

After-School Child Care Programs

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Abstract

When the public, elected officials, and child advocates focus on the risks and opportunities inherent in after-school hours, discussions quickly hone in on the benefits that after-school programs might offer. This article points out, however, that parents and children consider a wide variety of options for the after-school hours. Children may be with a parent or relative, they may go to lessons or play sports, they may spend time alone or with friends. For many children, this pattern of activities is reflective of their families' resources and neighborhood surroundings as well as their own needs and interests. Drawing on recent studies, this article documents children's experiences in different settings, discusses the variable quality of after-school programs, and indicates how program participation and exposure to self-care can affect children's adjustment in elementary school.

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Parents struggling to find dependable, high-quality child care for preschoolers sometimes erroneously assume that their child care worries will abate when their children enter elementary school. In fact, families must continue to arrange care for their school-age children, because the school day is considerably shorter than an adult's full-time workday. In addition, there are school holidays, teacher in-service days, and summer vacations to consider. Some parents are able to fill this time with formal after-school programs that their children enjoy attending. Others patch together care by shifting work schedules, hiring sitters, and setting up activities such as piano lessons and scouts on different days. Still others ask relatives or neighbors to supervise the children after school. Some have children care for themselves.

Settling on an appropriate after-school arrangement is no easy matter.¹ When children attend programs or lessons, parents may worry that the school day is too long and that the program is either too structured or too chaotic and boring. When older children press for permission to come home after school to relax, play with friends in the neighborhood, or just have flexibility in using their time, parents worry about safety, supervision, and a lack of opportunities for learning and growth.

The concerns of individual parents have been joined by increasing public attention to the potential benefits of after-school programs. The White House Conference on Child Care (October 1997) included after-school research and programs along with infant and preschool care in its deliberations. Newsmagazines and parenting magazines are devoting space to the demand for after-school programs.² Efforts to increase funding of after-school programs also are receiving attention. In 1999, Congress appropriated \$200 million to create after-school programs in the schools, and President Clinton has proposed further increases for the year 2000. General Colin Powell created America's Promise, a national umbrella organization with the mission of providing "safe places" for youth to go. Local funding initiatives also are evident. The DeWitt Wallace-Reader's Digest Fund granted \$1.2 million for after-school programs in Boston, Chicago, and Seattle. (See the article by Halpern in this journal issue.) California established a new after-school grants program costing \$50 million per year, and Los Angeles has allocated \$10 million for after-school tutoring programs. Another \$10 million for after-school programs is under consideration by the Georgia legislature; and the governor of Massachusetts is seeking \$8 million for after-school programs targeted to high-crime neighborhoods.³

Are such expenditures for after-school programs a good investment? Or are children doing just fine without them? These questions are best answered by considering the value of formal programs to children in relation to the merits of other options for after-school care. Consequently, this article juxtaposes research on school-age programs with studies of self-care and out-of-school activities—two other common solutions to the need for after-school care. This article briefly discusses what each after-school arrangement involves and how prevalent it is; it reviews research suggesting how the arrangement contributes in positive or negative ways to children's development; and it examines the features of after-school programs that are especially related to outcomes for children. The article concludes with the authors' thoughts on whether after-school programs are needed, and it suggests characteristics that parents and policymakers should look for in high-quality programs.

Care for School-Age Children While Mothers Work

The sustained high rates of maternal employment in the United States indicate

that the time-consuming quest for after-school care will not abate any time soon. From 1970 to 1990, the proportion of children under 18 years with mothers in the workforce rose from 39% to 62%. By 1997, fully 78% of the mothers in households

with children ages 6 to 13 were in the labor force.⁴ The majority of families use the time that their children attend grade school as their primary child care arrangement.⁵ Seventy-five percent of the children (ages 5 to 14) whose mothers are employed are in school for most of the hours their mothers are at work, but because the school day is shorter than the typical workday, problems arise during the two- to four-hour stretch in the afternoon that is not covered.

Figure 1, based on data about child care gathered from a nationally representative sample of households in 1990, shows that one-third of children ages 5 to 12 with working mothers were cared for by their parents when they were not in school.⁶ Some moth-

Being alone as a 10-year-old in a safe area with a supportive neighbor next door is not the same as being alone in a threatening inner-city apartment building

ers worked reduced hours to be home when their children returned; and in dual-earner families, the parents sometimes worked different shifts to share child care responsibilities. Another third of the children were in the care of relatives, sitters, and family child care providers after school. A small percentage of children (4%) cared for themselves and their siblings as a primary arrangement. About 14% of school-age children in 1990 attended after-school centers, and another 15% participated in lessons or enrichment activities.⁷

This summary may give the impression that after-school care arrangements are easy to categorize, but after-school experiences are often quite complicated. First, arrangements are often used in combination. The National Child Care Survey reported that more than three-quarters (76%) of children with employed mothers spent time in at least two other care arrangements in addition to their time in school.⁸ For example, a child might be in center care for two afternoons, parent care for two afternoons, and self-care for the fifth day. Even in a single day, children often move from one setting to another after school, experiencing different

arrangements in varying proportions. This poses definitional problems: Should a child who spends an hour or more walking home with friends after soccer practice be counted as experiencing self-care or as enrolled in activities?

Research challenges also arise from the differences that separate one self-care experience from another, and one program from another. Being alone as a 10-year-old in a safe area with a supportive neighbor next door is not the same as being alone in a threatening, inner-city apartment building. Attending a chaotic center, a strict tutoring session, or a stimulating program filled with choices will have different appeal and different consequences for children. The impact of these different after-school arrangements on children's development can be accurately measured only when researchers appreciate how families and children come to use particular after-school arrangements and when they attend to the widely varying features of those specific arrangements. Several recent studies of school-age children have begun to tackle these challenges (see the descriptions of these studies in Table 1), and their findings are reported throughout this article.

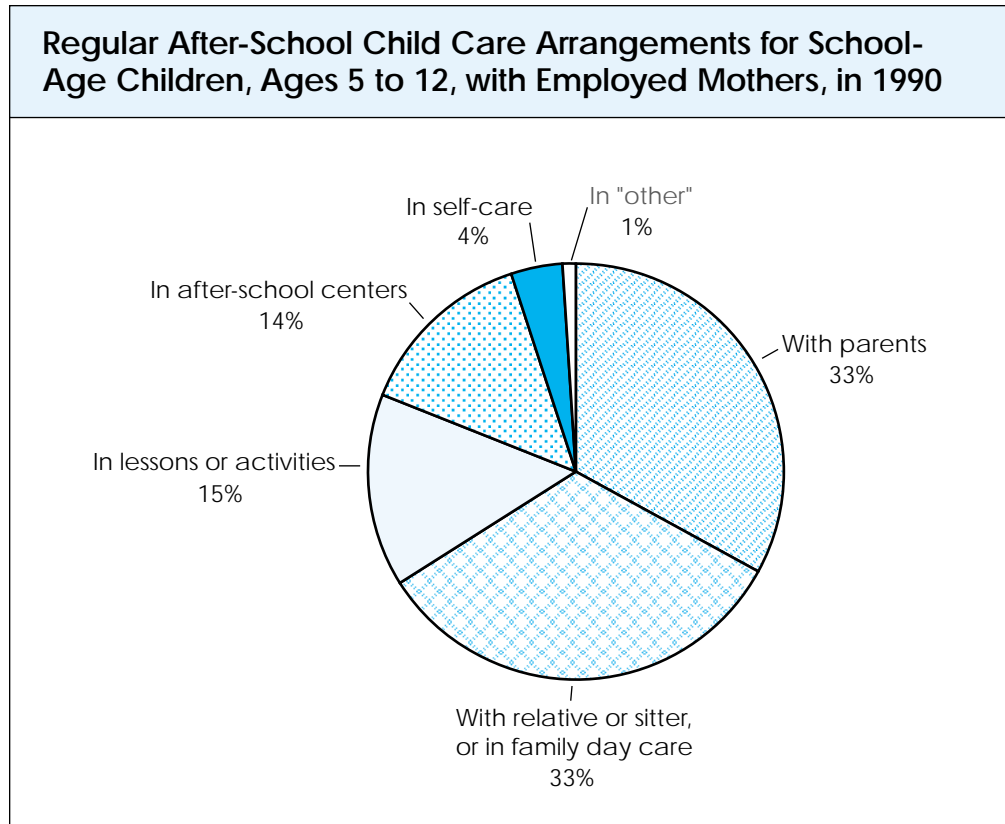
Self-Care and Its Effects on Children

Self-care, sometimes called latchkey care, comes in multiple forms.^{2,9} Children can be home alone, or they can stay with older or younger siblings. Some children go to public places such as libraries or shopping malls where adults are nearby but not charged with monitoring their safety or well-being. Others spend afternoons together with peers, away from any adult supervision.

Prevalence

Widely disparate estimates have been made of the number of children who are in self-care and the amount of time they spend on their own. For instance, the National Child Care Survey, which asked parents to report the child's primary care arrangement excluding school, estimated that 10% of 10- to 12-year-olds were in self-care.⁶ In direct interviews with children, other researchers found that 44% of third graders spent at least some of their after-school time in unsu-

Figure 1



Sources: Hofferth, S.L., Brayfield, A., Deich, S., and Holcomb, P. *National child care survey, 1990*. Urban Institute Report 91-5. Washington, DC: The Urban Institute Press, 1991, p. 66.

pervised settings.¹⁰ These disparities reflect the fact that researchers have focused on different forms of self-care, and they have defined and asked questions about it in different ways. (See the Child Indicators article by Kerrebrock and Lewit in this journal issue for a detailed review of data on self-care.)

Whatever measures and metrics are used, however, studies consistently show that children's age, gender, and maturity influence the use of self-care. It is more common for older than for younger children, and more common for boys than for girls.⁶ It is used less when children are fearful or when parents have concerns about their children's readiness for this level of independence.⁹ Family and neighborhood characteristics matter as well. Self-care is more prevalent when mothers are employed and families have higher incomes,⁶ and it is used more by suburban families and those who consider their neighborhoods to be relatively safe.¹⁰

Effects on Children

Studies documenting the effects of self-care on children's development have yielded

contradictory findings. Some indicate problematic development, while others have reported no overall differences in developmental outcomes for children in self-care or other after-school arrangements. Key factors explaining these differences include the specific types of self-care being studied, the amount of time self-care is used, the ages of the children involved, and the characteristics of the family and the neighborhood.⁹⁻¹⁴

For example, analyses of the Ecological Study of After-School Care revealed that children's age and the circumstances of self-care both influenced child outcomes.⁹ (See Table 1 for a description of the study.) Third-grade children who spent more time alone evinced more behavior problems in both third and fifth grades, suggesting that this form of self-care is not typically appropriate for children as young as eight or nine. Time spent alone by fifth graders, in contrast, was not related to behavior problems. However, unsupervised time with peers was related to more behavior problems in both third and fifth grades as well as poorer school adjustment in fifth grade.

Table 1

| Recent Studies of After-School Care Arrangements: Methods and Key Results | | | | |
|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Study and Related Endnote Numbers* | Sample Characteristics | After-School Care | Data Gathered | Developmental Outcomes of Program Participation |
| Ecological Study of After-School Care ^{9,10,17,18,34} | Milwaukee, WI 216 children Followed grades 3 to 5 54% nonwhite Low-income families | Compared children involved in maternal care, informal adult care, self-care, or formal program. | Parent interviews, child reports of activities and experiences, behavior ratings by parents and teachers, grades, and test scores. | In grade 3: better grades, work habits, emotional adjustment, and peer relationships; fewer behavior problems. In grade 5: no impact. (All children low income.) |
| Study of After-School Care and Children's Development ^{26,36} | 150 first graders 13% nonwhite Well-educated parents | Compared children who attended 38 after-school programs with varying characteristics. | Observations of child activities and interactions, parent and teacher reports of social behavior, grades, and work habits. | In structured programs: better grades, work habits, and fewer behavior problems. In positive emotional climate: fewer behavior problems. |
| Child Development Project ¹¹ | Tennessee and Indiana 466 children Followed grades K to 6 19% nonwhite Diverse economically | Compared children in grades 1, 3, and 5 who spent time in self-care, sitter care, neighbor care, day care, school-based program, or activities. | Time spent in each type of care, teacher-rated behavior problems and social competence, grades, and test scores. | If low income and in day care: more social competence, fewer behavior problems. If in activities 1 to 3 hours/week: more social competence, fewer behavior problems. |
| Boston After-School Time Study ¹² | Boston, MA 206 children Grades 1 to 4 67% nonwhite Diverse economically | Compared children who spent time unsupervised or in parental care, care by other adult, or a program or lessons. | Time spent in each type of care, observations of activities and interactions, and ratings of children's behavioral adjustment. | If low income and in programs: fewer problems of anxiety and withdrawal. If middle class: no impact. |

* See related endnotes at the end of this article.

Another study, the Child Development Project, also examined children's developmental outcomes in relation to self-care and found that the impact of self-care varied by the children's family background.¹¹ Parent and teacher ratings of children's behavior, school grades, and test scores in grade six were obtained for 466 children. These were then analyzed in light of descriptions by mothers of their children's after-school arrangements in earlier years. Even when the family's social class and child's prior adjustment were taken into account, both first and third graders who spent more time in self-care were less socially competent and received lower academic grades in grade six than children who spent less time on their own. These negative associations with self-care were more evident for children from low-income families

than for children from middle-income families.

A related study, the Boston After-School Time Study, also found that children from low-income households displayed more behavior problems such as aggression, defiance, and hyperactivity when they were in self-care for more time.¹² Those effects were not present among children in middle-class households.

For many families, children's transition to self-care is a long process that often begins with short spells of self-care that become longer and more frequent as children enter middle school. One impetus for this shift is the parents' assessment that children are psychologically and emotionally ready for the transition; another is children's strong push to leave more structured



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after-school programs. The safety of the neighborhood and the availability of good alternatives to self-care matter, as well. Nevertheless, some children do not fit these general trends: Some young children care for themselves on a regular basis, some fearful children must be left alone, and some older youths are sent to programs because of concerns about their immaturity. Careful study of the effects of both general self-care patterns and these less common conditions is needed to inform parents and policymakers.

Out-of-School Activities and Effects on Children

Another popular form of after-school care is a patchwork of out-of-school activities, including enrichment lessons (piano, dance, computer classes), clubs (Scouts, Boys and Girls Clubs), organized sports, and individual tutoring. Such activities and lessons may or may not be viewed by parents as child care. They are usually offered for limited time periods—an hour or two on one or two days each week—and children's attendance may not be closely monitored. In contrast, formal programs typically operate five days a week for several hours each day. While children's participation in regular programs declines through the elementary school years, they attend enrichment activities at increasing rates over the same period.^{6,11}

Out-of-school activities are usually supported by fees paid by parents and so are more commonly used by children from higher-income families.¹¹ According to the National Child Care Survey, 20% of children in families with incomes over \$50,000 were enrolled in lessons in 1990, compared with only 6% of children whose families earned between \$15,000 and \$25,000 per year.⁶ Both cost and transportation problems are barriers that prevent children from participating in these activities.¹⁵

There is some evidence that participation in out-of-school activities is related to children's adjustment, both concurrently and over time. One study of a small program that offered an hour of tutoring to second- and third-grade children four days a week documented improvements in the reading and spelling scores of children who participated, compared to those in a matched control group.¹⁶ The Ecological Study of After-School Care (described in Table 1) revealed that third graders who spent more time than their peers in enrichment activities received better grades in conduct and were reported by their teachers to have better work habits, better relationships with peers, and better emotional adjustment.¹⁷ In these analyses, however, it was not possible to determine whether the activities contributed to children's adjustment, or whether the findings reflected what researchers call

“selection effects”—when it is the more competent children who elect to participate in activities.

To clarify that question, researchers followed the Ecological Study children from third through fifth grades.¹⁸ Those children who spent more time in enrichment activities in all three grades showed better emotional adjustment in fifth grade, even when their adjustment as third graders was taken into account. It was also true that those who were better adjusted to school as third

Enrollment in after-school programs declines steadily from a high of 22% in kindergarten to 14% in third grade to just 1% in seventh grade.

graders were more likely to participate in enrichment activities in fifth grade, rather than “hanging out” with unsupervised peers. In other words, both forces were at work—children who were doing well chose to participate in enrichment activities, and once they were involved, they were likely to benefit.

The children in the Ecological Study came from low-income families, and none were heavily programmed in the way that children in more affluent households sometimes are.¹⁹ Findings from the Child Development Project, which included middle-income and low-income children,¹¹ suggest that children’s development suffers from both too few and too many activities. This study found that children who spent moderate amounts of time (one to three hours per week) in activities and lessons during grades one and three were more socially competent in grade six. Children who participated in no activities and those who were more extensively involved did not fare as well.

Given the extent to which families rely on patchwork schedules of lessons and activities to occupy their children—especially older school-agers—after school, further research is needed to clarify how the mix of activities and other care arrangements contributes to the development of children with different interests, living in different surroundings.

After-School Programs: Use and Characteristics

With the growing evidence that self-care poses risks for some children, it is not surprising that parents, policymakers, and educators have turned to after-school programs as a way to meet children’s needs. This is not a new strategy, although it has recently attracted more public attention than at any time since World War II. (See the commentary by Seligson in this journal issue.) Some programs target children from low-income families who live in high-crime neighborhoods^{2,17,20,21} and seek to provide a safe haven,²⁰ foster self-esteem and strong cultural identities,²² and help children overcome academic deficits.^{16,23} Other programs target middle-class children whose parents are employed. These programs may represent upward extensions of the preschool model with activities such as arts and crafts, games, and drama; or they may focus on a single interest such as chess or computers. Trends of increasing employment by low-income mothers (prompted by welfare reform) and heightened attention to student achievement throughout society are likely to make programs serving low-income and middle-income families more similar—combining safety and supervision with learning and enrichment opportunities.

Household interviews conducted for the National Child Care Survey⁶ in 1990 found that the vast majority of children who enrolled in after-school programs were in the third grade or younger. Enrollment declines steadily from a high of 22% in kindergarten to 14% in third grade to just 1% in seventh grade. This survey and other studies¹¹ reveal that higher-income families are more likely than low-income families to use school-based programs, centers, and lessons to occupy their young grade-school children after school. Community centers play a more important role for lower-income families.

A second nationally representative survey, the National Study of Before- and After-School Programs, obtained information about after-school programs.²⁴ This study, based on 1,304 telephone interviews conducted with directors of a nationally representative sample of programs, con-

cluded that an estimated 1.7 million children (kindergarten through eighth grade) were enrolled in almost 50,000 programs. The study documented the tremendous variability that exists in after-school programs. Figure 2 shows how the programs were distributed by sponsorship and location.

Smaller observational studies focusing on children's experiences in after-school programs reveal that differences in program structure and organization are related to the program's emotional climate and the opportunities it affords to participating children. Characteristics of the program, such as the child-staff ratio and staff qualifications, and characteristics of the site, such as sponsorship and location, have attracted special attention because they are levers that policy-makers may be able to use to improve the quality of the time children spend in after-school programs.

Regulatable Features

No uniform standards or regulations apply to after-school programs across the states. Consequently, wide variation exists in the program features that can be regulated by authorities, such as child-adult ratios, staff education, and class size. For example, the National Study of Before- and After-School Programs reported that the number of children per staff member ranged from a low of 4:1 to a high of 25:1.²⁴ Staff education varied from less than a high school degree to more than a master's degree.

In-depth studies show that these program features have implications for children's experiences. (Descriptions of typical programs are included in Box 1.) In one study, observations of 180 third-, fourth-, and fifth-grade children in 30 different after-school programs²⁵ focused on the positive or negative quality of children's interactions with staff, and the flexibility and diversity of program activities. In the programs with more children per adult and less-educated teachers, the staff were more negative with children. When programs offered a wider variety of activities and more flexible programming, staff-child interactions were more positive.

Similar patterns emerged in the Study of After-School Care and Children's

Development, which focused on first-grade children who attended 38 different programs.²⁶ When programs had fewer children per adult, programming was more flexible and staff appeared warmer, more sensitive, and more supportive of the children. Children in these programs spent less time waiting and in transition, less time watching television, and more time interacting positively with staff. When staff members had higher levels of education, they were more likely to use positive behavior management strategies and were less likely to be harsh with the children.

Although it is less amenable to regulation, staff turnover is another component of program quality. Some after-school programs succeed in maintaining a stable staff,

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but others have high rates of turnover. In the national study, 58% of the programs surveyed had experienced turnover during the previous year, and those programs reported that 60% of their staff had changed.²⁴ A 1992 study of eight inner-city after-school programs in Chicago found that more than 40% of the staff had been with the observed programs for less than one year.²⁰ Not surprisingly, staff who had been with the programs longer knew the children better and were more likely to follow up when children were absent. Other research, such as the Child Care Staffing Study,²⁷ has found that higher wages are a key factor in reducing staff turnover.

Site Characteristics: Auspice and Location

As Figure 2 shows, the National Study of Before- and After-School Programs found in 1991 that most after-school programs (66%) were operated by nonprofit organizations, including public schools, social service agencies, community organizations, and religious groups.²⁴ However, for-profit day-care centers made up the largest single category of sponsor, operating 29% of the after-

Box 1

After-School Programs: Examples from One Community

A variety of after-school programs in one low-income community were observed in the course of a study following a sample of 216 third graders over a three-year period. The brief program descriptions below (using fictitious names) illustrate the range of after-school programs attended by children in this community:

TimeOut for Kids: A nonprofit community agency, which has operated programs for urban youths for many years, organized this program after school from 3:00 P.M. to 6:00 P.M. and during the summer, offering both child care and enrichment activities. About 35 children were registered, with three staff members: a program coordinator with a master's degree in education, and two university students.

Children's daily activities were relatively unstructured: Upon arriving, children chose time in the gym or an activity room for about 45 minutes. After a snack, they participated in projects, played games, or did homework until departure time.

Hancock Elementary After-School Program: This program, operated by the school district's recreation department, sought to provide a safe play environment for children. Associated with the school, the program could use the school gym, playground, and cafeteria for activities, but little communication took place between elementary teachers and after-school staff. About 22 children attended with three staff members who had previous experience working with children, although turnover was high each semester.

Typically, children organized informal games in the gym upon arriving, ate snacks provided by the children's families, and then did homework, played board games, or did an arts and crafts activity. The program offered unstructured time for the children's play, but they received little support from staff when they tired of their own games.

The Oakridge After-School Program: This program was initiated and operated by the teachers of an elementary school to provide tutoring and homework help for any child requesting it. Two-thirds of the school's teachers were involved in the program, which operated four afternoons a week for two hours. One day a week, local police volunteers offered basketball, soccer, or baseball in the gym or playground.

About 300 students participated in the program on a limited basis; school busing schedules prevented many from attending regularly. At the end of the school day, the children remained in their classrooms with a teacher until 5:30 P.M., working on homework or supplemental assignments. The teachers were actively engaged with the students, but the program's activities and imposed restrictions were similar to those the children experienced during the school day.

Hamilton School Extended-Day Program: Also based at an elementary school, this program sought to bolster self-esteem by developing children's abilities in nonacademic subjects such as music, dance, drama, and art. It provided enrichment lessons in science, literature, and math, which are often beyond the financial means of low-income families.

Nearly 85% of the students at the school participated (530 students). Children and parents selected themes (arts, sports, creative writing, computers, and the like) and spent nine weeks focused on that theme. Homework help and remedial academic assistance were provided to children who needed it. The program operated in a school-like fashion: Children attended "classes" in their chosen themes and received grades on their participation and learning.

Child's Haven: This after-school program was operated by a nonprofit agency with a religious affiliation. It was oriented toward families, offered social service assistance, and emphasized emotional support. Many teen assistants had themselves attended the program or its summer day camp.

On any given day, 70 children could participate, although there were 240 children on the roster. The program was located in a community center, which offered a gym, roller-skating room, lounge for homework or rest, and activity rooms. The children met and spent the first hour or two with a small, stable "social group" of children and one or two adults for an activity and a snack. Between 4:30 P.M. and 5:30 P.M., the children could choose any activity offered in the program.

school programs (another 5% of programs were operated by for-profit private schools and other entities). A related (but not identical) distinction is program location. In 1991, slightly more than a third (35%) of after-school programs were housed in child care centers, while 28% were housed in public schools, 19% were in religious institutions or schools, and 18% were in other locations.²⁴

Smaller, in-depth studies reveal that the broad site characteristics of auspice and location are related to the programmatic features described above. Observations in 38 programs for the Study of After-School Care and Children's Development project showed that, compared to for-profit programs, programs that operated on a non-profit basis had more staff per child and had better-educated staff members who were more positive and warm with the children.²⁶ Children in nonprofit programs were less likely to watch television and wander aimlessly, and they experienced fewer negative interactions with staff. Not surprisingly, parents were more satisfied with nonprofit programs than with for-profit programs.

The same study focused on locations separate from sponsoring agency auspices. Researchers observed caregivers both in school-based programs and in community centers and day-care programs.²⁶ The staff members in the school-based programs interacted more sensitively with children. Accordingly, children in the school-based programs spent less time unoccupied and moving from one activity to another. A major strength of school-based programs may be the expectation that staff will be trained and compensated well enough to promote stability and the experience it entails. This comparison is important because the number of programs in public schools increased from 13,500 in 1991²⁸ to more than 18,000 in 1993–94.²⁹ Many of the new after-school funding initiatives focus on schools, so this number is destined to increase still further. (See the article by Dryfoos in this journal issue.)

The systematic studies of after-school programs described here document that

both organizational and programmatic characteristics are related to children's experiences in programs in predictable ways. Research of this type, which distinguishes key elements of program quality, can provide an empirical foundation for developing standards and requirements policymakers might use to monitor and improve the quality of the programs they fund. The next section will consider whether these program features are also related to children's developmental outcomes.

Program Participation and Children's Development

Another line of research on after-school programs tackles the complex challenge of measuring the effects of program participation on outcomes—on children's

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development. These studies contrast the social adjustment and school success of children who attend programs with outcomes for children who spend their afternoons in other care settings. This research task is complicated by the fact that no form of after-school care exists in a vacuum. Rather, a broader context of family and community influences the after-school arrangements that are available to particular children and conditions children's responses to their after-school experiences. Moreover, the individual child's own characteristics (age, temperament, and gender) play a role in shaping the choice of after-school arrangements for that child.

A number of early studies of single programs found benefits that the researchers attributed to program participation. One reported that kindergarten children who participated in an extended-day program at a university lab school had better peer relationships than classmates who did not participate in the program.³⁰ Another study found better performance on a standardized mathematics test among low-

Figure 2

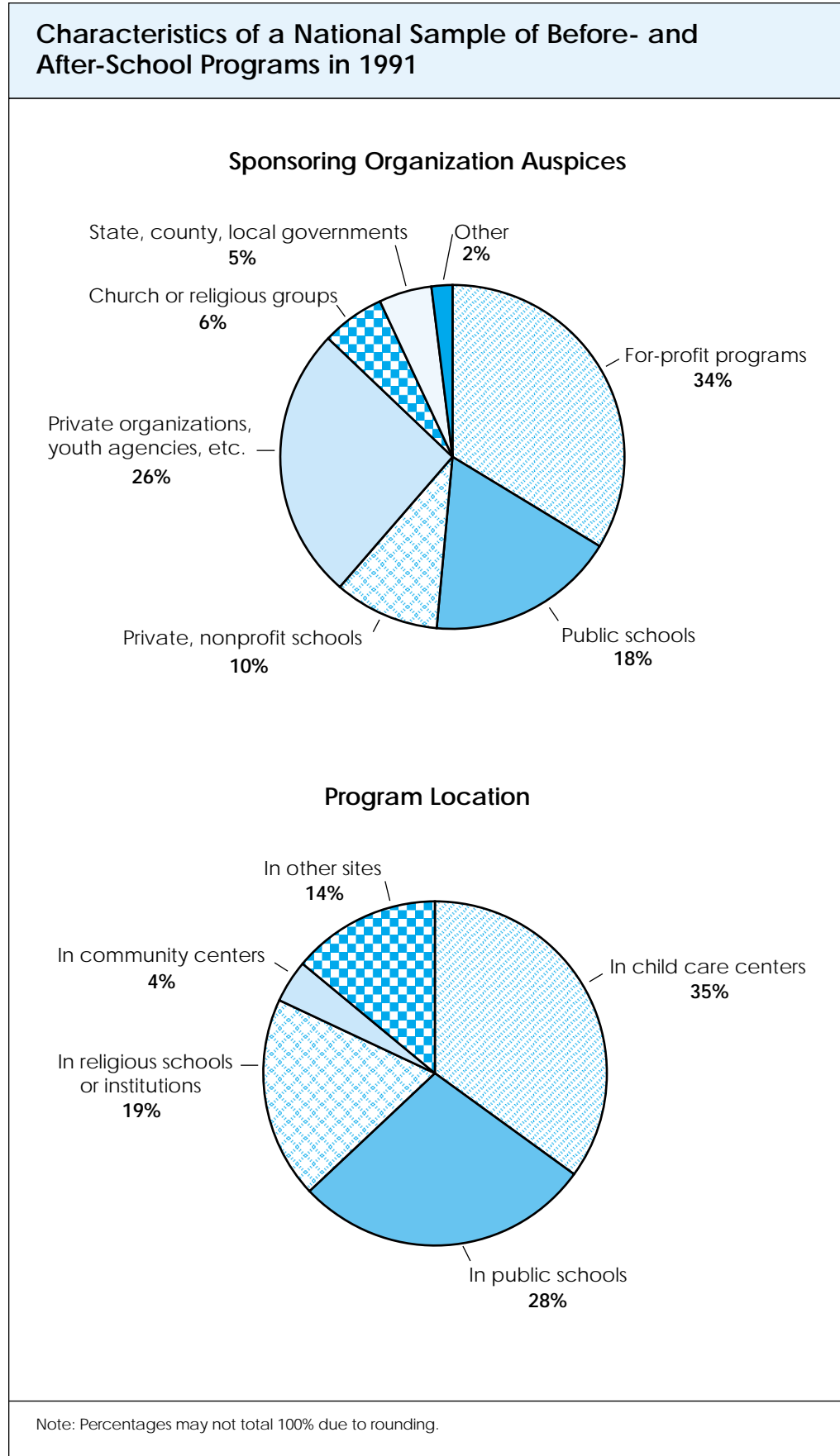
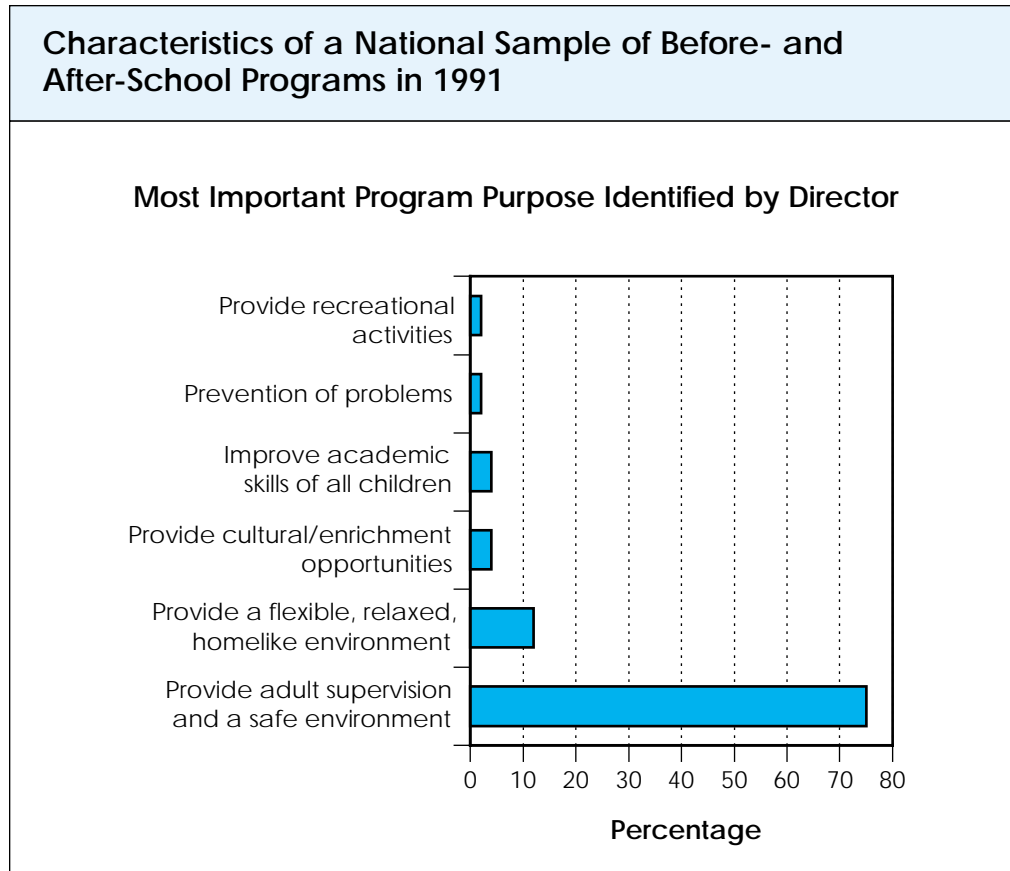


Figure 2 (continued)



Sources: Seppanen, P., deVries, D., Seligson, M. *National Study of Before- and After-School Programs*. Washington, DC: Office of Policy and Planning, U.S. Department of Education, 1993.

income children who participated in an after-school tutoring program in comparison with a matched control group.³¹ Similar findings emerged from the recent Ecological Study of After-School Care described earlier (see Table 1), which observed low-income third graders in their after-school settings—whether they attended after-school programs, or were with their parents or in informally supervised settings. The third graders in this study who attended programs had fewer antisocial behaviors and better reading and math grades, work habits, emotional adjustment, and peer relationships than did children in other forms of after-school care.¹⁷

However, not all studies have found positive program effects. Some investigators¹² have reported no overall associations between program participation and children's adjustment. And one study involving primarily middle-class children³² found that those who attended programs were rated

more negatively than children in other forms of care by their teachers, parents, and peers. These differences in findings likely reflect the combined influence of family and neighborhood factors, the children's own characteristics, and aspects of the child's program experience.

Family and Neighborhood Factors

One explanation for the discrepant program findings is that after-school programs may be more beneficial for children in low-income families and high-crime neighborhoods than for children in suburban neighborhoods and middle-income families. In the Boston After-School Time Study, program enrollment was not related to adjustment for middle-class children, but ratings provided by mothers showed that low-income children who attended programs had fewer behavior problems than low-income children in other care arrangements.¹² Similar findings emerged from other studies that included teacher reports

of children's social competence and behavior problems.^{11,17}

These results mirror the evidence that self-care is most problematic for children in low-income families and in dangerous surroundings; programs are apparently most beneficial for the same children. Formal after-school programs can serve as a safe haven within neighborhoods in which crime rates are high and the time after school exposes youngsters to deviant peers, illegal activities, and violence.^{17,20,21} The same pro-

attended programs as fifth graders (both those who remained in the programs from earlier grades and those who were placed in the programs as fifth graders) had been more troubled than other children in the third grade. The program placement may have been a strategy to keep them out of trouble. Most children who were doing well as third graders were no longer attending programs as fifth graders. When prior child adjustment was controlled, the negative "effects" associated with participation in after-school programs were no longer evident.

Evidence for beneficial effects is strongest for low-income children, children in urban or high-crime neighborhoods, younger children, and boys.

grams may have a different meaning, however, for children in suburban or rural neighborhoods^{32,33} where self-care may not be as fraught with risks and where children may want the freedom to participate in different after-school activities such as team sports and clubs, as well as to play with friends after school.

Child Characteristics: Age and Gender

In addition to the family and neighborhood context, the individual child's developmental status and psychological functioning influence the effects of after-school programs. Child characteristics help determine what after-school care the family will choose, and they shape the child's response to whatever setting is chosen.

Evidence from the Ecological Study of After-School Care shows that programs serve a different function for older school-age children than for younger ones. When researchers followed 215 low-income study children from third grade to fifth grade, they found that participating in a formal program was associated with better child functioning in third grade, but attending such a program in fifth grade was linked to more school and behavioral problems.⁹ What accounts for this difference? Do programs have negative effects on older children? This did not appear to be the case. Instead, it turned out that the children who

These research findings are consistent with the speculation that parents might use programs when they believe their children need more supervision and that children might leave programs when parents think that it is appropriate to offer less supervision (or a different type of supervision) after school.³² What is less clear in the program research to date is what happens when children who need more supervision do not have programs to attend. Pettit and colleagues' examination of the effects of self-care suggests that these children may be particularly vulnerable in less supervised settings.

Another factor contributing to variable program effects may be the uneven quality of the programs that were studied.³⁴ Although one program was excellent, others were of average quality or less. The program attended by the largest number of children allowed comparatively little child autonomy, children were not engaged in activities, the staff used punitive disciplinary techniques, and negative interactions between staff and children were numerous. If programs are to succeed for children of different ages and with different interests and skills, they should be structured in ways that are sensitive to these differences.

A study of low-income children who lived in high-crime neighborhoods revealed another factor impacting program effectiveness.³⁵ There, the beneficial effects of program participation were related to actual attendance. In a given school year, some children attended programs that for periods ranged from a single day to 160 days. Even after controlling for their prior

performance, children who attended more days were rated by their classroom teachers as having better work habits and better interpersonal skills compared to children who attended fewer days. Children who attended more days also were less likely to endorse aggression as a response to peer conflict. Their school attendance was better.

There is some evidence that program effects also may vary for boys and girls. Program qualities such as the emotional climate and the autonomy afforded to children appear to have more impact on boys than on girls. The Study of After-School Care and Children's Development (described in Table 1) included observations in 38 programs to assess the positive or negative tenor of staff relations with children, program activities and flexibility, and the quality of children's interactions with peers.³⁶ Children's experiences were related to teacher ratings of their adjustment in first grade. The results showed that boys who attended programs in which after-school staff established a positive emotional climate demonstrated fewer problem behaviors in their first-grade classroom, whereas boys who attended programs with more negative emotional climates had poorer academic performances. Program structure also was related to boys' adjustment. Boys who attended programs that permitted more individual choices and autonomy displayed better social skills with their first-grade classmates than did boys in more highly regimented programs. These findings support a recommendation³⁷ to consider the possibility of gender differences in susceptibility to intervention efforts.

Conclusion: Do We Really Need After-School Programs?

The introduction to this article asked whether recent public attention to after-school programs is warranted and whether devoting funds to these programs is necessary. No cost-benefit analyses of after-school programs have been conducted, because the research on these programs is still limited. Nonetheless, the available studies offer evidence of program benefits for many children, especially in contrast to the risks associated

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with self-care. Evidence for beneficial effects is strongest for low-income children, children in urban or high-crime neighborhoods, younger children, and boys.

Program benefits also appear to depend on program features such as opportunities for children to make choices and a positive emotional climate. These aspects of program quality can, in turn, be linked to structural factors such as child-staff ratios and staff qualifications.

These research findings must be viewed in context, however. First, after-school arrangements are not randomly assigned to families in the United States; instead, there are patterns in who uses different arrangements and in the particulars of those arrangements. Providing valid assessments of the effects of different after-school experiences requires serious attention to the factors that lead families to select one or

another arrangement, or faulty conclusions about care arrangements and child adjustment might be made. One of those factors is the family's perception of the neighborhood where they live. Another is the child's own characteristics and preferences. School-age children often play an active role in determining when self-care is initiated, when program participation is stopped, and which after-school activities are selected.

It is important for all programs to foster a positive emotional climate in which children know that they are valued, respected, and liked. The use of punitive, harsh behavior management strategies is a sign that programs are not functioning well. Staff harshness helps to create an overall negative emotional climate that has been

found to undermine children's functioning in the programs and at school. Program designers also must consider carefully the changing interests and capabilities of the children they propose to serve. Compelling school-age children to attend programs they find boring or restrictive is difficult at best. And no program can convey benefits to children who do not enter its doors.³⁵ Schools and program designers need to consider a broader range of after-school program designs, especially for the older grade school children. One such design might be the reintroduction of school-based extracurricular after-school activities such as sports teams, band, yearbook, and newspaper. These supervised, child-selected activities can offer substantial opportunities to learn and grow in a safe environment.

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