with center-based arrangements who live below the poverty threshold, children with center-based arrangements who live at or above the poverty threshold are more likely to receive center-based care in a place of worship (30 percent for children living above the poverty level vs. 9 percent for children living below the poverty level) and are less likely to receive it in a public or private school (24 percent for children living above the poverty level vs. 41 percent for children living below the poverty level).

Similar to the patterns for household income, as mother's level of education increases, children's participation rate in center-based care located in a place of worship also increases, with the reverse being true for care that takes place in a public or private school.

Children with center-based arrangements whose mothers work full time are the most likely to receive center-based care in its own building (44 percent), compared to children with center-based arrangements whose mothers work part time or are not in the labor force (30 and 25 percent, respectively). In contrast, children with center-based arrangements whose mothers work full time are less likely than children with center-based arrangements whose mothers work part time or are not in the labor force to receive center-based care in a church, synagogue, or other place of worship (22 vs. 30 and 33 percent, respectively). Additionally, children with center-based arrangements whose mothers are not in the labor force are more likely than children with center-based arrangements whose mothers work full time to receive center-based care in a public or private school (31 vs. 22 percent).

There are few differences detected with respect to geographic region. Eighteen percent of children with center-based arrangements who live in the West receive center-based care in churches, synagogues, or other place of worship. In comparison, larger percentages (between 26 and 30 percent) of children with center-based arrangements who live in other regions of the country go to centers located in places of worship.

In sum, the findings presented in this section show that, with few exceptions, among children with home-based arrangements, care is more commonly provided in someone else's home than in a child's own home. The groups of children who are most likely to be cared for in someone else's home, compared to other children, sometimes differ depending on whether the care is provided by a relative or nonrelative. Rates of participation in care provided in one's own home versus the home of someone else vary by race/ethnicity, poverty status, mother's education and employment status, and geographic region.

Overall, children in center-based care are more likely to receive this care in a center located in its own building than in any other location. There are some exceptions to this overall pattern when participation is examined by age and race/ethnicity. Also, comparing the participation of children with different characteristics to one another, there are some clear patterns for care provided in a church, synagogue, or other place of worship, as well as for care provided in a public or private school.

Table 4. Percent of children under 6 years old with weekly center-based care arrangements, by location and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	Location of center-based arrangement ¹									
		Private home		Place of worship ²		Public or private K-12 school		Own building		Other ³	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	6,695	5	0.6	26	1.1	27	1.1	35	1.3	9	0.8
Age ⁴											
Less than one	298	8	2.9	19	5.2	16	5.0	45	5.8	13	4.2
One year old	608	9	2.6	21	3.0	8	2.8	55	4.3	8	3.0
Two years old	1,000	8	1.6	27	2.9	13	2.3	41	3.1	11	2.2
Three years old	1,620	5	1.1	31	2.3	21	1.9	35	2.3	9	1.5
Four years old	2,515	3	0.6	25	1.6	35	1.7	31	1.7	8	0.9
Five years old	654	2	0.9	23	3.1	49	3.5	23	3.0	7	1.7
Race/ethnicity											
White, non-Hispanic	4,302	5	0.7	32	1.5	23	1.3	34	1.5	8	0.9
Black, non-Hispanic	1,185	7	1.5	16	2.0	30	2.7	43	3.3	8	1.5
Hispanic	762	3	0.9	16	2.2	70	2.7	28	2.7	16	1.8
Other	446	3	1.6	16	3.3	33	4.5	39	4.7	11	3.8
Household income											
\$10,000 or less	550	4	2.0	8	2.5	41	5.2	39	5.4	10	2.8
\$10,001 to \$20,000	816	5	1.1	11	2.1	36	2.9	39	3.0	13	2.4
\$20,001 to \$30,000	716	7	2.1	23	2.6	34	3.4	33	3.2	6	1.9
\$30,001 to \$40,000	673	4	1.6	23	2.7	28	3.4	40	4.0	7	1.7
\$40,001 to \$50,000	517	10	3.1	32	4.2	23	3.1	32	4.1	6	2.1
\$50,001 to \$75,000	1,479	4	0.8	34	2.3	21	2.1	35	2.5	9	1.7
More than \$75,000	1,944	5	0.8	33	2.2	20	2.0	34	2.1	9	1.2
Poverty status ⁵											
At or above poverty threshold	5,562	5	0.6	30	1.3	24	1.1	35	1.3	8	0.8
Below poverty threshold	1,132	5	1.4	9	1.7	41	2.9	36	3.2	12	2.2
Mother's level of education ⁶											
Less than high school	494	3	1.2	9	2.3	48	3.9	31	4.4	11	3.1
High school / GED	1,642	7	1.3	21	1.9	30	2.4	37	2.3	8	1.4
Vocational/technical or some college	2,076	6	1.0	26	1.9	25	1.7	36	2.3	9	1.3
Bachelor's degree	1,604	4	1.0	33	2.5	20	2.0	35	2.3	9	1.6
Graduate or professional degree	752	4	1.4	35	3.4	19	2.9	34	3.3	11	2.2

See notes at end of table.

Table 4. Percent of children under 6 years old with weekly center-based care arrangements, by location and child and family characteristics: 2001–Continued

Characteristic	Number of children (in thousands)	Location of center-based arrangement ¹									
		Private home		Place of worship ²		Public or private K-12 school		Own building		Other ³	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Mother's employment status ⁶											
35 hours or more per week	3,175	6	0.8	22	1.3	22	1.5	44	1.8	9	1.1
Less than 35 hours per week	1,436	7	1.3	30	2.4	27	2.1	30	2.5	8	1.2
Looking for work	231	4	2.0	14	4.4	39	7.1	31	5.8	12	5.6
Not in the labor force	1,726	2	0.6	33	2.4	31	2.2	25	2.2	10	1.5
Geographic region											
Northeast	1,302	6	1.3	26	2.4	28	2.4	34	2.5	10	1.5
South	2,461	3	0.6	30	1.6	24	1.6	38	1.9	7	1.2
Midwest	1,611	6	1.4	27	2.4	28	2.4	33	2.6	9	1.3
West	1,321	8	1.7	18	1.8	28	2.5	36	2.5	11	1.9

¹ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

² This includes churches, synagogues, and other places of worship.

³ The Other category includes locations such as a university, a community center, and a library.

⁴ Age is calculated as of December 31, 2000.

⁵ Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

⁶ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey and who had at least one center-based care arrangement. Children with only relative or nonrelative care arrangements or who had no nonparental care arrangements are excluded. Detail may not sum to totals because of rounding. Rows do not sum to 100 percent, because some children received center-based care in more than one location. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Average Time Spent in Nonparental Care Arrangements

The 2001 NHES collected information on the number of hours per week children spend in their nonparental care arrangements. This section presents this information about the time spent in care for children in different types of arrangements and with different background characteristics. It discusses time spent in care overall, i.e., for all children across all arrangements, as well as time spent in particular types of care for children with those types of care arrangements. Children who do not have at least one weekly nonparental care arrangement are excluded from these analyses.

Table 5 presents estimates of the total amount of time children spend in nonparental care arrangements, across all types of arrangements, as well as the amount of time children spend in care of any given type.¹⁰ Children receiving nonparental care on a weekly basis spend 31 hours, on average, in the care of someone other than their parents. They spend more time in the care of nonrelatives than in centers (an average of 28 hours compared to 25 hours).

Time spent in care varies by age for nonrelative and center-based care arrangements. While 1- and 2-year-olds spend about 30 hours each week in nonrelative care arrangements, 4- and 5-year-olds spend less time in such arrangements (about 25 and 24 hours per week, respectively). Also, infants and toddlers receive more hours of center-based care per week than 3- to 5-year-olds (about 29-32 hours compared to about 21-23 hours).

With an average of 38 hours per week, Black children spend more time, overall, in nonparental care arrangements than White or Hispanic children (28 and 31 hours each, on average). More specifically, Black children spend more hours per week in nonrelative care arrangements (34 hours) and in center-based care arrangements (34 hours) than do White or Hispanic children (27 hours in nonrelative care arrangements for both groups; 22 and 26 hours in center-based care arrangements for White and Hispanic children, respectively). These findings support previous research showing that Black children are not only more likely to receive care from someone other than their parents, but also to spend greater amounts of time in this care (West, Germino Hausken, and Collins 1993). With an average of 23 hours per week in relative care and 22 hours per week in center-based care, White children spend the fewest hours per week in these types of arrangements, compared to Black (30 hours for relative care; 34 hours for center-based care) and Hispanic children (28 hours for relative care; 26 hours for center-based care).

Children living in households with incomes of \$30,000 or less spend more time in care overall (between 32 and 33 hours per week, on average) than children living in households with incomes greater than \$50,000 (about 29 hours per week, on average). Looking specifically at center-based care, children living in households with incomes of \$20,000 or less spend more time in this care (28-29 hours per week) than children living in households with incomes greater than \$50,000 (23-25 hours per week). Children living below the poverty threshold spend about 28 hours per week in center-based care, which is more time than children living at or above the poverty threshold spend in such care (about 24 hours per week).

¹⁰ The hours spent in care are calculated per child. For children with two or more arrangements, the hours spent in each arrangement are summed to calculate the total time spent in care.

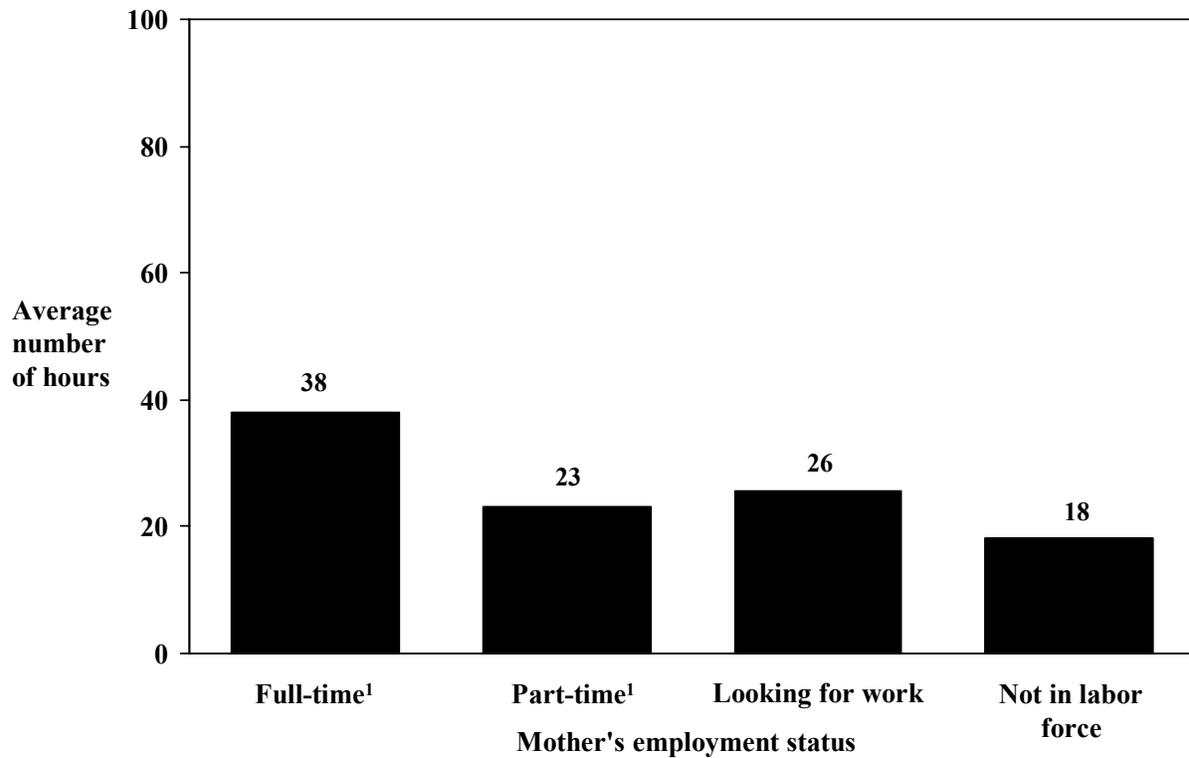
As mother's education increases, the hours children spend in relative care arrangements decrease. More specifically, children whose parents have less than a bachelor's degree spend more time in relative care (26-28 hours per week) than children whose parents have a bachelor's or advanced degree (19-21 hours per week). These general patterns are evident when considering care overall and center-based care arrangements, but the differences between children whose parents have less than a bachelor's degree and those whose parents have a bachelor's or advanced degree do not meet the effect size criteria for reporting as specified at the beginning of this report.

As shown in figure 6, children whose mothers work full time spend the greatest number of hours per week receiving nonparental care (about 38 hours per week, on average), while children whose mothers are not in the labor force spend the fewest (about 18 hours per week, on average). These patterns also are found for hours spent specifically in center-based care. Looking at relative and nonrelative care, children whose mothers work full time spend more time in these arrangements (30 hours in relative care and 34 hours in nonrelative care) than children whose mothers work part time or are not in the labor force (18-19 hours in relative care and 17-18 hours in nonrelative care).

Children living in the South spend more hours per week in nonparental care (about 33 hours, on average) than children living in the Northeast, Midwest, or West (about 29-30 hours per week). With an average of 29 hours per week, children living in the South also spend more time receiving center-based care than children living in any other region (between 21 and 24 hours). In addition, children living in the South spend more time than children living in the Northeast in nonrelative care arrangements (30 vs. 26 hours), and children in the West spend more time in center-based care than children in the Midwest (24 vs. 21 hours).

The results discussed above show that there is variation in the time spent in care related to all of the child, family, and community characteristics included in this report, although some of the patterns do vary according to the type of arrangement being considered. Overall, the children who spend the most time receiving care from someone other than their parents are Black, live in poverty, have less-educated mothers, have mothers who work full-time, and live in the South.

Figure 6. Average number of hours per week children under 6 years old and not yet in kindergarten spend in nonparental care arrangements, by mother's employment status: 2001



¹ Full-time employment is defined as 35 hours or more per week. Part-time employment is defined as less than 35 hours per week. NOTE: For children with more than one arrangement, the hours spent in each arrangement are summed to obtain total time spent in all arrangements. Age is calculated as of December 31, 2000. Children without mothers living in the household are not included in these estimates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Table 5. Average number of hours per week children under 6 years old with at least one weekly nonparental care arrangement spend in those arrangements, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	Hours per week in all nonparental care arrangements ¹		Hours per week in nonparental care arrangements of each type ²					
				Relative		Nonrelative		Center ³	
		Mean	s.e.	Mean	s.e.	Mean	s.e.	Mean	s.e.
Total	12,176	30.5	0.30	25.9	0.69	28.4	0.52	24.9	0.34
Age ⁴									
Less than one	1,530	30.3	0.78	26.1	1.19	28.5	1.32	32.2	2.14
One year old	2,074	31.7	0.79	26.8	1.16	29.5	1.15	32.2	1.23
Two years old	2,318	32.3	0.87	27.0	1.82	30.1	1.01	28.8	0.97
Three years old	2,473	29.7	0.69	24.7	1.52	28.6	1.35	23.4	0.75
Four years old	3,049	29.6	0.57	25.2	1.56	25.1	1.16	22.6	0.54
Five years old	731	29.0	1.46	25.0	2.75	23.5	2.79	21.4	0.84
Race/ethnicity									
White, non-Hispanic	7,471	28.1	0.40	22.7	0.96	27.3	0.69	22.3	0.44
Black, non-Hispanic	2,166	37.8	0.96	30.2	1.58	34.2	1.78	33.5	0.71
Hispanic	1,758	30.8	0.58	27.8	0.95	27.4	1.20	25.6	0.84
Other	780	33.4	1.52	32.5	2.75	31.9	2.95	25.9	1.43
Household income									
\$10,000 or less	1,216	32.9	1.38	27.2	2.29	27.1	2.62	28.7	1.33
\$10,001 to \$20,000	1,490	32.1	0.88	26.5	1.55	30.4	1.74	27.8	1.08
\$20,001 to \$30,000	1,448	32.9	1.37	31.1	2.50	29.0	1.74	25.6	1.08
\$30,001 to \$40,000	1,325	30.7	1.05	23.6	1.51	28.8	1.78	26.8	1.34
\$40,001 to \$50,000	1,107	30.4	0.97	25.3	1.61	29.8	1.38	24.5	1.48
\$50,001 to \$75,000	2,667	29.2	0.54	24.6	1.09	28.2	0.86	22.7	0.72
More than \$75,000	2,921	28.8	0.57	23.2	1.42	27.2	1.16	23.5	0.62
Poverty status ⁵									
At or above poverty threshold	9,924	30.2	0.32	25.6	0.73	28.4	0.54	24.4	0.37
Below poverty threshold	2,252	32.0	1.02	27.1	1.73	28.3	1.81	27.5	0.98
Mother's level of education ⁶									
Less than high school	1,023	30.5	1.13	28.2	1.85	28.0	2.72	25.8	1.32
High school / GED	3,380	31.5	0.65	27.3	1.28	28.6	1.10	26.7	0.65
Vocational/technical or some college	3,684	30.9	0.55	25.7	0.80	29.4	0.94	24.8	0.68
Bachelor's degree	2,568	28.7	0.64	21.1	1.07	27.9	1.16	23.7	0.79
Graduate or professional degree	1,256	28.8	0.81	18.8	2.15	27.0	1.31	23.6	1.03

See notes at end of table.

Table 5. Average number of hours per week children under 6 years with at least one weekly nonparental care arrangement spend in those arrangements, by type of arrangement and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	Hours per week in all nonparental care arrangements ¹		Hours per week in nonparental care arrangements of each type ²					
				Relative		Nonrelative		Center ³	
		Mean	s.e.	Mean	s.e.	Mean	s.e.	Mean	s.e.
Mother's employment status ⁶									
35 hours or more per week	6,422	38.1	0.37	30.1	0.75	34.2	0.56	32.3	0.46
Less than 35 hours per week	2,854	23.1	0.47	18.8	0.85	18.4	0.95	19.6	0.65
Looking for work	402	25.5	2.22	22.5	3.30	‡	‡	21.5	1.72
Not in the labor force	2,234	18.1	0.60	18.2	1.69	17.4	1.69	16.2	0.70
Geographic region									
Northeast	2,341	28.7	0.91	25.1	1.68	25.8	1.35	22.3	0.79
South	4,192	33.0	0.48	27.2	0.91	30.0	1.00	29.2	0.56
Midwest	3,014	29.4	0.62	24.9	1.21	28.7	1.00	21.2	0.83
West	2,629	29.6	0.87	25.9	1.96	28.2	1.39	24.1	0.83

‡ Reporting standards not met.

¹ Indicates the hours per week spent in care, per child, across all arrangements of all types. For children with more than one arrangement, the hours spent in each arrangement are summed to calculate total time spent in care.

² Indicates the hours per week spent in care of a given type, per child. For children with more than one arrangement of a given type, the hours spent in each arrangement of that type are summed to calculate total time spent in that type of care.

³ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

⁴ Age is calculated as of December 31, 2000.

⁵ Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

⁶ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey and who had at least one weekly nonparental care arrangement. Detail may not sum to totals because of rounding. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Average Out-of-Pocket Expenses for Nonparental Care

Families' out-of-pocket expenses for nonparental care can vary widely. Differences in the amount charged for care by providers may be a major source of variation. Also, some families have reduced out-of-pocket expenses or pay nothing themselves, because care is paid for or subsidized by someone else (e.g., a local government agency or an employer). Variations in the amount families pay for care¹¹ related to child, family, and community characteristics, as well as by type of care, are presented below. As was the case with time spent in care, the report discusses out-of-pocket expenses for care overall, i.e., for all children who receive nonparental care across all arrangements, as well as out-of-pocket expenses for particular types of care for children with those types of care. Children who did not spend any time with a nonparental caregiver on a weekly basis and children whose families paid nothing for their care are excluded from this discussion. Approximately 30% of the families of children who were cared for by someone other than a parent reported they did not pay for child care, either because there was no fee or because someone else paid the entire fee (not shown in tables).

There are different ways in which child care costs can be measured, including cost per week and cost per hour.¹² The former measure may be largely a function of time spent in care. Therefore, the latter measure may be a more accurate indicator of which type of care is more costly and for whom, independent of care hours. Both cost estimates for the sample of children whose families pay for child care are discussed. Table 6-A presents estimates of the average weekly out-of-pocket child care expenses for families who pay for this care for their children under the age of 6. Overall, they spend an average of \$69 a week. Average expenses per hour are \$3 overall (table 6-B). Families pay less per week (\$48.06) and per hour (\$1.93) for relative care than they do for either nonrelative (\$72.21 per week; \$3.25 per hour) or center-based care (\$65.50 per week; \$3.24 per hour).

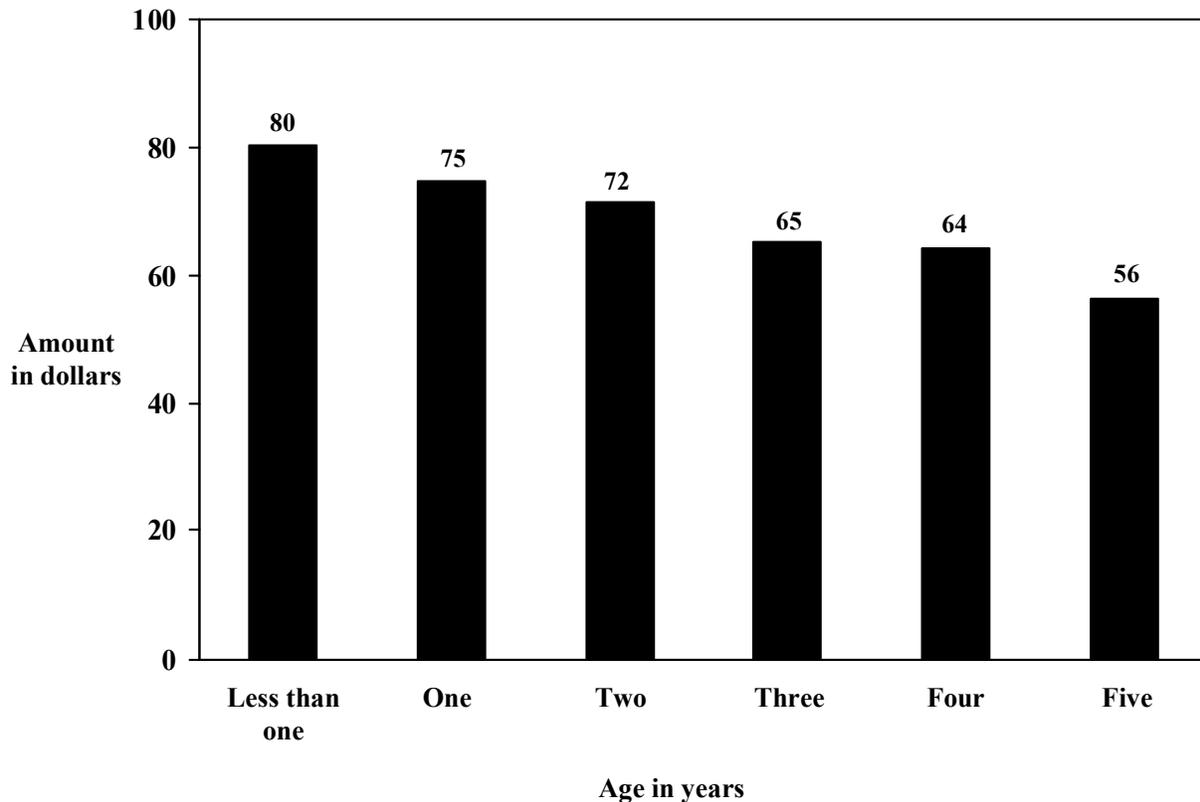
Overall, families spend more money per week for child care for infants and 1-year-olds than they do for preschoolers (\$80.27 and \$74.71 respectively compared to \$56.18-\$65.00 per week) (figure 7). Also, families spend more per week for nonrelative arrangements for infants, toddlers, and 3-year-olds than for 5-year-olds (\$67.68-\$80.95 vs. \$50.18 per week). Among families of infants and 1-year-olds, these greater weekly expenses may be a result of their higher hourly expenses for nonrelative care (\$3.33 and \$3.55 per hour, respectively), compared to the expenses for families of 5-year-olds (\$2.38 per hour). Weekly center-based care for infants and toddlers is more costly than for preschoolers (\$73.91-\$99.11 compared to \$52.38-\$59.00 per week). These greater expenses for families of infants and toddlers may result from children in these age groups spending more time in center-based care, compared to preschoolers. However,

¹¹ The NHES only ascertains the amount families pay for care themselves, apart from any financial assistance they may receive from others. Therefore, the data presented here may not represent the total cost of care.

¹² Parents reported their out-of-pocket expenses for each care arrangement their child had separately. For children living in households in which parents paid for care for more than one child, the reported out-of-pocket expenses for each arrangement were divided by the number of children for whom care was paid to obtain a dollar amount paid for care for the sampled child. If a child had more than one arrangement, the costs of each arrangement were summed to obtain a total weekly dollar amount. To obtain a measure of cost per hour, the total weekly cost paid was divided by the total number of hours children spent in all arrangements in a week. Out-of-pocket expenses have not been adjusted for geographic differences in the cost of living.

families of 2-year-olds do pay more per hour for center-based care than families of 4- and 5-year-olds (\$3.88 vs. \$2.83-\$2.92 per hour).

Figure 7. Average amount households of children under 6 years old and not yet in kindergarten spend for nonparental care arrangements per week, by age: 2001



NOTE: Age is calculated as of December 31, 2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

More money is spent on nonrelative care every week by families of White children than by families of Hispanic children (\$74.80 vs. \$58.75). They also pay more for center-based care, on an hourly basis, than families of Hispanic children (\$3.45 vs. \$2.75). In contrast, families of Hispanic children pay more per week and per hour for relative care (\$51.68 and \$2.26) than do families of White children (\$43.22 and \$1.54). Families of White children pay more per hour for care overall than families of Black children (\$3.14 compared to \$2.39 per hour). Also, families of Black children pay \$2.29 per hour for center-based care, which is less than the amount families of White and Hispanic children pay for such care (\$3.45 and \$2.75 per hour, respectively).

As household income increases, the average amount households of children under 6 years old spend, overall, for child care and early education arrangements on a weekly basis increases. On average, families of children in households with incomes greater than \$75,000 spend \$94.50

a week for care overall, compared to families with household incomes of \$10,000 or less, who spend \$46.50 a week for overall care. This positive relationship between household income and weekly out-of-pocket expenses also is found when considering nonrelative and center-based care arrangements separately. Families of children in households with incomes greater than \$75,000 also pay more per hour for care overall (\$3.99 per hour), and for center-based care individually (\$4.04 per hour), than do families of children in all other income categories (\$1.91-\$2.84 for care overall; \$1.60-\$3.10 for center-based care).

The average out-of-pocket expenses per week for child care for children living at or above the poverty threshold is \$72, compared to \$45 for children living below the poverty threshold. When looking at expenses per week by type of care, families of children living at or above the poverty threshold pay more for nonrelative and center-based care (\$75.28 and \$68.04, respectively) than families of children living below the poverty threshold (\$48.27 and \$39.63, respectively). Nonpoor families also pay more per hour for care overall and for center-based care (\$3.11 and \$3.33 per hour, respectively) than poor families (\$2.35 and \$2.27 per hour, respectively).

Families' weekly out-of-pocket expenses for nonparental care overall increase with mother's level of education, from a low of \$43.84 per week when mothers have less than a high school diploma or equivalent to a high of \$102.61 per week when mothers have an advanced degree. More specifically, weekly out-of-pocket expenses for nonrelative and center-based care increase with mother's education as well. Looking at expenses per hour, mothers with a bachelor's or advanced degree generally pay more per hour than mothers with less education, both overall (\$3.40 and \$4.42 per hour compared to between \$2.22 and \$2.74 per hour) and for center-based care (\$3.71 and \$4.19 per hour compared to \$2.06-\$2.93 per hour), with one exception: no difference was detected between children whose mothers have a vocational/technical diploma or some college and children whose mothers have a bachelor's degree in the amount their families pay per hour for care overall.

Families of children whose mothers work full time spend \$79.07 per week for care overall, which is more than families of children whose mothers work part time or are not in the labor force spend (\$58.59 and \$48.76 per week, respectively). They also spend the most per week for center-based care (\$82.57 compared to \$54.64 per week when mothers work part time and \$40.75 per week when mothers are not in the labor force). For relative and nonrelative care, families of children whose mothers work full time spend more on a weekly basis (\$50.35 and \$76.93, respectively) than families of children whose mothers work part time (\$35.62 and \$60.64, respectively). Also, families of children whose mothers work part time pay more every week for care overall, and for center-based care, than families of children whose mothers are not in the labor force.

Greater weekly expenditures among working mothers appear to be related to the greater number of hours their children spend in care. Consideration of the average expenses per hour shows that, in contrast to findings for weekly expenses, families of children whose mothers are not in the labor force pay more per hour for care overall (\$4.20 per hour), as well as for nonrelative and center-based care (\$4.81 and \$4.11 per hour, respectively), than families of children whose mothers are employed full time (\$2.55, \$2.70, and \$2.76, for overall care,

nonrelative care, and center-based care, respectively). Also, families of children whose mothers work part time pay more per hour for care overall (\$3.40 per hour), and for both nonrelative and center-based care individually (\$4.23 and \$3.39 per hour, respectively), than do families of children whose mothers work full time.

Families of children living in the Northeast spend more money per week than families of children living in the South on nonparental care overall (\$80.00 per week compared to \$63.55 per week), and for all three types of nonparental care individually (\$56.48 vs. \$41.95 for relative care; \$81.16 vs. \$65.67 for nonrelative care; and \$74.71 vs. \$63.54 for center-based care). These Northeastern families also pay more than families of children living in the Midwest for overall care (\$80.00 vs. \$63.75), nonrelative care (\$81.16 vs. \$66.86), and center-based care (\$74.71 vs. \$57.09) on a weekly basis. Families of children living in the West pay more per week than families of children living in the South and Midwest for care, overall (\$74.50 compared to \$63.55 and \$63.75, respectively), and for nonrelative care (\$80.97 compared to \$65.67 and \$66.86, respectively). With average weekly out-of-pocket expenses of \$70.43, families of children living in the West also pay more for center-based care every week than Midwestern families, who pay an average of \$57.09.

Regional differences also exist when expenses per hour are considered. Families of children living in the Northeast pay more money per hour for both nonparental care overall (\$3.87) and center-based care (\$4.07) than families of children living in any other region (between \$2.61 and \$3.06 per hour for overall care; between \$2.75 and \$3.37 per hour for center-based care). They also pay more per hour for nonrelative care (\$4.41) than families of children living in the Midwest or South (\$2.91 and \$2.82, respectively). Additionally, families of children living in the West pay more per hour for center-based care (\$3.37 per hour) than families of children living in the South (\$2.75 per hour).

In sum, findings presented in this section show that, among children whose families report having out-of-pocket expenses for care: families with younger children pay more on a weekly basis than do families with older children; higher-income families pay more than do lower-income families (and families who do not live in poverty pay more than do families living in poverty); families in which mothers are better-educated pay more on a weekly basis than do families with less educated mothers; families in which mothers work full-time pay more than do families in which mothers do not work full-time; and families living in the Northeast and West pay more on a weekly basis than do families living in the Midwest and South.

Table 6-A. Average amount households of children under 6 years old spend for nonparental care arrangements per week, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	Amount per week for all nonparental care arrangements ¹		Amount per week for nonparental care arrangements of each type ²					
		Mean	s.e.	Relative		Nonrelative		Center ³	
				Mean	s.e.	Mean	s.e.	Mean	s.e.
Total	8,570	\$68.95	1.169	\$48.06	2.398	\$72.21	2.007	\$65.50	1.507
Age ⁴									
Less than one	1,017	80.27	3.983	57.25	6.243	80.95	6.136	99.11	8.029
One year old	1,414	74.71	2.813	42.33	3.621	75.35	3.412	86.27	6.086
Two years old	1,694	71.47	2.440	51.50	4.467	67.68	3.887	73.91	3.758
Three years old	1,788	65.00	2.383	41.10	2.966	74.93	5.782	59.00	2.538
Four years old	2,167	64.05	1.923	47.71	8.354	66.44	5.344	57.90	2.050
Five years old	491	56.18	4.099	‡	‡	50.18	6.985	52.38	4.219
Race/ethnicity									
White, non-Hispanic	5,723	70.01	1.544	43.22	2.681	74.80	2.404	63.71	1.945
Black, non-Hispanic	1,327	64.34	2.642	46.88	6.479	64.99	5.508	68.34	3.621
Hispanic	1,035	61.53	2.069	51.68	2.577	58.75	3.270	64.42	4.050
Other	486	84.83	6.022	‡	‡	87.63	13.434	80.56	5.932
Household income									
\$10,000 or less	548	46.48	4.172	51.75	9.623	46.18	6.187	41.33	8.749
\$10,001 to \$20,000	828	48.12	2.695	42.09	3.330	53.36	5.152	43.78	4.122
\$20,001 to \$30,000	896	56.86	2.523	41.29	4.754	56.72	3.461	59.17	3.375
\$30,001 to \$40,000	876	55.49	2.769	40.01	4.476	58.77	4.919	56.38	3.850
\$40,001 to \$50,000	779	64.41	3.713	38.81	2.689	69.46	6.593	63.47	4.823
\$50,001 to \$75,000	2,109	64.63	1.733	54.76	4.068	68.12	2.447	57.69	2.029
More than \$75,000	2,533	94.54	2.660	66.23	10.582	98.52	5.573	82.53	2.571
Poverty status ⁵									
At or above poverty threshold	7,486	72.40	1.286	48.07	2.585	75.28	2.277	68.04	1.511
Below poverty threshold	1,084	45.09	2.989	48.02	6.474	48.27	4.839	39.63	4.709
Mother's level of education ⁶									
Less than high school	508	43.84	3.225	44.13	5.171	51.48	5.615	33.63	4.864
High school / GED	2,120	56.96	1.824	48.51	3.928	54.18	2.628	58.59	2.928
Vocational/technical or some college	2,629	60.37	1.761	43.28	3.466	66.45	3.270	56.69	2.355
Bachelor's degree	2,091	79.76	2.867	51.37	4.196	74.81	3.950	75.86	3.235
Graduate or professional degree	1,090	102.61	3.806	‡	‡	104.85	7.375	83.39	3.494

See notes at end of table.

Table 6-A. Average amount households of children under 6 years old spend for nonparental care arrangements per week, by type of arrangement and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	Amount per week for all nonparental care arrangements ¹		Amount per week for nonparental care arrangements of each type ²					
				Relative		Nonrelative		Center ³	
		Mean	s.e.	Mean	s.e.	Mean	s.e.	Mean	s.e.
Mother's employment status ⁶									
35 hours or more per week	4,944	\$79.07	1.593	\$50.35	2.537	\$76.93	2.393	\$82.57	2.389
Less than 35 hours per week	1,916	58.59	2.618	35.62	3.060	60.64	4.597	54.64	2.737
Looking for work	189	49.92	6.549	‡	‡	‡	‡	48.66	7.922
Not in the labor force	1,390	48.76	2.556	‡	‡	66.43	8.270	40.75	1.939
Geographic region									
Northeast	1,614	80.00	2.983	56.48	6.400	81.16	5.553	74.71	3.454
South	2,910	63.55	1.726	41.95	2.188	65.67	3.330	63.54	2.051
Midwest	2,289	63.75	2.058	47.98	6.033	66.86	2.933	57.09	3.136
West	1,757	74.50	2.790	49.71	3.420	80.97	4.727	70.43	3.726

‡ Reporting standards not met.

¹ Indicates out-of-pocket expenses per week, per child, across all arrangements of all types. For children with more than one arrangement, the expenses for each arrangement are summed to calculate the total spent on child care per week.

² Indicates out-of-pocket expenses per week for care of a given type, per child. For children with more than one arrangement of a given type, the expenses for each arrangement of that type are summed to calculate the total spent per week for that type of care.

³ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

⁴ Age is calculated as of December 31, 2000.

⁵ Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

⁶ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey and whose households paid a fee for nonparental care. Children for whom no fee was charged, for whom another source paid the entire fee for care, or for whom the period of time covered by the amount indicated (e.g., per hour, per week, etc.) could not be determined are excluded from the estimates. Detail may not sum to totals because of rounding. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Table 6-B. Average amount households of children under 6 years old spend for nonparental care arrangements per hour, by type of arrangement and child and family characteristics: 2001

Characteristic	Number of children (in thousands)	Amount per hour for all nonparental care arrangements ¹		Amount per hour for nonparental care arrangements of each type ²					
				Relative		Nonrelative		Center ³	
		Mean	s.e.	Mean	s.e.	Mean	s.e.	Mean	s.e.
Total	8,570	\$3.02	0.088	\$1.93	0.114	\$3.25	0.210	\$3.24	0.100
Age ⁴									
Less than one	1,017	2.94	0.162	2.04	0.293	3.33	0.264	3.21	0.311
One year old	1,414	3.07	0.268	1.81	0.258	3.55	0.540	3.05	0.190
Two years old	1,694	3.16	0.239	1.81	0.215	2.96	0.364	3.88	0.414
Three years old	1,788	3.26	0.222	2.10	0.319	3.61	0.651	3.45	0.228
Four years old	2,167	2.79	0.099	1.94	0.275	2.97	0.173	2.92	0.109
Five years old	491	2.62	0.126	‡	‡	2.38	0.226	2.83	0.158
Race/ethnicity									
White, non-Hispanic	5,723	3.14	0.092	1.54	0.086	3.18	0.173	3.45	0.123
Black, non-Hispanic	1,327	2.39	0.193	1.97	0.288	3.09	0.739	2.29	0.157
Hispanic	1,035	2.58	0.119	2.26	0.181	2.78	0.298	2.75	0.152
Other	486	4.21	0.773	‡	‡	6.14	2.748	3.60	0.262
Household income									
\$10,000 or less	548	1.91	0.182	1.87	0.294	2.38	0.572	1.60	0.257
\$10,001 to \$20,000	828	2.51	0.390	1.79	0.240	3.01	0.857	2.53	0.580
\$20,001 to \$30,000	896	2.49	0.234	1.28	0.133	2.55	0.318	2.99	0.424
\$30,001 to \$40,000	876	2.74	0.430	2.20	0.351	3.73	1.374	2.34	0.181
\$40,001 to \$50,000	779	2.57	0.149	1.55	0.192	2.67	0.281	2.81	0.210
\$50,001 to \$75,000	2,109	2.84	0.099	2.18	0.249	2.65	0.129	3.10	0.159
More than \$75,000	2,533	3.99	0.166	2.75	0.587	4.37	0.372	4.04	0.161
Poverty status ⁵									
At or above poverty threshold	7,486	3.11	0.090	1.98	0.138	3.27	0.217	3.33	0.094
Below poverty threshold	1,084	2.35	0.303	1.79	0.219	3.09	0.802	2.27	0.513
Mother's level of education ⁶									
Less than high school	508	2.22	0.235	2.19	0.306	2.44	0.565	2.06	0.414
High school / GED	2,120	2.45	0.146	1.72	0.166	2.71	0.370	2.62	0.167
Vocational/technical or some college	2,629	2.74	0.169	1.73	0.187	3.01	0.458	2.93	0.208
Bachelor's degree	2,091	3.40	0.137	1.75	0.168	3.21	0.182	3.71	0.173
Graduate or professional degree	1,090	4.42	0.315	‡	‡	4.74	0.599	4.19	0.262

See notes at end of table.

Table 6-B. Average amount households of children under 6 years old spend for nonparental care arrangements per hour, by type of arrangement and child and family characteristics: 2001—Continued

Characteristic	Number of children (in thousands)	Amount per hour for all nonparental care arrangements ¹		Amount per hour for nonparental care arrangements of each type ²					
				Relative		Nonrelative		Center ³	
		Mean	s.e.	Mean	s.e.	Mean	s.e.	Mean	s.e.
Mother's employment status ⁶									
35 hours or more per week	4,944	\$2.55	0.093	\$1.81	0.124	\$2.70	0.247	\$2.76	0.073
Less than 35 hours per week	1,916	3.40	0.192	1.72	0.155	4.23	0.518	3.39	0.183
Looking for work	189	2.60	0.348	‡	‡	‡	‡	3.14	0.422
Not in the labor force	1,390	4.20	0.327	‡	‡	4.81	0.508	4.11	0.367
Geographic region									
Northeast	1,614	3.87	0.244	2.13	0.293	4.41	0.583	4.07	0.251
South	2,910	2.61	0.130	1.82	0.199	2.82	0.305	2.75	0.157
Midwest	2,289	2.90	0.208	1.82	0.269	2.91	0.407	3.18	0.239
West	1,757	3.06	0.107	2.07	0.169	3.35	0.228	3.37	0.190

‡ Reporting standards not met.

¹ Indicates out-of-pocket expenses per hour, per child, across all arrangements of all types. For children with more than one arrangement, the expenses for each arrangement are summed to calculate the total spent on child care per hour.

² Indicates out-of-pocket expenses per hour for care of a given type, per child. For children with more than one arrangement of a given type, the expenses for each arrangement of that type are summed to calculate the total spent per hour for that type of care.

³ Center-based arrangements include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

⁴ Age is calculated as of December 31, 2000.

⁵ Children are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition.

⁶ Children without mothers living in the household are not included in estimates related to mother's education or mother's employment status.

NOTE: Estimates pertain to children under 6 years old who had not yet entered kindergarten at the time of the survey and whose households paid a fee for nonparental care. Children for whom no fee was charged, for whom another source paid the entire fee for care, or for whom the period of time covered by the amount indicated (e.g., per hour, per week, etc.) could not be determined are excluded from the estimates. Detail may not sum to totals because of rounding. s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey, National Household Education Surveys Program, 2001.

Summary

In 2001, the majority (60 percent) of children under the age of 6 who were not yet in kindergarten received some type of care or education, or both, on a weekly basis from persons other than their parents (table 1). Participation rates in nonparental care arrangements vary by all of the child, family, and household characteristics examined in this report. Overall, the percentage of children receiving nonparental care increases with the age of the child, up to age four (figure 1). Black children are more likely than White or Hispanic children to be cared for by someone other than a parent on a weekly basis (table 2). In contrast, Hispanic children are less likely than White or Black children to be cared for by someone other than their parents on a weekly basis. There is a relationship between income and participation such that children living in households with incomes over \$50,000 are more likely to receive nonparental care than children in households with lower incomes. With a participation rate of 72 percent, children in homes with incomes greater than \$75,000 are most likely to receive this care, compared to children in lower-income households. Also, overall, children are more likely to have nonparental care arrangements when their mothers have higher levels of education and when their mothers work. These results generally are consistent with analyses of child care participation using the National Household Education Survey from earlier years, the Survey of Income and Program Participation (Smith 2000; Smith 2002), and the National Child Care Survey (Hofferth et al. 1990). This study expands on previous NHES reports to show that children living below the poverty threshold and children living in the West are less likely than their counterparts to be cared for by someone other than their parents on a weekly basis.

More children overall receive nonparental care in centers than from either relatives or nonrelatives (table 2). However, the type of care received is related to child's age and race/ethnicity. Infants are more likely to be cared for by relatives than by nonrelatives or in centers. Black children are more likely to be cared for by relatives or in centers than White or Hispanic children. Furthermore, some patterns of participation in relative care arrangements are different from the patterns of participation in nonrelative and center-based arrangements. Participation in nonrelative and center-based arrangements is higher for children in households with incomes greater than \$50,000 than it is for children in households with incomes of \$30,000 or less. In contrast, children in households with incomes greater than \$75,000 are less likely than children living in lower-income households to be cared for by a relative. Also, children's participation in nonrelative and center-based arrangements increases with mother's education. The relationship of mother's education to children's participation is less clear for relative care arrangements, but participation in relative care tends to decrease as mother's education increases.

Children receiving nonparental care in a home-based setting are more likely to be cared for in someone else's home than in their own, regardless of whether the care is provided by a relative or a nonrelative (figure 4). Those children who are cared for in a center-based setting are most likely to receive that care and education in a stand-alone building (table 4) compared to other locations, such as a community center or library.

Children receiving nonparental care on a weekly basis spend 31 hours, on average, in the care of someone other than their parents (table 5). Additionally, these children spend more time in the care of nonrelatives than in centers. The children who spend the most time in nonparental

care arrangements tend to be Black, come from families with lower household incomes, have mothers with lower levels of education or who work, and live in the South. A consistent relationship between child age and time spent in nonparental care emerged only for center-based arrangements; younger children spend more time than older children being cared for in a center. A somewhat similar, though not as consistent, pattern was found for nonrelative care arrangements, whereby toddlers spend more time in nonrelative care arrangements than 4- and 5-year-olds.

Out-of-pocket expenses for nonparental care and education vary by type of care arrangement as well as by child, family, and community characteristics (tables 6-A and 6-B). Relative care is the least costly, both weekly and hourly, for families of children under the age of 6. Overall, care is less costly on a weekly basis for families of older children than for families of younger children.

Some differences were detected in the amount paid for care by families of children from different racial/ethnic backgrounds. Families of Black children pay the least per hour for center-based care, compared to families of White or Hispanic children. They also pay less per hour for care overall than families of White children. More money is spent on nonrelative care per week by families of White children than by families of Hispanic children. In contrast, families of Hispanic children pay more per week and per hour for relative care than do families of White children.

As household income and mother's level of education increase, so does the amount of money families spend on nonparental care and education for their children. Families in which mothers work full time generally pay more per week but less per hour for care than do families in which mothers work part time or not at all, suggesting weekly out-of-pocket expenses are partly a function of time spent in care. Weekly expenses tend to be higher in the Northeast and West than in the South or Midwest, while hourly expenses are higher in the Northeast than in other areas of the country.

In sum, findings from this report using the most recent data available from the National Household Education Survey support previous research showing that children's participation in nonparental care and education arrangements is related to a variety of factors. Families of children of different ages and racial or ethnic backgrounds, in different economic situations, with mothers of varying educational levels and employment statuses, and who live in different areas of the country exhibit differences with respect to whether or not they have any weekly child care arrangements. They also report differences in the location and provider of child care. Additionally, the time children spend in nonparental care, and the amount their families pay for it, are related to many of the same factors associated with participation in nonparental care and education in general.

Methodology and Technical Notes

Survey Methodology

The National Household Education Surveys Program (NHES) is a series of telephone surveys sponsored by the U.S. Department of Education's National Center for Education Statistics (NCES). It collects data on high priority topics on a rotating basis using computer-assisted telephone interviewing (CATI) technology. The data in this report come from the Early Childhood Program Participation Survey (ECP) of the 2001 NHES, conducted by Westat, a social science research firm, from January 2 through April 14, 2001.

The 2001 NHES sample was drawn from the civilian, noninstitutionalized population in households with telephones in the 50 states and the District of Columbia. It was selected using a multiple stage sampling framework. The first stage of selection in NHES 2001 involved the selection of a list-assisted random digit dial (RDD) sample of telephone numbers. Households from this list were contacted, and a screener interview was used to enumerate household members and to collect demographic and educational information that determined eligibility for the three NHES:2001 topical surveys—the ECP, the Before- and After-School Programs and Activities Survey (ASPA), and the Adult Education and Lifelong Learning Survey (AELL). Eligible household members were then selected to be the subject of one of the three 2001 topical interviews. To reduce respondent burden, a maximum of three interviews was allowed per household. A preschooler (ages 3 through 6 and not enrolled in kindergarten or higher grades) and a middle school student (grades 6 through 8) were sampled in any household that contained them, because of their relative scarcity in the population and the predetermined sample sizes needed to meet precision requirements. In contrast, it was known that more adults, infants and toddlers (ages 0 through 2), and elementary school students (kindergartners through fifth graders) would be found during screening than would be needed for precision requirements. For this reason, a maximum of two people in these groups (adults, infants and toddlers, and elementary school students) were sampled in any household. Additionally, to further reduce respondent burden, adults were sampled at a lower rate in households that contained eligible children.

For the ECP, children ages 6 and younger who were not yet enrolled in kindergarten or above were sampled from the households contacted by telephone, and their parents or guardians provided information about their early childhood care and education arrangements, educational activities at home, emerging literacy and numeracy, the child's personal and demographic characteristics, and parent and household characteristics. Multiple attempts were made to complete interviews with persons who were not available at the time of selection. If an interviewer contacted an individual who preferred to conduct the interview in Spanish, a Spanish-speaking interviewer and survey instrument were used. For more detailed information on sample selection and survey content in the NHES, consult the *NHES:2001 Data File User's Manual, Vol. 1* (Collins et al. 2002a).

Response Rates

The 2001 NHES completed screening interviews with 48,385 households. The response rate for the Screener was 69.2 percent. For the ECP Survey, 6,749 interviews were completed for

a unit response rate of 86.6 percent. Thus, the overall response rate for the Parent Interview was 59.9 percent (the product of the Screener response rate and the ECPP unit response rate). The number of interviews included in this analysis is 6,741—i.e., the number of completed interviews for children under the age of 6.

The estimates from the 2001 NHES are subject to potential bias because of nonresponse to the Screener and ECPP surveys. During the conduct of the 2001 interviews, many procedures were employed to minimize nonresponse bias. These included extensive training of the interviewers, call scheduling strategies, and attempts to obtain cooperation from respondents who initially refused to participate. Weighting adjustments are also made to minimize any bias that may result from the nonresponse that does occur.

Results from a nonresponse bias analysis conducted for the 1999 NHES suggest that the estimates produced from 2001 data are not biased as a result of nonresponse. The 1999 NHES is similar to the 2001 NHES in terms of its target populations, contact procedures, and salience. Response rates in 1999 were slightly higher than those in 2001 (60-67 percent for the topical surveys in 1999, and 53-60 percent for the topical surveys in 2001). However, similar procedures were used to reduce and adjust for nonresponse in 1999 and 2001. Therefore, it is likely that any nonresponse bias present in estimates from the 2001 NHES would be similar to nonresponse bias in estimates from the 1999 NHES. The nonresponse bias analysis of the 1999 NHES involved an examination of response rates as a whole and for various subgroups, an analysis to determine characteristics that are associated with Screener nonresponse, an examination of the potential usefulness of household-level data from an external source in reducing nonresponse bias, and a comparison of estimates based on adjusted and unadjusted weights. The results of these analyses showed no evidence of bias in estimates produced from the 1999 NHES data. In addition, comparisons between key estimates from the 2001 NHES and those of extant data sources further suggest there is no bias associated with nonresponse. Additional information regarding nonresponse bias and weighting procedures in the NHES can be found in the 1999 and 2001 NHES Methodology Reports (Nolin et al. 2000 and Nolin et al. 2004).

Item nonresponse (the failure to complete some items in an otherwise completed interview) was less than 2 percent for all of the items used in this report except income, which has an item nonresponse rate of 12 percent. Missing responses to all items were imputed using a hot-deck procedure.

Data Reliability and Weighting

Estimates produced using data from surveys are subject to two types of error, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample rather than a census of the population. In general, it is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. In the 2001 NHES, efforts were made to prevent such errors from occurring by using focus groups and cognitive laboratory interviews when designing the survey instruments, extensively testing the CATI system, and conducting two pretests. One source of nonsampling error for a telephone survey that cannot be eliminated is the failure to include persons who do not live in households with telephones. About 10 percent of all children under the

age of 6 live in households without telephones. Estimation procedures were used to help reduce the bias in the estimates associated with children who do not live in households with telephones. Specifically, estimates were adjusted using control totals from the Census Bureau's Current Population Survey (CPS) so that the totals were consistent with the total number of civilian, noninstitutionalized persons in all (telephone and nontelephone) households.

Sampling error exists because the sample of telephone households selected for the 2001 NHES is just one of many possible samples that could have been selected. Estimates produced from this sample may differ from estimates that would have been produced from other samples. The standard error is a measure of the variability, or sampling error, due to sampling when estimating a statistic. They can be used as a measure of the precision expected from a particular sample. The probability that a complete census count would differ from the sample estimate by less than one standard error is about 68 percent. The chance that the difference would be less than 1.65 standard errors is about 90 percent; and that the difference would be less than 1.96 standard errors, about 95 percent.

The standard errors found in the tables also can be used to produce confidence intervals. For example, an estimated 23 percent of Hispanic children receive regular care from a relative. This figure has an estimated standard error of 1.3. The estimated 95 percent confidence interval for this statistic is approximately 20.5 to 25.5 percent. For more information on sampling error in the NHES, consult the *NHES:2001 Data File User's Manual, Vol. I* (Collins et al. 2002a).

All of the estimates in this report are based on weighting the observations using the probabilities of selection of the respondents and other adjustments to partially account for nonresponse and coverage bias. Use of the design weight produces approximately unbiased and consistent estimates of national totals. When weighted appropriately using the child-level weight available in the ECPP dataset, these data represent the child care and early education experiences of the population of children under age 6 and not yet enrolled in kindergarten or above—approximately 20.3 million children.

In addition to properly weighting the responses, special procedures for estimating the statistical significance of the estimates were employed because the 2001 NHES data were collected using a complex sample design. Complex sample designs result in data that violate some of the assumptions that are normally made when assessing the statistical significance of results from a simple random sample. Frequently, the standard errors of the estimates from these surveys are larger than would be expected if the sample was a simple random sample and the observations were independent and identically distributed random variables. The estimates and standard errors presented in this report were produced using WesVar Complex Samples software and a jackknife replication procedure (Wolter 1985).

Statistical Tests

The tests of significance used in this report are based on Student's *t* statistic. All differences cited in this report are significant at the .05 level of significance. Trend tests, or bivariate regressions, were used to examine the general relationships between the various characteristics of child care and both household income and mother's education level.

Participation in child care, overall and for each type of arrangement, time spent in care, and out-of-pocket expenses for care were each regressed on household income and on mother's education level separately. Logistic regression was used for those tests involving the dichotomous measures of participation, and ordinary least squares regression was used for those tests involving the continuous measures of hours in and out-of-pocket expenses for care. Additionally, the discussion was limited to differences of at least 5 percentage points when percentage estimates were compared. When mean estimates were compared, the discussion was limited to differences where the effect size, as calculated using Cohen's d statistic, was .2 or larger. Cohen's d is derived from the following formula:

$$d = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(n_1 - 1)(SE_1 \sqrt{n_1})^2 + (n_2 - 1)(SE_2 \sqrt{n_2})^2}{n_1 + n_2}}}$$

where x_i is the estimated mean of subgroup i ($i = 1, 2$), $SE(x_i)$ is the standard error of that estimate, and n_i is the size of the subgroup to which the estimate pertains. For more information on effect size, see Cohen (1988).

References

- Brimhall, D., Reaney, L., and West, J. (1999). *Participation of Kindergarteners Through Third-Graders in Before- and After-School Care* (NCES 1999-013). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. New York: Academic Press.
- Collins, M., Montaquila, J., Nolin, M. J., Kim, K., Kleiner, B., Waits, T., Chapman, C., and Chandler, K. (2002a). *National Household Education Surveys Program of 2001: Data File User's Manual, Volume I* (NCES 2002-140). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Early, D. and Burchinal, M. (2001). Early Childhood Care: Relations With Family Characteristics and Preferred Care Characteristics. *Early Childhood Research Quarterly*, 16(4): 475-497.
- Fuller, B., Eggers-Pierola, C., Holloway, S. D., Liang, X., and Rambaud, M. F. (1996). Rich Culture, Poor Markets: Why Do Latino Parents Forgo Preschooling? *Teachers College Record* 97(3): 400-418.
- Hofferth, S., Shauman, K., Henke, R., and West, J. (1998). *Characteristics of Children's Early Care and Education Programs: Data From the 1995 National Household Education Survey* (NCES 98-128). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Hofferth, S., Brayfield, A., Deich, S., and Holcomb, P. (1990). *National Child Care Survey, 1990*. Washington, DC: Urban Institute Press.
- Huang, G. G., and Van Horn, P. (1995). Using Child Care Services: Families With Disabled Children. *Rural Special Education Quarterly* 14(4): 27-36.
- Nolin, M. J., Montaquila, J., Nicchitta, P., Kim, K., Kleiner, B., Lennon, J., Chapman, C., Creighton, S., and Bielick, S. (2000). *National Household Education Surveys Program of 1999: Methodology Report* (NCES 2000-078). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Nolin, M. J., Montaquila, J., Nicchitta, P., Collins Hagedorn, M., and Chapman, C. (2004). *National Household Education Surveys Program: 2001: Methodology Report* (NCES 2005-071). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Proctor, B.D., and Dalaker, J. (2002). *Poverty in the United States: 2001*. Current Population Reports (P60-219). U.S. Census Bureau. Washington, DC: U.S. Government Printing Office.

- Singer, J. D., Fuller, B., Keiley., M. K., Wolf, A. (1998). Early Child-Care Selection: Variation by Geographic Location, Maternal Characteristics, and Family Structure. *Developmental Psychology*, 34(5): 1129-44.
- Smith, K. (2000). *Who's minding the kids? Child care arrangements: Fall 1995*. Current Population Reports (P70-70). Washington, DC: U.S. Census Bureau.
- Smith, K. (2002). *Who's minding the kids? Child care arrangements: Spring 1997*. Current Population Reports (P70-86). Washington, DC: U.S. Census Bureau.
- Smith, T., Kleiner, A., Parsad, B., Farris, E., and Greene, B. (2003). *Prekindergarten in U.S. Public Schools: 2000-2001*. U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- West, J., Germino Hausken, E., Chandler, K., and Collins, M. (1992). *Experiences in Child Care and Early Childhood Programs of First and Second Graders* (NCES 92-005). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- West, J., Germino Hausken, E., and Collins, M. (1993). *Profile of Preschool Children's Child Care and Early Education Program Participation* (NCES 93-133). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- West, J., Wright, D., and Germino Hausken, E. (1995). *Child Care and Early Education Program Participation of Infants, Toddlers, and Preschoolers* (NCES 95-824). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Wolter, K. (1985). *Introduction to Variance Estimation*. New York: Springer-Verlag.