Publication # 2003-05

4301 Connecticut Avenue, NW, Suite 100, Washington, DC 20008 Phone 202-572-6000 Fax 202-362-5533 www.childtrends.org

Left Unsupervised: A Look at the Most Vulnerable Children

By Sharon Vandivere, M.P.P., Kathryn Tout, Ph.D., Jeffrey Capizzano*, M.A., and Martha Zaslow, Ph.D. April 2003

verview The popular movie Home Alone and its sequels put a comic spin on the situation of children fending for themselves without adult supervision. In real life, however, children who lack adult supervision – either at home or in other settings – are a serious societal concern, and with good reason. Research finds that when children under 13 are regularly left to spend time alone or to be cared for by young siblings, they may be at risk for injuries and developmental problems. More specifically, these children in "self care" – as some researchers describe it – may be at increased risk for accidents and injuries, for social and behavior problems, and for academic achievement and school adjustment problems.

Self care is not always harmful. Children typically become more independent as they mature, gradually spending more and more time alone and taking increasing amounts of responsibility for caring for themselves. Still, children caring for themselves may miss out on potentially beneficial opportunities. For example, they may spend their time watching TV or playing video games instead of participating in academic or social activities. Self care can also be a potentially dangerous situation. (Think of children playing with matches.) And children who are home without adult supervision and social interaction with peers may also experience isolation and loneliness.

This Research Brief focuses on two groups of children that may be particularly vulnerable when they lack regular adult supervision: the youngest school-age children and low-income children.⁴ Why these particular groups? The less mature children are, the more risky it is for them to spend time unsupervised. Most 6- to 9-year-olds are probably not ready developmentally to care for themselves regularly, and they are probably less prepared than older children to deal with household emergencies.⁵ For the second group, low-income children, having an adult looking after them or having opportunities to benefit from regular high-quality child care or after-school programs may be particularly important because of disadvantages that they more often face, such as living in unsafe neighborhoods.⁶

To shed light on self care and the circumstances under which these two vulnerable groups of children are likely to spend time unsupervised, Child Trends analyzed data from the 1999 National Survey of America's Families (see box on page 2). These analyses yielded some important findings. For example, we found that despite their families' limited financial resources, low-income children, in general, are less likely to be in self care than children in higher-income households, especially when they are young. In addition, we found that children with parents reporting symptoms of poor mental health are more likely to spend time unsupervised than children whose parents do not report symptoms of poor mental health. Finally, although we found that the vast majority of children are not in self care, the actual number of children in these circumstances is substantial, which may point to unmet needs for affordable supervised care options.

ABOUT THE RESEARCH SOURCE FOR THIS BRIEF

The 1999 National Survey of America's Families is a survey of parents (usually the child's mother) or other adults in more than 42,000 households in the United States. The Urban Institute and Child Trends developed this survey as part of the Assessing the New Federalism project; the firm Westat conducted the actual interviews. Since data from the National Survey of America's Families are nationally representative, they can inform us about how common self care is overall in the United States, as well as about patterns of self care use among important subgroups of children. To learn more about children in self care, Child Trends analyzed data about nearly 10,000 children between the ages of 6 and 12.8 Since patterns of child care and self care differ during the summer months, we focused on children whose parents were interviewed during the school year.⁹

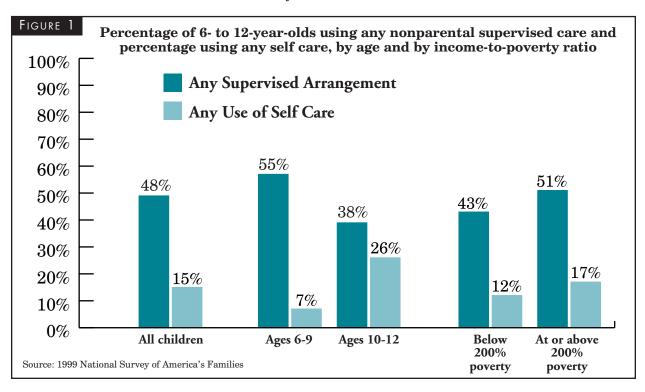
THE NUMBERS

How many children are in self care? The answer to this question depends on exactly how self care is defined – and on how researchers obtain the information. In the 1999 National Survey of

America's Families, parents reported on whether their children took care of themselves or stayed alone with a sibling age 12 or younger on a regular basis during the last month, even for a small amount of time. By this definition, a minority of children in the United States was in self care in 1999: 14.8 percent of 6- to 12-year-olds overall (see Figure 1, below).

Child Trends' analyses show that a much smaller proportion of 6- to 9-year-olds was in self care in 1999 than of 10- to 12-year-olds: 6.7 percent, compared with 26.1 percent (see Figure 1, middle panel). Our analyses also show that, among all 6to 12-year-olds, a smaller proportion of lowincome children - those living in families whose incomes fall below twice the poverty threshold¹⁰ – was in self care, compared with the proportion of higher-income children in self care: 11.6 percent versus 17.0 percent (see Figure 1, below). Analyses with other national data also show that self care is less common among low-income and among younger children. 11 Yet only a small minority of children in both these vulnerable groups was regularly left without adult supervision.

Nevertheless, the actual number of children who are regularly unsupervised is substantial. Nationwide, 3,325,000¹² 6- to 12-year-olds regularly spent time unsupervised or in the care of a young sibling in 1999. Of these, 866,000 were 6- to 9-



year-olds and 1,050,000 were low-income children (of whom approximately 236,000 were 6 to 9).¹³ These are probably conservative estimates. Most parents would agree that young children should not be left unsupervised, so they may be reluctant to report that their own children regularly spend time alone or in the care of a sibling under 13.¹⁴

THE HOURS

How much time do children spend in self care? Analyses of the survey data show that when children care for themselves, the amount of time they spend unsupervised by adults or teens is reported to be relatively low. Overall, 6- to 12-year-olds who were in any self care in 1999 spent an average of just under four-and-a-half hours a week alone or with a young sibling (see Figure 2, bottom panel). This amount of time was about the same regardless of children's ages or family income (see Figure 2, middle and top panels). Looking at it another way, among those in self care, about three-quarters (74.4 percent) of the youngest school-age children and just under two-thirds (63.3 percent) of low-income children were in self care for fewer than five hours a week in 1999.

Just because children spend some time in self care does not necessarily mean that they don't also regularly spend time in an arrangement that *does* provide adult supervision. Examples include

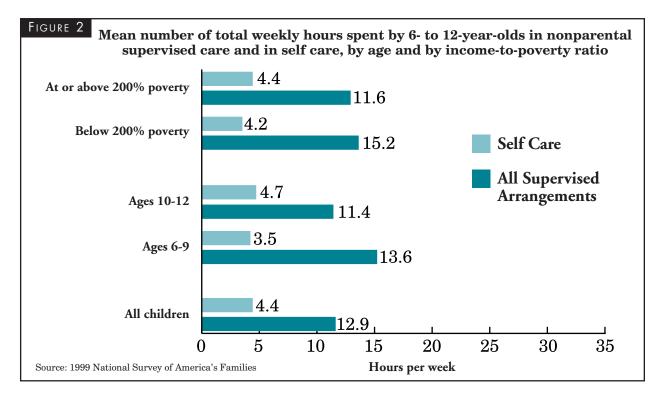
before- or after-school care, family child care, nanny or babysitter care, or care by a relative, such as a grandparent or teenage sibling. In fact, among those 6- to 12-year-olds who regularly spent time unsupervised in 1999, two out of five (41.5 percent) also regularly spent time in these other child care arrangements.

Even those children who were in self care but who had *no* regular non-parental supervised care arrangements were unsupervised by adults or teens only about five hours a week. This pattern held for low-income children and for 6- to 9-year olds.

The encouraging news, then, is that children who are in self care typically do not spend extensive amounts of time unsupervised. Yet a minority of children is left unsupervised by adults or teens for substantial amounts of time. More than a tenth of the unsupervised children in each of these vulnerable groups spent ten or more hours a week in self care (11.3 percent of 6- to 9-year-olds and 13.2 percent of low-income children).

THE CIRCUMSTANCES

What factors might account for whether or not parents leave their children without adult supervision? Part of Child Trends' analyses of the 1999 National Survey of America's Families involved examining multiple child and family



characteristics simultaneously in order to isolate specific characteristics that may be linked with an increased likelihood of self care. These analyses did not reveal *why* certain children were in self care. However, they did reveal new information about which of the youngest school-age children and which of the low-income children seemed to be more likely – or less likely – than others to be in self care. These findings are presented below:

For the Youngest School-age Children

- Family income. As previously noted, a smaller proportion of low-income children was in self care, compared with the proportion of higher-income children in self care. It is true that employment is lower for low-income families than for higher-income families, so one underlying reason to leave children unsupervised at all may be less prevalent among low-income families. However, even after controlling for parental employment status, we found that self care was less common among poor children than among children living in families with incomes over 300 percent of the federal poverty threshold. ^{16, 17}
- **Parental employment:** Not surprisingly, 6- to 9-year-olds were more likely to spend time unsupervised by adults or teens when both parents were employed full-time, or when they had a single parent employed full-time.
- Parental mental health: Six- to 9-year-olds whose parent reported symptoms of poor mental health were more likely than other children to spend time without adult supervision (8.0 percent *versus* 6.5 percent). This link between symptoms of poor parental mental health and children in self care was apparent among 10- to 12-year olds as well.
- Child disability: Six- to 9-year-olds vulnerable in another aspect of their lives because they have a disability were less likely to be left in self care than were non-disabled children. Only 2.8 percent of children with a disability regularly spent time unsupervised by adults or teens.
- **Presence of siblings:** One household characteristic was linked with self care among 6- to 9-year-olds, even after controlling for

other factors. Those who had teenage siblings were more likely to be in self care than were 6- to 9-year-olds who did not. This pattern was not seen with older children. Although some parents may rely on older children to care for their younger siblings, in the National Survey of America's Families, care by siblings age 13 and older is considered to be relative care rather than self care. 18 It may be that when parents rely on sibling care for younger children, children have an increased likelihood of caring for themselves either because there are gaps in time when the older siblings are not available, or because parents allow children to care for themselves if they know an older sibling can check on the child occasionally. 19

For Low-income Children

- **Age of child:** Low-income children were much less likely to be in self care when they were young than when they were older, even after controlling for other relevant child and family characteristics. In 1999, only 4.5 percent of low-income children aged 6 to 9 regularly spent time without adult supervision, compared with 21.8 percent of low-income children aged 10 to 12.
- Parental employment: Low-income children were more likely to spend time unsupervised by adults or teens when both parents were employed full-time, or when they had a single parent employed full-time, than when neither parent was employed, or when they had a single parent who was not employed.
- Parental mental health: When low-income children had a parent who reported symptoms of poor mental health, they were more likely than other low-income children to be left without adult supervision (17.4 percent *versus* 10.0 percent). Thus, a subgroup of children that is already vulnerable because of economic disadvantage may experience additional risks stemming from both the time spent in self care and having a parent whose mental health is potentially compromised. In contrast, after controlling for other relevant factors, analyses show that poor parental mental health symptoms were not linked with self care among higher-income children.

Race and ethnicity: Low-income children who were Hispanic were less likely than white children to spend time without adult supervision, while low-income black children and white children were equally likely to be in self care. Ethnicity was related to a lower likelihood of self care even after controlling for income and other child and family characteristics, suggesting that culture may somehow play a role. 19

SOME POSSIBLE REASONS

Why might children spend time unsupervised? Little or no research exists on the whys of self care, but one can think of a number of possible explanations for the use of self care. For example, parents may face barriers in arranging age- and culturallyappropriate child care. For low-income families in particular, parents may not be able to afford additional supervised arrangements for their children. Or, after-school options may not be available in schools or communities. Parents also may be working unconventional hours, which makes finding care for their children more difficult. The end result could be that self care is used when no other supervised options are available to fill in the gaps between school hours and parental work hours. In fact, our analyses show that self care is more common when parents are employed full-time than when parents are not employed.

Yet most children with parents who are employed full-time are not left unsupervised. It is also important to recall that the vast majority of low-income children are not regularly left in self care, and, in fact, are less likely to be in self care than are higher-income children. It may be that parents feel less comfortable leaving their children unsupervised or in the care of a young sibling if they live in "unsafe" neighborhoods – those with high levels of crime (which often translate into low-income neighborhoods), or where people are not available to help watch out for neighborhood children.²⁰

In sum, a child's age is the strongest correlate of self care use. The finding that many child and family factors other than age are weakly or not at all linked to the use of self care suggests that the specific reasons behind self care use may be unique to each family's circumstances and characteristics. 21

IMPLICATIONS FOR POLICY AND RESEARCH

The use of self care is an issue that raises concerns among families, communities, and policy makers. This Research Brief has focused on the use of self care among two groups that may be particularly vulnerable when spending time unsupervised: younger school-age children and low-income children. Children who spend time on their own at younger ages may be setting the stage for increased time spent with other unsupervised children and involvement in risky behaviors as they get older. And the risks of self care for low-income children may be elevated since they are likely to live in less safe neighborhoods than higher-income children, and they might be missing out on the academic enrichment that some before- and afterschool programs provide.

The significant numbers of school-age children spending time in self care imply that increased public attention to the issue of self care may be warranted. Data from the National Survey of America's Families indicate that more than 3.3 million school-age children regularly spend time unsupervised by adults or teens. As noted earlier, in 1999, this number included approximately 866,000 6- to 9-year-olds as well as 1,050,000 low-income children, though these groups overlap.

One of the most worrisome findings to emerge from our analyses concerns parental mental health. Poor mental health may hinder a parent's ability to care for his or her child effectively and may doubly jeopardize children because it seems to be linked with an increased likelihood that these children might be in self care. To address this issue, it may be important to simultaneously target both child and parent needs. Some have suggested that high-risk families in the welfare population are more likely to benefit when services are comprehensive and have "multiple entry points."22 In the case of self care, by systematically asking parents about the care and supervision of their school-age children, programs that focus on parental mental health issues or programs designed to help parents leave welfare and start working could also serve as "entry points" to other programs that might help parents navigate beforeand after-school care options.

Another anti-poverty model that might be followed is the "two-generational" approach: programs that include direct benefits both for adults and for children. The idea is that when a child problem and a parent problem seem to be linked – as with self care and parent mental health – families will benefit most if a program addresses both parent and child needs.²³

In this *Research Brief*, we have noted some important links between the characteristics of children and families and the use of self care, such as the link with parent mental health. However, we did not identify a clear "profile" of a child who is likely to spend time unsupervised. Because of the variety of possible reasons children are left without adult supervision, it is unlikely that any single program or approach can comprehensively address the issue of self care.

In fact, a variety of informal and formal arrangements – including care at home or in home-based settings, before- and after-school programs, and clubs, sports, and activities – are used during children's out-of-school time. These arrangements vary widely in their purpose, scope, and content, and families may use a combination of arrangements to serve their needs. Arrangements are designed, implemented, and funded by families, by private organizations, and by local, federal, and state governments. ^{24,25}

Before- and after-school care programs can be effective both in providing needed supervision and in providing opportunities for academic enrichment – when they are well-staffed, well-run, stable, and engaging to children. Programs should address the needs and desires of children and recognize, in particular, the developmental challenges of middle childhood and adolescence: the growing desire for autonomy and the increasing importance of friendships and peer groups.

Though we have focused on low-income and younger school-age children, research shows that self care can be risky for all children, including older school-age children and adolescents. For example, self care among adolescents has been linked to an increased likelihood of delinquent

behaviors such as cigarette, alcohol, and drug use.²⁶ And, because older children are both more likely to spend time unsupervised and to engage in more risky behaviors than younger children, there is certainly reason to be concerned about self care for this larger group of children.

In future research, we need to learn more about the link between parental mental health and children's care settings. We also need to learn more about factors that the National Survey of America's Families did not assess, such as the types of neighborhoods in which children live, the availability of supervised child care arrangements, and how these factors might influence whether or not a child is in self care. And we need to examine further how different cultural groups perceive the use of self care. Finally, we need to understand more about how self care affects children's wellbeing and development, especially among the youngest school-age children and among low-income children.

This Research Brief draws heavily from "Unsupervised Time: Family and Child Factors Associated with Self Care," a paper written by Sharon Vandivere, Kathryn Tout, Martha J. Zaslow, Julia Calkins, and Jeffrey Capizzano, to be published as part of Assessing the New Federalism, a joint project of Child Trends and the Urban Institute. The authors are indebted to Beth M. Miller, Ph.D., of Miller Midzik Research Associates, for her careful review of and helpful suggestions on this brief.

Child Trends gratefully acknowledges the John D. and Catherine T. MacArthur Foundation for ongoing support of our *Research Brief* series. Additional support for Child Trends' communications activities is provided by the David and Lucile Packard Foundation, the William and Flora Hewlett Foundation, and the Annie E. Casey Foundation.

Editor: Harriet J. Scarupa

Endnotes

¹Peterson, L. (1989.) Latchkey children's preparation for self-care: Overestimated, underrehearsed, and unsafe. *Journal of Clinical Child Psychology*, 18(1), 36-43; Kerrebrock, N., and Lewit, E.M. (1999.) Children in self-care. *The Future of Children*, 9(2), 151-160.

²Colwell, M.J., Pettit, G.S., Meece, D., Bates, J.E., and Dodge, K.A. (2001). Cumulative risk and continuity in nonparental care from infancy to early adolescence. *Merrill-Palmer Quarterly*, 47(2), 207-234; Vandell, D.L. and Posner, J.K. (1999). Conceptualization and measurement of children's after-school environments. In S. L. Friedman and T. D. Wachs (Eds.), *Assessment of the Environment Across the Lifespan*. Washington, D.C.: American Psychological Association Press; Posner, J.K., and Vandell, D.L. (1994.) Low-income children's after school care: Are there beneficial effects of after-school programs? *Child Development*, 65, 440-456; Vandell, D.L., and Ramanan, J. (1991.) Children of the National Longitudinal Survey of Youth: Choices in after-school care and child development. *Developmental Psychology* 27(4), 637-643.

³Pettit, G.S., Laird, R.D., Bates, J.E., and Dodge, K.A. (1997.) Patterns of after-school care in middle childhood: Risk factors and developmental outcomes. *Merrill-Palmer Quarterly*, 43(3), 515-538.

⁴While we note here the greater vulnerability of younger children in self care, the patterns for older children are important as well given the greater likelihood of older children to actually engage in risky behavior. Similarly, while our focus here is on low-income families given the possibility of greater risk in their overall environments, the patterns for higher-income children are important to consider as well given the greater prevalence of self care found in this set of analyses for higher-income families. For a discussion of children of both age groups and both income groups, see Vandivere, S., Tout, K., Zaslow, M., Calkins, J., and Capizzano, J. (forthcoming.) Unsupervised Time: Family and Child Factors Associated with Self Care. Washington, DC: The Urban Institute.

⁵Although few studies have examined the outcomes of self care for children under age 10, one study found that third graders who spent time in self care had more behavior problems in third and fifth grades, while self care among fifth graders was not linked to behavior problems (Vandell and Posner, 1999). Dwyer et al. (1990) suggested that the younger children are when they begin spending time unsupervised, the more likely they are to use alcohol and to report risk-taking tendencies as adolescents. Vandell, D.L., and Posner, J.K. (1999). Conceptualization and measurement of children's after-school environments. In S. L. Friedman and T. D. Wachs (Eds.), Assessment of the Environment Across the Lifespan. Washington, D.C.: American Psychological Association Press. Dwyer, K.M., Richardson, J.L., et al. (1990). Characteristics of eighth-grade students who initiate self-care in elementary and junior high school. Pediatrics, 86: 448-454.

⁶Vandell and Posner (1999) found that a link between self care with lower social competence and lower academic grades was stronger for low-income children than for other children. Vandell, D.L., and Posner, J.K. (1999.) Conceptualization and measurement of children's afterschool environments. In S. L. Friedman and T. D. Wachs (Eds.), Assessment of the Environment Across the Lifespan. Washington, D.C.: American Psychological Association Press.

⁷Data are weighted in order to generate national estimates of population sizes and to correct for the fact that certain groups – such as low-income children – were oversampled in the National Survey of America's Families

⁸Two questions in the survey were designed to obtain information about self care. One was whether, during the past month, a focal child took care of himself or herself or stayed at home on a regular basis with a sibling who is under the age of 13, even for a small amount of time. The other was how many hours a week that child takes care of himself or herself or stays alone with a sibling who is under the age of 14.

⁹For more information on child care and self care patterns during the summer months, see, Capizzano, J., Adelman, S., and Stagner, M. (2002.) What Happens When the School Year Is Over? The Use and Costs of Child Care for School-Age Children During the Summer Months. Occasional Paper No. 58. Washington, DC: The Urban Institute.

 10 For example, a family of four with two adults and two children earning under \$33,060 in 1998 would be classified as low-income.

¹¹Estimates from the 1995 and 1997 Survey of Income and Program Participation (SIPP) (Smith, 2000; 2002), although notably from somewhat earlier time periods than the analyses reported here, are consistent with the NSAF figures and highlight the increase in the use of self care among older children and among higher-income children. Smith, K. (2000.) Who's Minding the Kids? Child Care Arrangements: Fall 1995. Washington, D.C.: U.S. Census Bureau. Current Population Reports, P70-70. Smith, K. (2002.) Who's Minding the Kids? Child Care Arrangements: Spring 1997. Washington, D.C.: U.S. Census Bureau. Current Population Reports, P70-86.

¹²The 95 percent confidence level estimate of this number is between 3,068,060 and 3,582,018 children, or a margin of error of about 260,000.

¹³The 95 percent confidence level estimate of the number of 6- to 9-year-olds in self care is between 716,933 and 1,014,542 children, or a margin of error of about plus or minus 150,000. The 95 percent confidence level estimate of the number of low-income children in self care is between 893,540 and 1,205,882 children, or a margin of error of about plus or minus 160,000. The 95 percent confidence interval of the number of low-income 6- to 9-year olds that are in self care is between 166,114 and 306,236.

¹⁴O'Connell, M., and Casper, L.M. (1995). Where have all the hours gone? Uncovering and resolving problems in questionnaire design: The case of estimating children's self-care. Paper presented at the annual meeting of the Population Association of America, San Francisco, April 6-8.

 $^{15}\mbox{We}$ estimated multivariate logistic regression models predicting the use of any self care. We estimated one model that included all 6- to 12year-olds in order to look at the main effects of age and income on the likelihood of self care use. Along with this, we estimated separate models for age and income subgroups to examine the independent associations of an array of child and family characteristics with the likelihood of self care use. We included the following variables in the models: parents' employment status, parent has spouse/partner, presence of adults other than parents in household, presence of children age 13 to 17 in household, presence of any additional children under age 13 in household, income-to-poverty ratio, parent's educational attainment, child age, child gender, child race/ethnicity, county of residence is in metropolitan sampling area, child health status, child disability status, child behavioral and emotional problems, child school engagement, use of any regular non-parental supervised care arrangement, child participation in extracurricular activities, symptoms of poor parental mental health, and parental aggravation level. Full regression results are available from the authors.

 $^{16}\mathrm{For}$ example, a family of four with two adults and two children earning \$49,590 or more in 1998 would be classified as having an income over 300 percent of the federal poverty threshold.

 $^{17}\mathrm{Cain}$ and Hofferth (1989) found a positive link between income and self care in multivariate analyses of the Current Population Survey, while Casper and Smith (1999) found that the link disappeared in multivariate analyses of 1995 Survey of Income and Program Participation data. Hofferth et al. (2000), using the Child Development Supplement to the Panel Study of Income Dynamics, found that children in highincome families were more likely to be in self care than children in moderate-income families, but that children in low-income families were the least likely to be in self care. Each of these studies used a slightly different set of control variables. Cain, V., and Hofferth, S.L. (1989). Parental choice of self care for school-age children. Journal of Marriage and the Family, 51, 65-77; Casper, L.M., and Smith, K. (1999). Home alone: Reasons parents leave their children unsupervised. Paper presented at the annual meeting of the Population Association of America; March 25-27,1999; New York; Hofferth, S.L., Jankuniene, Z., and Brandon, P.D. (2000). Self-Care among School-Age Children. Unpublished paper.

¹⁸Correspondingly, children's parents are much more likely to report that they use relative care when they have 13- to 17-year-olds in their household. Though we cannot determine that the caretaker is, in fact, the teenage sibling, 89 percent of 6- to 12-year-olds who have teens in their households are reported to use relative care, compared with only 40 percent of 6- to 12-year-olds who do not live with teens.

¹⁹Although we did not control for number of siblings or family size, which varies according to ethnicity and could be linked to self care, we did control for the presence of any other siblings under 13, the presence of any teenage siblings, the presence of any adults in the household other than the parent(s), and whether the parent was single or not.

²⁰However, another study focusing on self care used only while a parent was working indicated that self care is still slightly more common among higher-income families than among low-income families, even after controlling for family structure. Sonenstein, F.L., Gates, G.J., Schmidt, S., and Bolshun, N. (2002.) Primary child care arrangements of employed parents: Findings from the 1999 National Survey of America's Families. Assessing the New Federalism, Occasional Paper No. 59. Washington, DC: The Urban Institute.

²¹One study has found that the link between family income and self care disappears, after the parents' perception of the neighborhood safety was taken into account. Casper, L.M., and Smith, K. (1999). Home alone: Reasons parents leave their children unsupervised. Paper presented at the annual meeting of the Population Association of America; March 25-27.1999: New York.

²²Knitzer, J. (2000.) Promoting resilience: Helping young children and parents affected by substance abuse, domestic violence, and depression in the context of welfare reform. New York: National Center for Children in Poverty. ²³St. Pierre, R.G., Layzer, J.I., and Barnes, H.V. (1995.) Two-generation programs: Design, cost, and short-term effectiveness. *The Future of Children* 5(3), 76-93; Smith, S., and Zaslow, M. (1995.) Rationale and policy context for two-generation interventions. Pp. 1-33 in *Advances in Applied Developmental Psychology: Two-Generation Programs for Families in Poverty* (I. Sigal (series ed.) and S. Smith (vol. ed.)). Norwood, NJ: Ablex.

 $^{24} Langford, B.H.~(2001.)$ State legislative investments in school-age children and youth. Washington, DC: The Finance Project. Available online at http://www.financeprojectinfo.org/Publications/oststatepaper.pdf.

²⁵For example, in 1997, the Wallace-Reader's Digest Funds began supporting the development and implementation of 60 new after-school programs in 20 communities with the goal of promoting children's development. See, Grossman, J.B., Price, M.L., Fellerath, V., Jucovy, L.Z., Kotloff, L.J., Raley, R., and Walker, K.E. (2002.) Multiple choices after school: Findings from the Extended-Service Schools Initiative. New York, NY: Manpower Demonstration Research Corporation and Public/Private Ventures. Available online at http://www.mdrc.org/Reports2002/ppv_multichoice/ppv_multichoice_abstract.htm. Or, for profiles of eight other diverse citywide initiatives, see Hall, G., and Harvey, B. (2002.) Building and sustaining citywide afterschool initiatives: Experiences of the Cross-Cities Network Citywide Afterschool Initiatives. Wellesley, MA: National Institute on Out-of-School Time. Available online at http://www.niost.org/cross_cities_briefs.pdf.

²⁶Mott, J.A., Crowe, P.A., Richardson, J. and Flay, B. (1999.) After-school supervision and adolescent cigarette smoking: Contributions of the setting and intensity of after-school self-care. *Journal of Behavioral Medicine*, 22(1), 35-58; Mulhall, P.F., Stone, D., and Stone, B. (1996.) Home alone: Is it a risk factor for middle school youth and drug use? *Journal of Drug Education*, 26(1), 39-48.

Child Trends, founded in 1979, is an independent, nonpartisan research center dedicated to improving the lives of children and their families by conducting research and providing science-based information to the public and decision-makers. For additional information on Child Trends, including a complete set of available *Research Briefs*, visit our Web site at **www.childtrends.org**. For the latest information on more than 70 key indicators of child and youth well-being, visit the Child Trends DataBank at **www.childtrendsdatabank.org**.

© 2003 Child Trends ISBN 0-932359-02-7



Washington, DC 20008

ADDRESS SERVICE REQUESTED

NONPROFIT
U.S. POSTAGE
PAID
Permit No. 1897
Washington, D.C.