## NATIONAL CENTER FOR EDUCATION STATISTICS

## Participation of Kindergartners through Third-Graders in Before- and After-School Care

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Approximately 39 percent of the nation's primary school children (i.e., kindergartners through third-graders) receive some form of nonparental care before and/or after school on a weekly basis. They spend an average of 14 hours per week in this care. These findings come from the National Center of Education Statistics' (NCES) 1995 National Household Education Survey (NHES:95) and highlight the importance of looking at before- and after-school care for children during their early school years.

The care children receive before and after school concerns parents, practitioners, researchers, and policymakers. The major concern centers on how children spend their out-of-school time. The majority of children's waking hours (70 to 90
percent) is spent outside of school (Miller 1995; Seppanen et al. 1993). This time represents an enormous opportunity for learning social skills and developing interests, and the way this time is spent has been linked to achievement (Seligson 1997). Organized programs for the provision of this care and enrichment have been noted to be especially vital for kindergartners through third-graders (Seppanen et al. 1993). Before- and after-school care for kindergartners is of special interest, because many of these children are only in school for part of the day, so the care and education they receive for the rest of the day is of great concern.

School-age children's care and developmental needs differ greatly from those of younger children, and the type of care they receive may impact their social, emotional, and cognitive development, as well as their school performance (Miller and Marx 1990; Pierce, Hamm, and Vandell 1999; Vandell and Corasaniti 1988). Before- and after-school care has the potential to have both positive and negative effects on children's development, depending on the characteristics of the care arrangement. Children's successful school adjustment is related to their experiences in after-school programs. For example, first grade boys attending programs where the staff was positive were rated by school teachers as having fewer internalizing and externalizing problems (Pierce et al. 1999). First-grade girls experiencing positive interaction with after-school staff also exhibited fewer internalizing behaviors in school (Pierce et al.). On the other hand, other research has found that third-graders (predominately middle class) in center-based care have lower scores on standardized tests and lower grades in school than children in other types of care (Vandell and Corasaniti 1988). In this study, though, center quality was not controlled; it was, in fact, noted to be questionable at many sites, perhaps explaining the negative findings. Findings from research examining the potential effects of self care are contradictory as well. School performance has been shown to decline with unsupervised care, and less peer contact after school seems to contribute to feelings of isolation and loneliness (Miller and Marx 1990).

However, Vandell and Corasaniti (1988) found middle-class third-graders in self care to be comparable to children solely in maternal care for school grades and test scores. ${ }^{1}$

While prior research indicates that self care is more prevalent in middle-childhood (e.g., Hofferth et al. 1991; Seppanen et al. 1993), it is of equal interest in the primary grades. Self care seems to be an established arrangement as early as 7 or 8 years of age (Seppanen et al. 1993 citing Divine-Hawkins 1992). It tends to increase during the school years, varying along maternal employment status (i.e., full versus part time) (Casper et al. 1994; Hofferth et al. 1991).

Several changes in family employment have contributed to an increasing demand for beforeand after-school care for children of all ages. The growing number of women in the labor force, as well as an increase in single parent families, impact the need for before- and after-school care by limiting the ability of parents to care for their children immediately before and after school (Hofferth et al. 1991; Seppanen et al. 1993).

This report contains information from the NHES:95 on the before- and after-school care arrangements of children in kindergarten through third grade. It examines characteristics of these arrangements that are of key public interestparticipation rates, average time spent in care, and out-of-pocket expenses.

First, this report describes children's overall participation in before- and/or after-school care by type of arrangement (i.e., home-based relative care, home-based nonrelative care, center-based care, and self care). Included in the description of care that takes place after school is an examination of the characteristics of children (e.g., race-ethnicity and grade level) and their families (e.g., mother's education and employment status) that have been shown to be related to participation rates in prior research (Casper et al. 1994; Hofferth et al. 1998; Hofferth et al. 1991; Seppanen et al. 1993).

Second, this report describes the amount of time primary school children spend in care on a weekly basis. The amount of time children under the age of 6 spend in care varies by such
characteristics as family type, maternal employment, and race-ethnicity (Hofferth et al. 1998). Time in care is a critical issue for schoolaged children, especially kindergartners, since a significant amount of their time is spent outside of school.

Finally, this report describes the out-of-pocket expense to families for before- and after-school care. Cost is one constraint on parents' decisions on the type of care chosen, and it varies by several child and family characteristics, including maternal employment, family type, and income. For example, families with higher incomes tend to pay more for care (Hofferth et al. 1991).

## National Data on Participation in Before- and After-School Care

The early childhood program participation component of the NHES was developed to collect information on children's experiences in a wide range of care settings, including their homes, the homes of others, and formal group settings. This component was first fielded in 1991 and repeated in 1995. However, the 1995 survey was the first to include significant information on the before- and after-school care of primary school children. Because parents are considered by definition to be their children's primary-care providers, the NHES does not include parents as providers of supplemental care. Instead, it seeks to provide data to estimate how many children receive care on a regular basis from persons other than their parents. ${ }^{2}$ [For a review of other national data on beforeand after-school care, see the Methodology and Technical Notes section at the end of this report.]

## Participation in Nonparental Before- and After-School Care by Grade

Children may receive before- and after-school care in home-based or in center-based settings. Home-based arrangements may take place in either 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, or in some cases, the child may be caring for himself or herself. Center-based
programs, on the other hand, provide children with care in a nonresidential setting. ${ }^{3}$

There are many ways of calculating children's participation rates in various before- and afterschool care arrangements. This report uses a prevalence rate that represents the percentage of children receiving 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 others or a 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.

During the spring of 1995, approximately 39 percent of kindergartners through third-graders were receiving some type of before- and/or after-school care on a weekly basis from persons other than their parents (table 1). This translates to more than 6.1 million primary school children. Overall, these children are more likely to spend time in nonparental care after school than before school. When in the care of someone other than their parents, they are most likely to be cared for by a relative and least likely to be cared for by a nonrelative. Overall, very few children care for themselves before and/or after school.

In general, part-day ${ }^{4}$ kindergartners participate in some form of nonparental care arrangements more than children in the first through third grades. With regard to care that takes place before school, 23 percent of part-day kindergartners receive some type of nonparental care in comparison to 15 percent of first-graders, 15 percent of second-graders, and 14 percent of third-graders. For after-school care, there is no significant difference between kindergartners and first- and second-graders.

Kindergartners are no more likely than firstthrough third-graders to be cared for by a relative before or after school. Part-day kindergartners are, however, more likely to be cared for by a nonrelative in a private home than first- through third-graders. This is true overall ( 15 percent versus 9 percent, each, for firstthrough third-graders) and for care taking place
after school ( 13 percent versus 8 percent, each, for first- through third-graders). Part-day
kindergartners are also more likely to be cared for by a nonrelative than first- and secondgraders ( 7 percent versus 4 percent, each, for first- and second-graders) before school. The differences in participation rates in nonrelative care between part-day and full-day kindergartners are not statistically significant. With regard to center-based care, there are no significant differences in participation rates between kindergartners, first-graders, and second-graders.

Only a small percentage of primary school children are in self care before or after school. Overall, 2 percent of first- through third-graders care for themselves. There are no significant differences in self care between second- and third-graders ( 2 and 3 percent, respectively). In 1990, the National Child Care Survey found that 2.2 percent of 5- to 7 -year-olds cared for themselves; thus the numbers found here are similar ( 2 percent of first- through thirdgraders).

## Participation in After-School Care by Child and Family Characteristics

As shown in table 1 , during the spring of 1995 the majority of nonparental care took place after school. Consequently, this report will focus on the after-school care arrangements of kindergartners through third-graders when discussing participation rates by child and family characteristics. ${ }^{5}$ However, information on participation rates for before-school care and for before- and after-school care combined can be found in tables A1 and A2 at the back of this report.

Black children are more likely to receive afterschool care than children of any other race or ethnicity. About 45 percent of black children, compared with 34 percent of white children and 31 percent of Hispanic children, receive care after school on a weekly basis from persons other than their parents (table 2). ${ }^{6}$

While participation in after-school care does not differ by household income, there are differences by family type. Children living with
only one parent or no parents ${ }^{7}$ are more likely than children living with both a mother and father to participate in an after-school care arrangement (48 percent compared to 30 percent).

Children whose mothers did not complete high school are less likely to receive after-school care (21 percent) than children whose mothers graduated from high school/earned a GED (34 percent), attended some college (38 percent), graduated from college ( 37 percent), or earned a graduate degree (46 percent).

Children are also more likely to participate in after-school care when their mothers work. About 61 percent of children whose mothers work full time ( 35 hours or more per week) and 31 percent of children whose mothers work part time (less than 35 hours per week) receive afterschool care on a weekly basis from a nonparental caregiver. In contrast, 9 percent of kindergartners through third-graders whose mothers are not in the workforce receive afterschool care from persons other than their parents.

## Participation in Different Types of AfterSchool Care by Child and Family Characteristics

The setting in which children receive care after school is related to children's race-ethnicity (table 2). Black (24 percent) and Hispanic (19 percent) children are more likely than white children ( 13 percent) to be in relative care, while they are less likely to be in nonrelative care (5 and 7 percent, respectively, versus 10 percent). Nineteen percent of black children are enrolled in a center-based program after school-an enrollment rate greater than that of both white (12 percent) and Hispanic (7 percent) children (rates which are, respectively, also significantly different from each other).

Differences in children's after-school care participation rates are also related to household income. Eight percent of children living in households with annual incomes of more than $\$ 75,000$ are cared for by a relative after school. This participation rate is significantly less than
the rates for children in all other income groups, except for those children in the $\$ 50,001$ to $\$ 75,000$ group. Children living in households with an annual income of $\$ 10,000$ or less are less likely to be cared for by a nonrelative in a private home than children in all income groups, except for those in the $\$ 20,001$ to $\$ 30,000$ group. With regard to care taking place in a center-based setting, children living in households with incomes over $\$ 50,000$ are more likely than children living in households with incomes of $\$ 50,000$ or less to be enrolled in a center-based program after school, except for those living in households with incomes between $\$ 30,001$ and $\$ 40,000$.

Children living in two parent families are less likely than children living with one parent or with no parents to be cared for after school by a relative ( 12 percent versus 24 percent) or to be enrolled in a center-based program (11 percent versus 17 percent).

A mother's education is also significantly related to children's participation in nonparental after-school care arrangements. Children whose mothers did not graduate from high school are less likely than those whose mothers graduated from high school or attended some college to be cared for by either a relative ( 12 percent versus 18 and 17 percent, respectively) or a nonrelative (3 percent versus 8 and 10 percent, respectively) after school. Fewer children whose mothers graduated from college with a Bachelor's or an advanced degree (11 and 9 percent, respectively) are cared for by a relative after school than children whose mothers graduated from high school or attended some college (18 and 17 percent, respectively). The difference in participation rates for nonrelative care is also significant for children whose mothers graduated from high school ( 8 percent) and those whose mothers obtained an advanced degree (14 percent). Children whose mothers did not graduate from high school are also less likely to be cared for by a nonrelative after school than children whose mothers graduated from college with a Bachelor's or an advanced degree.

Finally, in regard to participation in center-based care programs, there are also several significant differences by a mother's education. Children
whose mothers obtained an advanced degree are more likely than children whose mothers did not obtain at least a Bachelor's degree to attend a center-based program after school. Similarly, children whose mothers obtained a Bachelor's degree are also more likely than children whose mothers did not attend school beyond high school to participate in a center-based program, and children whose mothers attended some college are more likely than children whose mothers did not graduate from high school to participate in a center-based after-school care program ( 13 percent versus 7 percent).

With few exceptions, all comparisons of participation rates between children by mother's employment status are significant. Children whose mothers work 35 hours or more per week are the most likely, while children whose mothers are not in the labor force are the least likely, to spend time with a nonparental caregiver after school, regardless of who provides the care or the setting in which the care takes place.

## Average Number of Hours Children Spend in Nonparental Care Per Week

The NHES:95 collected information on the number of hours per week children spend in nonparental care. As respondents were not asked to distinguish time spent in care before school versus time spent in care after school, the data on average hours presented in this report are for the combined total of time spent in nonparental care before and after school. Children who did not spend any time with a nonparental caregiver on a weekly basis are excluded from this discussion.

Kindergartners through third-graders participating in care spend an average of 14 hours per week being cared for by someone other than their parents, either before or after school (table 3). Some first-, second-, and thirdgraders care for themselves before or after school 1 or more days a week. On the average, this self care takes place about 5 hours a week.

When all types of care arrangements are considered, both part-day (20 hours) and full-
day (15 hours) kindergartners spend more time than first-, second-, and third-graders ( 12 hours, 13 hours, and 13 hours, respectively) in nonparental care before and after school. However, when the settings and types of caregivers are examined separately, only the average hours spent in nonparental care by partday kindergartners are significantly greater than those of first- through third- graders.

Overall, white children (13 hours) spend less time than black or Hispanic children (16 and 15 hours, respectively) in nonparental care. Black children (18 hours) spend more time than Hispanic and white children (14 and 12 hours, respectively) in relative care arrangements. On the other hand, white children ( 12 hours) spend less time in nonrelative care arrangements than Hispanic children (17 hours) and more time in center-based before and after school care programs than black children (13 versus 11 hours).

When all types of arrangements are considered, children from lower income households spend more hours per week in nonparental care arrangements than children from higher income households. However, when looking at hours by type of arrangement, there are no statistically significant trends.

Kindergartners through third-graders who reside with only one parent or with no parents spend more hours per week in nonparental care arrangements than children living with two parents (16 hours versus 12 hours). This difference remains significant when looking at children participating in relative care and nonrelative care arrangements individually (16 versus 12 hours and 14 versus 12 hours, respectively).

While hours spent in care do not significantly vary by a mother's education, they do differ by a mother's employment status. Children whose mothers work full time ( 35 hours or more per week) spend more time in nonparental beforeand after-school care arrangements than children whose mothers work part time or are not in the labor force ( 15 hours versus 11 and 11 hours, respectively). Only the difference between children whose mothers work full time and those
whose mothers work part time remains significant when each type of care is considered individually (i.e., 14 hours versus 12 hours in relative care, 14 hours versus 8 hours in nonrelative care, and 13 hours versus 10 hours in a center-based program).

## Average Cost of Nonparental Care Per Week

The out-of-pocket cost for families of beforeand after-school care varies widely. Obviously, differences in the amount charged for care by care providers are a major source of the variation. Yet, there are also differences because some care providers do not charge a fee (e.g., grandparents and older siblings) and some families do not have to pay for all or a portion of the care because it is covered or subsidized by someone else (e.g., a local government agency or an employer). Because NHES:95 only collected data on families' out-of-pocket cost for nonparental care, the discussion of average cost of care in this report will be limited to families who pay for at least part of their child's beforeand after-school care. Children who did not spend any time with a nonparental caregiver on a weekly basis are excluded from this discussion.

Families who pay for the nonparental care of their kindergartners through third-graders spend an average of $\$ 33.00$ a week for before- and after-school care (table 4). Families pay less for relative care than they do for care in centerbased programs. This difference would most likely be even larger if free care was included in the cost estimates, because a larger percentage of relative care arrangements have no cost for parents. To include this free care would dramatically decrease the average cost of relative care, making the difference in cost between types even more striking.

There are not a lot of differences in cost of care by child and family characteristics. In fact, no significant differences are found when looking at children's race-ethnicity or their family type. When looking at children's grade in school, there are, however, some differences by grade in the average weekly cost of center-based programs. With an average expenditure of
$\$ 51.00$ per week, families of part-day kindergartners pay more for care than families of full-day kindergartners (\$33.00), first-graders ( $\$ 30.00$ ), second-graders ( $\$ 27.00$ ), and thirdgraders ( $\$ 30.00$ ). Most likely, this difference is due to the fact that part-day kindergartners spend more hours a week in nonparental care arrangements because they spend fewer hours a week in school.

Parents of children living in households with annual incomes of more than $\$ 75,000$ spend more for care per week than parents of children living in households with incomes between $\$ 10,000$ and $\$ 50,000$. While it appears that high income households (i.e., more than $\$ 75,000$ ) pay more for care than households with annual incomes of $\$ 10,000$ or less ( $\$ 55.00$ a week versus $\$ 31.00$ ), the difference is not statistically significant.

If a child's mother graduated from college, his or her family spends more for center-based care per week than the families of children whose mothers did not attend school beyond high school ( $\$ 40.00$ a week versus $\$ 28.00$ a week).

When all care types are considered, families of children whose mothers work full time spend more per week for nonparental care than families of children whose mothers only work part time ( $\$ 35.00$ versus $\$ 25.00$ ). This is almost exactly as reported by Hofferth et al. (1991).

## Summary

In general, part-day kindergartners receive before- and after-school care more than children in first through third grade. Participation decreases slightly as children progress through primary school. More children, overall, receive care after school than before and in home-based relative care than in either home-based nonrelative or center-based arrangements. For home-based arrangements, the differences in participation rates between relative and nonrelative care vary depending on the characteristics of children and their families. Children who are members of a racial-ethnic minority group, who do live in households with annual incomes of less than $\$ 75,000$, or whose
mothers have a high school diploma or attended some college are more likely to be cared for by relatives after school. Children who live in households with annual incomes of $\$ 30,000$ or more, or who are white, are more likely to be cared for by nonrelatives after school. Participation in nonrelative care after school also varies by maternal education; children whose mothers have at least a high school education are more likely to be cared for by a nonrelative after school than those whose mothers did not graduate from high school. Children's participation in center-based programs after school increases with household income and mother's education. Children who do not live with two parents or who have mothers employed full time participate more in after-school care than children who live with two parents or whose mothers are not in the labor force. And while self care occurs rarely with primary school children, it increases as children get older.

Time in nonparental care before and after school and the cost of this care also vary by the characteristics of children and their families. Part-day kindergartners spend more time in care overall than other primary school children (including full-day kindergartners), most likely because they are in school fewer hours per week. Children who are members of a racial-ethnic minority group, who do not live with two parents, or who have mothers who are employed full time are more likely to spend a greater number of hours in nonparental care than children who live with two parents, who are not members of a racial-ethnic minority group, or whose mothers work part time or are not in the labor force at all. Time spent in care does not vary by mother's education. With regard to cost, families pay less for relative care than for center-based care. The cost of center-based care varies by grade with more dollars per week spent on the care of part-day kindergartners than other primary school children. Children who live in higher income households (more than $\$ 75,000$ ) or whose mothers work full time spend more money on nonparental care, while no differences exist in the cost of care by the raceethnicity or family type.

This report presents descriptive data on the participation of primary school children in
before- and after-school care. The NHES:95 data, however, can be used to answer other questions about before- and after-school care and its relationship to a wide range of child and family characteristics. For example, the differences in participation by race-ethnicity may be related to the number of black children living in single parent families where the mother, as the sole provider, is required to work more hours (U.S. Department of Health and Human Services 1998). Data from NHES:95 can be used to answer the question, are black children more likely to receive after-school care because they are more likely to live in single parent homes? And regardless of race-ethnicity, are children in single parent families more likely to have a parent who is employed full time, impacting the type of care used, the number of hours children spend in care, and the cost of the care? Another area that can be further investigated with this national data set are the differences in before- and after-school participation across levels of maternal education. These differences may be in part related to differences in employment status of women with more or less education. Not only are mothers with a higher level of education more likely to be in the labor force, but they are more likely to be working full time and at a higher level of pay (Rindfuss, Morgan, and Offutt 1996; Women's Bureau 1999). These differences may relate to the number of children requiring care before or after school, the number of hours in care, and the type of care chosen based on its affordability and other factors. Finally, NHES:95 data can be used to answer questions about public and private before- and after-school care. For example, what percentage of children receive before- and/or after-school care from public versus private providers? What are the characteristics of children and families who receive care from private as compared to public providers? These questions and those cited above represent only a small sample of the diverse questions that can be addressed with this national data set in order to further describe the care of primary school children before and after school.

## Methodology and Technical Notes

## Survey Methodology

NHES is a random-digit-dial (RDD) telephone survey conducted by Westat, Inc. for NCES. It collects data on high priority topics on a rotating basis using computer-assisted telephone interviewing (CATI) technology. The sample is drawn from the civilian, noninstitutionalized population in households with telephones in the 50 states and the District of Columbia.

Data collection for the NHES:95 took place between January and April of 1995. A screener interview was conducted with an adult member of the household and was used (1) to determine whether any children of the appropriate ages lived in the household, (2) to collect information on each household member, and (3) to identify the parent/guardian most knowledgeable about the care and education of each sampled child. If more than two eligible children resided in a household, two children were sampled as interview subjects. Children who were enrolled in transitional kindergarten, kindergarten, and prefirst grade were assigned a higher probability of selection.

The Early Childhood Program Participation (ECPP) component of the NHES:95 sampled 0to 10-year-olds who were not yet in fourth grade. Since the sample for the ECPP interviews was drawn from households with telephones, the 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. ${ }^{8}$

## Response Rates

The NHES:95 completed screening interviews with 45,465 households, of which 11,042 contained at least one child eligible for the ECPP component of the survey. The response rate for the screener was 73.3 percent. The completion rate for the ECPP interview was 90.4
percent, or 14,064 interviews. Thus, the overall response rate for the ECPP interview was 66.3 percent (the product of the screener response rate and the ECPP completion rate). This report is based on children enrolled in kindergarten through third grade. The number of interviews included in this analysis is 6,396 .

The 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 for income which has an item nonresponse rate of 14 percent). Missing responses to all items were imputed, and imputations were done using a procedure called a hot-deck.

## Data Reliability

Estimates produced using data from surveys are subject to two types of errors, 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.

## Nonsampling Errors

Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations and data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, the differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, and mistakes in data preparation.

In general, it is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. In the NHES:95, efforts were made to prevent such errors from occurring and to compensate for them where possible. These efforts included the use of focus groups and cognitive laboratory interviews when designing the survey instruments, extensive testing of the CATI system, and a two-phase
pretest with approximately 870 households (759 in the first phase and 111 in the second phase).

An important nonsampling error for a telephone survey is the failure to include persons who do not live in households with telephones. Estimation procedures were used to help reduce the bias in the estimates associated with children who do not live in telephone households.

## Sampling Errors

The sample of telephone households selected for the NHES:95 is just one of many possible samples that could have been selected. Therefore, estimates produced from this sample may differ from estimates that would have been produced from other samples. This type of variability is called sampling error, because it arises from using a sample of households with telephones, rather than all households with telephones.

The standard error is a measure of the variability due to sampling when estimating a statistic. Standard errors for estimates presented in this report were computed using a jacknife replication method. Standard errors 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 1 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 is about 95 percent.

The standard errors found in the tables of this report can be used to produce confidence intervals. For example, an estimated 24 percent of black children are cared for after school by a relative. This figure has an estimated standard error of 1.8. Therefore, the estimated 95 percent confidence interval for this statistic is approximately 20.5 to 27.5 percent.

The significance of differences cited in this report for the participation rates, average hours per week spent in care, and average cost for care per week were tested using student's $\boldsymbol{t}$ statistic. All the differences cited in this report are
significant at the 0.05 level of significance with a Bonferroni adjustment procedure used to correct the significance tests for multiple comparisons. Statistical tests were conducted using unrounded numbers.

Regressions were used to test trends across income and education categories (e.g., does percent participation increase with mother's education level). Where needed, the given participation percentage was the dependent variable and the relative child/family characteristic was the independent variable. Also, no transformations were performed on the data.

## Other National Data on Participation in Before- and After-School Care

National statistics on before- and after-school care usually comes from two sources: (1) surveys of child care providers and (2) household surveys of child care users. Few national surveys of child care providers exist and even fewer focus on before- and after-school care. The last provider survey to examine before and after care was the National Study of Before and After School Programs, conducted in 1991 (Seppanen et al., 1993). This survey reviewed programs based in or operated by public and private schools, churches, youth organizations, and independently licensed centers. It did not, however, include home-based care settings. NCES' Schools and Staffing Survey (SASS) provides rates of student participation in public and private schools' extended day programs. It has been conducted for 3 school years, 1987-88, 1990-91, and 1993-1994; a new collection is planned for the 1999-2000 school year. The SASS focuses on only one subset of centerbased programs, those in public and private schools with a first grade or above, and does not include care provided in private homes.

In addition to provider surveys, several national household surveys collect data on before- and after-school care arrangements. Among these are the U.S. Bureau of the Census' Survey of Income and Program Participation (SIPP) and the National Child Care Study (NCCS). The SIPP routinely collects data from mothers on
their children's child care arrangements. It examines participation in center-based and home-based arrangements and includes parental care and school as options. Historically, the SIPP concentrates on the care children receive while their mothers are at work or in school, so it does not include children of all mothers. This changed in 1996 when information on care was collected regardless of mother's employment status. The NCCS was a one-time survey conducted in 1990. Its parent survey focused on child care arrangements, regardless of maternal employment, that regularly substituted for maternal care. For school-aged children, this care consisted of several nonschool arrangements, including parental care if no other arrangement existed. While the NCCS obtained a complete schedule of care arrangements that allows the examination of before- and afterschool arrangements separately, these data have not been reported. The SIPP, however, does not distinguish arrangements for before school from those for after school.

NCES' National Household Education Survey (NHES) contributes to national statistics on before- and after-school care by examining the care children receive, regardless of parental activity while in this care. Furthermore, the NHES directly examines the care primary school children receive before and/or after school by asking whether a particular arrangement occurs before school, after school, or both, before and after school. The early childhood program participation component of the NHES is scheduled to be repeated in 2001.

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## Endnotes

${ }^{1}$ For a more extensive review on the influence of early child care and education programs on children's development, refer to Hofferth et al. (1998) or Seppanen et al. (1993).
${ }^{2}$ Throughout this report, parents represent biological, adoptive, step, and foster parents.
${ }^{3}$ In this report, center-based programs refers to all nonresidential care programs, including those programs located in or sponsored by a public or private school, a church, or an employer, or they may be independent.
${ }^{4}$ In this report, part-day kindergarten programs include those identified as morning only or afternoon only programs.
${ }^{5}$ The characteristics discussed are likely to be highly interrelated. While acknowledging this, this report will look at each separately when examining the relationship between child and family characteristics and before- and afterschool care.
${ }^{6}$ If an interviewer contacted an individual who preferred to conduct the interview in Spanish, a Spanish speaking interviewer and survey instrument were used. Also, in this report, the terms "white" and "black" are used to describe "white, non-Hispanic" and "black, nonHispanic" children.

7 "No parents" includes children living with one or more nonparental guardians (e.g., grandparents, siblings).
${ }^{8}$ Additional information pertaining to the ECPP survey component is provided in Collins et al. (1996).

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Table 1.-Percentage of children in kindergarten through third grade participating in before- and after-school care on a weekly basis, by type of arrangement and grade: 1995

| Grade | Children |  | Type of nonparental care arrangement ${ }^{1}$ |  |  |  |  |  |  |  |  |  | No nonparental care arrangement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total |  | In relative care |  | In nonrelative care |  | In center-based program |  | Self care ${ }^{2}$ |  |  |  |
|  | Number (in thousands) | Percent | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. |
| Kindergarten - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 15,663 | 100 | 39 | 0.7 | 17 | 0.5 | 10 | 0.5 | 14 | 0.5 | 2 | 0.2 | 61 | 0.7 |
| Before school |  |  | 16 | 0.5 | 6 | 0.3 | 5 | 0.3 | 5 | 0.3 | N/A | N/A | 84 | 0.5 |
| After school |  |  | 35 | 0.7 | 16 | 0.5 | 9 | 0.4 | 13 | 0.5 | N/A | N/A | 65 | 0.7 |
| Kindergarten Part day |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 2,082 | 13 | 43 | 1.7 | 15 | 1.4 | 15 | 1.4 | 16 | 1.5 | N/A | N/A | 57 | 1.7 |
| Before school |  |  | 23 | 1.5 | 8 | 1.0 | 7 | 0.8 | 8 | 1.1 | N/A | N/A | 77 | 1.5 |
| After school |  |  | 40 | 1.7 | 13 | 1.4 | 13 | 1.4 | 15 | 1.4 | N/A | N/A | 60 | 1.7 |
| Full day |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,982 | 13 | 42 | 1.8 | 18 | 1.2 | 11 | 0.9 | 17 | 1.3 | N/A | N/A | 58 | 1.8 |
| Before school |  |  | 18 | 1.3 | 6 | 0.8 | 5 | 0.7 | 7 | 0.8 | N/A | N/A | 82 | 1.3 |
| After school |  |  | 40 | 1.8 | 17 | 1.2 | 10 | 0.8 | 16 | 1.3 | N/A | N/A | 60 | 1.8 |
| First grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 3,935 | 25 | 38 | 1.2 | 16 | 1.1 | 9 | 0.7 | 14 | 1.1 | - | - | 62 | 1.2 |
| Before school |  |  | 15 | 1.0 | 6 | 0.7 | 4 | 0.5 | 5 | 0.6 | N/A | N/A | 85 | 1.0 |
| After school |  |  | 35 | 1.3 | 15 | 1.1 | 8 | 0.6 | 13 | 1.1 | N/A | N/A | 65 | 1.3 |
| Second grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 3,716 | 24 | 39 | 1.3 | 18 | 1.0 | 9 | 0.9 | 13 | 1.1 | 2 | 0.4 | 61 | 1.3 |
| Before school |  |  | 15 | 1.0 | 6 | 0.5 | 4 | 0.5 | 4 | 0.8 | N/A | N/A | 85 | 1.0 |
| After school |  |  | 35 | 1.3 | 17 | 1.1 | 8 | 0.8 | 12 | 1.0 | N/A | N/A | 65 | 1.3 |
| Third grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 3,947 | 25 | 36 | 1.4 | 16 | 0.9 | 9 | 1.0 | 12 | 0.9 | 3 | 0.5 | 64 | 1.4 |
| Before school |  |  | 14 | 1.1 | 5 | 0.7 | 5 | 0.6 | 4 | 0.5 | N/A | N/A | 86 | 1.1 |
| After school |  |  | 32 | 1.3 | 15 | 0.9 | 8 | 0.9 | 11 | 0.8 | N/A | N/A | 68 | 1.3 |

${ }^{1}$ Columns do not add up to total because some children participated in more than one type of nonparental arrangement.
${ }^{2}$ The item regarding self care was not asked of respondents whose sampled child was in kindergarten, and information on self care is not available separately for before- and after-school care. NOTE: - indicates that the estimate has been suppressed because it is based on fewer than 30 cases, and details may not add to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring 1995.

Table 2. -Percentage of children in kindergarten through third grade participating in after-school care on a weekly basis, by type of arrangement and child and family characteristics: 1995

| Characteristic | Children |  | Type of nonparental care arrangement ${ }^{1}$ |  |  |  |  |  |  |  | No nonparental care arrangement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total |  | In relative care |  | In nonrelative care |  | In center-based program |  |  |  |
|  | Number <br> (in thousands) | Percent | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. |
| Total | 15,663 | 100 | 35 | 0.7 | 16 | 0.5 | 9 | 0.4 | 13 | 0.5 | 65 | 0.7 |
| Race-ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White, non-Hispanic | 10,637 | 68 | 34 | 0.9 | 13 | 0.6 | 10 | 0.6 | 12 | 0.5 | 66 | 0.9 |
| Black, non-Hispanic | 2,318 | 15 | 45 | 2.0 | 24 | 1.8 | 5 | 0.8 | 19 | 1.6 | 55 | 2.0 |
| Hispanic | 1,928 | 12 | 31 | 1.7 | 19 | 1.4 | 7 | 1.0 | 7 | 0.9 | 69 | 1.7 |
| Other | 780 | 5 | 34 | 3.9 | 12 | 1.8 | - | - | 18 | 3.4 | 66 | 3.9 |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 2,758 | 18 | 31 | 2.0 | 18 | 1.7 | 5 | 1.0 | 10 | 1.5 | 69 | 2.0 |
| \$10,001 to \$20,000 | 1,938 | 12 | 33 | 1.7 | 18 | 1.5 | 9 | 1.2 | 10 | 1.0 | 67 | 1.7 |
| \$20,001 to \$30,000 | 2,563 | 16 | 35 | 1.8 | 18 | 1.3 | 7 | 0.9 | 10 | 1.1 | 65 | 1.8 |
| \$30,001 to \$40,000 | 2,332 | 15 | 37 | 1.9 | 17 | 1.1 | 10 | 1.0 | 12 | 1.3 | 63 | 1.9 |
| \$40,001 to \$50,000 | 1,774 | 11 | 36 | 2.2 | 15 | 1.6 | 11 | 1.4 | 11 | 1.3 | 64 | 2.2 |
| \$50,001 to \$75,000 | 2,457 | 16 | 39 | 1.5 | 13 | 1.3 | 10 | 1.0 | 18 | 1.3 | 61 | 1.5 |
| More than \$75,000 | 1,841 | 12 | 38 | 2.0 | 8 | 1.1 | 11 | 1.2 | 20 | 1.5 | 62 | 2.0 |
| Family type |  |  |  |  |  |  |  |  |  |  |  |  |
| Two parents | 11,202 | 72 | 30 | 0.7 | 12 | 0.5 | 8 | 0.5 | 11 | 0.5 | 70 | 0.7 |
| One or no parents | 4,460 | 28 | 48 | 1.5 | 24 | 1.4 | 10 | 0.9 | 17 | 1.1 | 52 | 1.5 |
| Mother's education ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 1,968 | 13 | 21 | 1.7 | 12 | 1.5 | 3 | 0.6 | 7 | 1.2 | 79 | 1.7 |
| High school/GED | 5,496 | 36 | 34 | 1.2 | 18 | 0.9 | 8 | 0.8 | 10 | 0.7 | 66 | 1.2 |
| Vocational/technical or some college | 4,491 | 30 | 38 | 1.3 | 17 | 1.2 | 10 | 0.8 | 13 | 1.0 | 62 | 1.3 |
| College graduate | 2,325 | 15 | 37 | 2.2 | 11 | 1.2 | 10 | 1.4 | 17 | 1.5 | 63 | 2.2 |
| Graduate or professional degree | 941 | 6 | 46 | 2.7 | 9 | 1.6 | 14 | 1.6 | 25 | 2.7 | 54 | 2.7 |
| Mother's employment status ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 6,046 | 40 | 61 | 1.2 | 25 | 0.9 | 15 | 0.8 | 23 | 0.9 | 39 | 1.2 |
| Less than 35 hours per week | 3,258 | 21 | 31 | 1.5 | 15 | 1.1 | 9 | 1.0 | 9 | 0.9 | 69 | 1.5 |
| Looking for work | 817 | 5 | 20 | 2.7 | - | - | - | - | 9 | 1.6 | 80 | 2.7 |
| Not in labor force | 5,100 | 34 | 9 | 0.9 | 5 | 0.7 | 2 | 0.4 | 3 | 0.6 | 91 | 0.9 |

${ }^{1}$ Columns do not add up to total because some children participated in more than one type of nonparental arrangement.
${ }^{2}$ Children without mothers are not included in estimates dealing with mother's education or mother's employment status.
NOTE: - indicates that the estimate has been suppressed because it is based on fewer than 30 cases, and details may not add to total due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring 1995.

Table 3.-Average number of hours children in kindergarten through third grade spend in before- and after-school care on a weekly basis, by type of arrangement and child and family characteristics: $1995{ }^{1}$

| Characteristic | Children |  | Type of nonparental care arrangement |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total |  | In relative care |  | In nonrelative care |  | In center-based program |  | Self care ${ }^{2}$ |  |
|  | Number (in thousands) | Percent | Avg. <br> hours | s.e. | Avg. <br> hours | s.e. | Avg. hours | s.e. | Avg. <br> hours | s.e. | Avg. <br> hours | s.e. |
| Total | 5,548 | 100 | 14 | 0.3 | 14 | 0.4 | 13 | 0.5 | 12 | 0.3 | 5 | 0.9 |
| Grade |  |  |  |  |  |  |  |  |  |  |  |  |
| Kindergarten |  |  |  |  |  |  |  |  |  |  |  |  |
| Part day | 823 | 15 | 20 | 0.6 | 18 | 1.1 | 16 | 0.9 | 21 | 0.8 | N/A | N/A |
| Full day | 797 | 14 | 15 | 0.7 | 15 | 1.3 | 13 | 1.0 | 13 | 0.8 | N/A | N/A |
| First grade | 1,366 | 25 | 12 | 0.4 | 13 | 0.7 | 12 | 0.9 | 11 | 0.5 | - | - |
| Second grade | 1,289 | 23 | 13 | 0.4 | 13 | 0.7 | 12 | 0.9 | 10 | 0.5 | 6 | 1.8 |
| Third grade | 1,273 | 23 | 12 | 0.5 | 13 | 0.9 | 11 | 0.8 | 10 | 0.5 | 5 | 1.2 |
| Race-ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White, non-Hispanic | 3,634 | 65 | 13 | 0.3 | 12 | 0.5 | 12 | 0.5 | 13 | 0.4 | 5 | 1.2 |
| Black, non-Hispanic | 1,040 | 19 | 16 | 0.7 | 18 | 1.0 | 14 | 1.4 | 11 | 0.7 | - | - |
| Hispanic | 607 | 11 | 15 | 0.6 | 14 | 0.8 | 17 | 1.5 | 13 | 1.0 | - | - |
| Other | 267 | 5 | 16 | 1.5 | 18 | 2.4 | - | - | 13 | 1.5 | - | - |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 851 | 15 | 14 | 0.9 | 14 | 1.0 | 13 | 1.5 | 13 | 1.5 | - | - |
| \$10,001 to \$20,000 | 644 | 12 | 17 | 0.7 | 16 | 1.1 | 15 | 1.3 | 14 | 1.1 | - | - |
| \$20,001 to \$30,000 | 891 | 16 | 15 | 0.6 | 15 | 0.9 | 14 | 1.3 | 12 | 0.7 | - | - |
| \$30,001 to \$40,000 | 864 | 16 | 14 | 0.6 | 13 | 0.8 | 12 | 0.8 | 12 | 0.8 | - | - |
| \$40,001 to \$50,000 | 635 | 11 | 13 | 0.7 | 12 | 0.7 | 15 | 1.6 | 13 | 1.0 | - | - |
| \$50,001 to \$75,000 | 958 | 17 | 12 | 0.5 | 13 | 1.1 | 9 | 0.7 | 13 | 0.6 | - | - |
| More than \$75,000 | 705 | 13 | 13 | 0.5 | 13 | 1.2 | 13 | 1.3 | 12 | 0.7 | - | - |
| Family type |  |  |  |  |  |  |  |  |  |  |  |  |
| Two parents | 3,418 | 62 | 12 | 0.3 | 12 | 0.3 | 12 | 0.5 | 12 | 0.4 | 5 | 1.1 |
| One or no parents | 2,130 | 38 | 16 | 0.5 | 16 | 0.7 | 14 | 0.8 | 13 | 0.6 | 6 | 1.6 |
| Mother's education ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 410 | 7 | 15 | 1.1 | 15 | 1.3 | 15 | 1.9 | 13 | 1.8 | - | - |
| High school/GED | 1,872 | 34 | 14 | 0.4 | 13 | 0.6 | 14 | 0.7 | 12 | 0.6 | 5 | 1.4 |
| Vocational/technical or some college | 1,726 | 31 | 14 | 0.4 | 14 | 0.6 | 12 | 0.8 | 13 | 0.5 | - | - |
| College graduate | 864 | 16 | 13 | 0.6 | 13 | 1.1 | 11 | 1.1 | 12 | 0.7 | - | - |
| Graduate or professional degree | 433 | 8 | 13 | 0.7 | 14 | 1.6 | 11 | 1.2 | 11 | 0.9 | - | - |
| Mother's employment status ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 3,694 | 67 | 15 | 0.3 | 14 | 0.4 | 14 | 0.5 | 13 | 0.3 | 6 | 1.4 |
| Less than 35 hours per week | 1,005 | 18 | 11 | 0.4 | 12 | 0.6 | 8 | 0.6 | 10 | 1.0 | - | - |
| Looking for work | 164 | 3 | 15 | 1.6 | - | - | - | - | 11 | 1.4 | - | - |
| Not in labor force | 440 | 8 | 11 | 0.9 | 11 | 1.5 | 9 | 1.9 | 10 | 1.3 | - | - |

${ }^{1}$ The averages presented in the table are based only on those children receiving nonparental care.
${ }^{2}$ The item regarding self care was not asked of respondents whose sampled child was in kindergarten.
${ }^{3}$ Children without mothers are not included in estimates dealing with mother's education or mother's employment status
NOTE: - indicates that the estimate has been suppressed because it is based on fewer than 30 cases, and details may not add to total due to rounding
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring 1995.

Table 4.-Average weekly cost for nonparental before- and after-school care occurring on a weekly basis for children in kindergarten through third grade, by type of arrangement and child and family characteristics: $\mathbf{1 9 9 5}^{1}$

| Characteristic | Children |  | Type of nonparental care arrangement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total |  | In relative care |  | In nonrelative care |  | In center-based program |  |
|  | $\begin{gathered} \text { Number } \\ \text { (in thousands) } \end{gathered}$ | Percent | Avg. cost | s.e. | Avg. cost | s.e. | Avg. cost | s.e. | Avg. cost | s.e. |
| Total | 2,482 | 100 | \$32.81 | 1.72 | \$25.71 | 1.72 | \$33.43 | 3.59 | \$33.50 | 1.73 |
| Grade |  |  |  |  |  |  |  |  |  |  |
| Kindergarten |  |  |  |  |  |  |  |  |  |  |
| Part day | 473 | 19 | 38.35 | 2.61 | 26.18 | 4.27 | 30.77 | 2.23 | 50.78 | 4.87 |
| Full day | 356 | 14 | 37.43 | 5.37 | - | - | 40.82 | 12.29 | 32.96 | 3.10 |
| First grade | 590 | 24 | 31.40 | 2.17 | 26.61 | 2.89 | 33.71 | 5.50 | 30.37 | 2.30 |
| Second grade | 554 | 22 | 31.60 | 3.50 | 21.17 | 2.68 | 39.08 | 8.81 | 26.62 | 2.31 |
| Third grade | 509 | 21 | 27.40 | 2.11 | 24.88 | 3.88 | 24.58 | 2.88 | 30.18 | 3.14 |
| Race-ethnicity |  |  |  |  |  |  |  |  |  |  |
| White, non-Hispanic | 1,826 | 73 | 33.55 | 2.20 | 22.21 | 2.44 | 34.56 | 4.27 | 34.66 | 1.80 |
| Black, non-Hispanic | 273 | 11 | 29.10 | 2.48 | 30.50 | 3.33 | - | - | 27.07 | 3.39 |
| Hispanic | 239 | 10 | 28.87 | 1.94 | 28.78 | 3.11 | 25.45 | 1.67 | 31.49 | 5.25 |
| Other | 145 | 6 | 36.96 | 6.58 | - | - | - | - | 33.04 | 8.29 |
| Income |  |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 251 | 10 | 30.61 | 4.57 | 28.03 | 3.74 | - | - | - | - |
| \$10,001 to \$20,000 | 255 | 10 | 26.90 | 2.58 | 23.44 | 4.71 | 26.15 | 3.86 | 29.33 | 3.71 |
| \$20,001 to \$30,000 | 359 | 14 | 24.40 | 2.16 | 19.49 | 3.02 | 23.89 | 4.50 | 27.86 | 3.40 |
| \$30,001 to \$40,000 | 385 | 16 | 28.99 | 3.08 | 24.42 | 3.88 | 26.47 | 3.89 | 32.29 | 5.10 |
| \$40,001 to \$50,000 | 266 | 11 | 27.17 | 1.99 | - | - | 27.73 | 2.81 | 24.89 | 2.39 |
| \$50,001 to \$75,000 | 557 | 22 | 31.19 | 1.68 | 29.37 | 4.18 | 23.63 | 1.63 | 36.60 | 2.73 |
| More than \$75,000 | 409 | 16 | 54.71 | 7.68 | - | - | 67.95 | 17.49 | 40.66 | 3.13 |
| Family type |  |  |  |  |  |  |  |  |  |  |
| Two parents | 1,780 | 72 | 33.10 | 2.20 | 24.53 | 2.26 | 33.82 | 4.35 | 33.64 | 1.83 |
| One or no parents | 703 | 28 | 32.09 | 2.31 | 27.46 | 2.85 | 32.23 | 4.35 | 33.12 | 4.10 |
| Mother's education ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 126 | 5 | 24.47 | 4.06 | - | - | - | - | - | - |
| High school/GED | 769 | 31 | 28.67 | 1.98 | 26.84 | 2.81 | 28.54 | 3.62 | 28.47 | 2.57 |
| Vocational/technical or some college | 755 | 30 | 28.27 | 1.82 | 19.79 | 2.08 | 24.39 | 2.60 | 35.02 | 2.98 |
| College graduate | 492 | 20 | 37.22 | 2.62 | 28.32 | 4.82 | 33.82 | 4.98 | 40.46 | 3.19 |
| Graduate or professional degree | 247 | 10 | 52.07 | 12.37 | - | - | 75.76 | 28.55 | 27.71 | 3.36 |
| Mother's employment status ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 1,724 | 69 | 35.24 | 2.06 | 27.06 | 2.23 | 38.23 | 5.21 | 33.68 | 1.73 |
| Less than 35 hours per week | 482 | 19 | 24.92 | 2.73 | 18.74 | 3.10 | 24.86 | 4.21 | 27.19 | 4.54 |
| Looking for work | - | - | - | - | - | - | - | - | - | - |
| Not in labor force | 128 | 5 | 25.78 | 4.26 | - | - | - | - | - | - |

${ }^{1}$ The averages presented in the table are based only on those children receiving nonparental care. The averages also exclude families who do not pay for nonparental care.
${ }^{2}$ Children without mothers are not included in estimates dealing with mother's education or mother's employment status.
NOTE: - indicates that the estimate has been suppressed because it is based on fewer than 30 cases, and details may not add to total due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring 1995.

Table A1.-Percentage of children in kindergarten through third grade participating in before- and after-school care on a weekly basis, by type of arrangement and child and family characteristics: 1995

| Characteristic | Children |  | Type of nonparental care arrangement ${ }^{1}$ |  |  |  |  |  |  |  |  |  | No nonparental care <br> arrangement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number(in thousands) | Percent | Total |  | In relative care |  | In nonrelative care |  | In center-based program |  | Self care ${ }^{2}$ |  |  |  |
|  |  |  | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. | Percent | s.e. |
| Total | 15,663 | 100 | 39 | 0.7 | 17 | 0.5 | 10 | 0.5 | 14 | 0.5 | 2 | 0.2 | 61 | 0.7 |
| Grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kindergarten |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part day | 2,082 | 13 | 43 | 1.7 | 15 | 1.4 | 15 | 1.4 | 16 | 1.5 | N/A | N/A | 57 | 1.7 |
| Full day | 1,982 | 13 | 42 | 1.8 | 18 | 1.2 | 11 | 0.9 | 17 | 1.3 | N/A | N/A | 58 | 1.8 |
| First grade | 3,635 | 25 | 38 | 1.2 | 16 | 1.1 | 9 | 0.7 | 14 | 1.1 | - | - | 62 | 1.2 |
| Second grade | 3,716 | 24 | 39 | 1.3 | 18 | 1.0 | 9 | 0.9 | 12 | 1.1 | 2 | 0.4 | 61 | 1.3 |
| Third grade | 3,947 | 25 | 36 | 1.4 | 16 | 0.9 | 9 | 1.0 | 12 | 0.9 | 3 | 0.5 | 64 | 1.4 |
| Race-ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White, non-Hispanic | 10,637 | 68 | 37 | 0.9 | 14 | 0.6 | 12 | 0.6 | 13 | 0.5 | 2 | 0.3 | 63 | 0.9 |
| Black, non-Hispanic | 2,318 | 15 | 49 | 2.2 | 26 | 1.8 | 6 | 0.8 | 19 | 1.7 | 3 | 0.9 | 51 | 2.2 |
| Hispanic | 1,928 | 12 | 35 | 1.7 | 21 | 1.4 | 8 | 1.0 | 8 | 0.9 | 3 | 0.7 | 65 | 1.7 |
| Other | 780 | 5 | 37 | 3.9 | 13 | 1.8 | - | - | 21 | 3.4 | 3 | 1.0 | 63 | 3.9 |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \$10,000 or less | 2,728 | 18 | 35 | 2.0 | 19 | 1.7 | 6 | 1.0 | 11 | 1.6 | 3 | 0.7 | 65 | 2.0 |
| \$10,001 to \$20,000 | 1,938 | 12 | 36 | 1.9 | 19 | 1.4 | 10 | 1.3 | 10 | 1.1 | 1 | 0.4 | 64 | 1.9 |
| \$20,001 to \$30,000 | 2,563 | 16 | 38 | 1.8 | 20 | 1.3 | 9 | 1.0 | 11 | 1.1 | 2 | 0.7 | 62 | 1.8 |
| \$30,001 to \$40,000 | 2,332 | 15 | 41 | 1.9 | 19 | 1.2 | 11 | 1.1 | 13 | 1.3 | 2 | 0.5 | 59 | 1.9 |
| \$40,001 to \$50,000 | 1,774 | 11 | 38 | 2.3 | 16 | 1.6 | 12 | 1.5 | 12 | 1.3 | 1 | 0.6 | 62 | 2.3 |
| \$50,001 to \$75,000 | 2,457 | 16 | 43 | 1.6 | 14 | 1.3 | 12 | 1.1 | 18 | 1.4 | 2 | 0.6 | 57 | 1.6 |
| More than \$75,000 | 1,841 | 12 | 42 | 2.1 | 9 | 1.1 | 13 | 1.2 | 21 | 1.6 | 2 | 0.6 | 58 | 2.1 |
| Family type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Two parents | 11,202 | 71 | 34 | 0.7 | 13 | 0.5 | 10 | 0.5 | 12 | 0.5 | 2 | 0.3 | 66 | 0.7 |
| One or no parents | 4,460 | 29 | 52 | 1.4 | 26 | 1.4 | 12 | 0.9 | 18 | 1.1 | 3 | 0.5 | 48 | 1.4 |
| Mother's education ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 1968 | 13 | 25 | 2.0 | 13 | 1.5 | 4 | 0.9 | 7 | 1.4 | 3 | 0.9 | 75 | 2.0 |
| High school/GED | 5,496 | 36 | 38 | 1.2 | 20 | 0.9 | 9 | 0.9 | 10 | 0.7 | 2 | 0.4 | 62 | 1.2 |
| Vocational/technical or some college | 4,491 | 29 | 42 | 1.5 | 18 | 1.2 | 12 | 0.9 | 14 | 1.0 | 2 | 0.4 | 58 | 1.5 |
| College graduate | 2,325 | 15 | 40 | 2.1 | 12 | 1.3 | 12 | 1.4 | 18 | 1.5 | 1 | 0.4 | 60 | 2.1 |
| Graduate or professional degree | 941 | 6 | 49 | 2.8 | 10 | 1.6 | 16 | 1.6 | 26 | 2.7 | 1 | 0.6 | 51 | 2.8 |
| Mother's employment status ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 hours or more per week | 6,046 | 40 | 67 | 1.1 | 27 | 0.9 | 17 | 0.8 | 24 | 0.9 | 3 | 0.5 | 33 | 1.1 |
| Less than 35 hours per week | 3,258 | 21 | 34 | 1.6 | 16 | 1.2 | 10 | 1.0 | 9 | 1.0 | 1 | 0.4 | 66 | 1.6 |
| Looking for work | 817 | 5 | 24 | 2.8 | - | - | - | - | 9 | 1.6 | 2 | 1.3 | 76 | 2.8 |
| Not in labor force | 5,100 | 33 | 10 | 1.0 | 5 | 0.7 | 2 | 0.5 | 3 | 0.6 | 1 | 0.3 | 90 | 1.0 |

Columns do not add up to total because some children participated in more than one type of nonparental arrangement.
${ }^{2}$ The item regarding self care was not asked of respondents whose sampled child was in kindergarten.
${ }^{3}$ Children without mothers are not included in estimates dealing with mother's education or mother's employment status.
NOTE: - indicates that the estimate has been suppressed because it is based on fewer than 30 cases, and details may not add to total due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring 1995.

Table A2. -Percentage of children in kindergarten through third grade participating in before-school care on a weekly basis, by type of arrangement and child and family characteristics: 1995

${ }^{1}$ Columns do not add up to total because some children participated in more than one type of nonparental arrangement.
${ }^{2}$ Children without mothers are not included in estimates dealing with mother's education or mother's employment status.
NOTE: - indicates that the estimate has been suppressed because it is based on fewer than 30 cases, and details may not add to total due to rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), Spring 1995.

