

# **From Early Involvement with Child Welfare Services to School Entry: A 5- to 6-Year Follow-Up of Infants in the National Survey of Child and Adolescent Well-Being**

**With Tables of 5- to 6-Year Follow-Up Results  
for Children Aged 1 to 4 at Baseline**

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## EXECUTIVE SUMMARY

In 1999 the Administration for Children and Families, U.S. Department of Health and Human Services, undertook the National Survey of Child and Adolescent Well-Being (NSCAW) to learn about children and families coming in contact with the child welfare system (CWS). The sample, which represents the population of children and families that entered the CWS within a 15-month period (October 1999 to December 2000), comprises 5,501 children (aged 0 to 14 years) from 92 child welfare agencies nationwide. The first national longitudinal survey of its kind, NSCAW gathers information about children's safety, living-situation permanency, well-being, and services after a maltreatment investigation by child protective services. NSCAW has examined the experiences of children and families with the CWS, starting approximately 4 months after the completion of a CWS maltreatment investigation and following up 1½ years, 3 years, and 5 to 6 years later (in 2005 and 2006).

### **Purpose of the Report**

The current report provides information about 962 children who were infants (0 to 12 months old) when they first became involved in investigations for child abuse or neglect and whose caregivers participated at the 5- to 6-year follow-up. Some children's cases were closed after investigation; others had a case opened to child welfare services. Although the majority remained at home after investigation, others were removed from their homes. Five to 6 years after child protective services investigation, these children were 5 to 6 years old. This report is the first in a series presenting findings from the NSCAW 5- to 6-year follow-up.

Infants who were the focus of maltreatment for CWS constitute an especially vulnerable population. Many of these children have faced disruptions in their living arrangements that may have jeopardized their well-being. Many have developmental, emotional, behavioral, or physical health needs, or a combination of such needs, that may benefit from services. As 5- to 6-year-olds, these children were entering an important developmental period, beginning their school experience, and learning to negotiate lasting peer relationships. This report provides information to enhance our understanding of the needs of these youngest children entering the CWS:

- Who are the children who have had contact with the CWS during infancy? What types of maltreatment did they experience as infants? What risks did they face? What environments were these children living in by the time they were 5 to 6 years old?
- How well have these children been doing in terms of their physical, psychosocial, cognitive, peer, and academic development? How does this development compare with that of other children?
- How stable have the children's living situations been? Were they living in permanent homes by the time they were 5 to 6 years old?
- What services do these children, caregivers, and families need? What have they received?

## Who Are the Children Who Had Contact with CWS During Infancy?

**Children's age, sex and race/ethnicity.** Almost all of these children were 5 (67.1%) or 6 (31.6%) years of age. They were evenly divided between males and females. White children made up the largest group (43.3%), followed by Black children (30.1%) and then Hispanic children (20.8%).

**Type of abuse.** At the time of the report of child abuse or neglect, caseworkers reported that about two thirds (63.9%) came to the attention of the CWS because of neglect. The caregiver's failure to provide for the child was reported for 34.9%; the caregiver's failure to supervise, for 29.0%; and physical abuse, for 19.2%. Emotional, moral/legal, or educational abuse, or abandonment, was reported for 4.8%. Another 10.5% were reported for reasons other than abuse or neglect (e.g., for mental health or domestic violence). More than one third (38.7%) of these maltreatment cases were *substantiated*, meaning the CWS decided that the allegations of child maltreatment were valid.

**Living situation.** At the 5- to 6-year follow-up, the majority of these children were living at home with their biological parents (61.7%). An additional 15.3% were living at home with kin or other caregivers, and another 16.7% were living in adoptive homes. In addition, 6.4% of children were living out of home. The interviewed caregivers were primarily female (92.7%) and White (54.7%); more than half were 25 to 44 years old. Only one third of caregivers had more than a high school education, and almost half lived beneath the federal poverty level. About half of caregivers were employed full or part time. Although fewer than half (43.2%) were married, the majority of caregivers (70.3%) lived with at least one other adult in the home.

## What Risks Did These Children Face at the Time of CWS Investigation?

**Prior CWS involvement.** Caseworkers reported that 40.0% of families had been previously reported for child maltreatment. Of these families, 91.6% previously had been investigated for child abuse or neglect, and more than two thirds had previously substantiated incidents of abuse or neglect.

**Caseworker risk assessment at investigation.** At the first interview, when children were 0 to 12 months old, caseworkers were asked about their perceptions of caregivers' risk factors. Caseworkers reported that 14.4% of caregivers were abusing alcohol, 29.7% were abusing drugs, 20.2% recently had been arrested, 23.3% had a serious mental health problem, and 11.1% had a cognitive impairment. Caseworkers estimated that almost half (42.6%) of caregivers had poor parenting skills and that 14.8% had unrealistic expectations of their infants. About a third of caregivers themselves had a history of abuse and neglect, and 37.7% had been victims of domestic violence. At the time of the first interview, there was active domestic violence against 22.3% of caregivers.

## How Well Were These Children Functioning and Behaving at 5 to 6 Years of Age?

**Caregiver aggression and neglect.** More than three quarters (77.5%) of caregivers reported using psychologically aggressive discipline tactics (e.g., shouting or screaming at a child), and 65.2% used corporal punishment or other minor hitting (Straus, 1996). Much lower proportions of caregivers reported any type of severe assault (3.5%) or very severe assault

(0.2%). More than a tenth (12.3%) of caregivers reported the occurrence of some form of neglect in the year before the interview—primarily being so distracted by problems that they could not show or tell their child that they loved him or her (8.5%).

**Physical well-being.** The majority of children were in good, very good, or excellent health, according to their caregivers. Approximately a fifth (20.5%) had a serious chronic health condition, with the majority of these children suffering from asthma (13.3%). This rate of asthma is similar to that among similarly aged children in the general population. Some type of injury, accident, or poisoning that required the care of a doctor or nurse was experienced by 5.8% of children during the 12 months before the interview. The injuries themselves were most commonly cuts, scrapes, puncture wounds, or broken bones.

**Disability risk.** When several measures are considered, about a third of children showed patterns of functioning and behavior consistent with a variety of disabilities. Standardized assessments, together with caregiver and teacher reports, across several indicators showed risks for a cognitive disability, emotional or behavioral problems, or physical disability. Overall, 13.0% of children appeared to be at risk for a cognitive disability, 28.9% appeared to be at risk for an emotional or behavioral problem, and 5.9% showed signs of a physical disability.

**Psychosocial well-being.** Children in the NSCAW study had rates of externalizing behavior problems (e.g., aggression, hyperactivity, oppositional behaviors) higher than the rates for the normative sample, as indicated by reports from caregivers and teachers on the Achenbach scales (Achenbach, 1991). Caregivers' reports of externalizing behaviors were significantly more likely for girls than for boys and more likely for children who had been physically abused than for those who had not been physically abused. The rates of internalizing symptoms (e.g., anxiety, depression) reported by parents and teachers were similar to rates in normative samples.

**Cognitive well-being.** Overall, children's average score was within the average range on standardized measures of cognitive and language skills. These scores were, however, slightly lower than those for children in the normative population: The children's average score on the Kaufman Brief Intelligence Test was one half of a standard deviation below the normative mean (Kaufman & Kaufman, 1990). Average scores for children on the Preschool Language Scale also were one half of a standard deviation below the mean for the normative population (Zimmerman, Steiner, & Pond, 1992).

**Social functioning.** Although the average total scores on the Social Skills Rating System (SSRS) were within the typical range for children of this age (Gresham & Elliot, 1990), they were lower than those observed in the normative population (for both the caregiver and teacher ratings). As rated by parents, girls showed fewer cooperative behaviors than boys on average. As rated by teachers, those who had experienced physical abuse had better SSRS Total scores than those with other types of maltreatment. As measured by the Vineland Adaptive Behavior Screener (Sparrow, Carter, & Cicchetti, 1993), more than a fifth of children had "low" daily-living skills, a rate substantially higher than in the general population. When asked about relationships with peers, children described themselves as lonelier than did children in the normative group on the Loneliness and Social Dissatisfaction Scale (Cassidy & Asher, 1992). They described a connection to school that was positive, according to responses to a school engagement scale.

**Academic achievement.** Average achievement test scores generally fell within the typical range (85 to 115), although at the lower end. Assessments of reading comprehension and oral mathematical skills were significantly below the normative means, however, on the Woodcock-Johnson III Tests of Cognitive Abilities (Woodcock, McGrew, & Mather, 2001). Teachers also rated children's performance in academic subjects. Although most children were described as being "at grade level," a sizable percentage were said to be performing "below" or "far below" in language arts (39.0%) and mathematics (35.1%).

### **How Stable Are the Children's Living Situations? Are They Living in Permanent Homes?**

**Living situation.** By the time children were 5 to 6 years old, about a third of children had been placed out of the home at some point in their lives. Black (46.9%), Hispanic (43.2%), and "Other" children (46.7%) were more likely to be placed outside the home than White children (26.8%). Of the children who had been placed, 23.5% had two placements during their lifetime, and 27.3% had three or more placements. Parental rights were terminated in more than one third of cases that had at least one placement out of home. Of the children with out-of-home placement histories, only about a fifth were reunified with their birth parents.

**Adoption.** Fewer than one fifth (17.0%) of all children were adopted by age 5 to 6. The median time between placement and finalized adoption was almost 2 years. More than three quarters of those adopted had been placed outside the home before the adoption. As the number of children adopted increased over time, the number of children in foster care decreased.

### **What Services Do Children Receive? Do They Receive the Services That They Need?**

**Health services.** Nearly all children (95.7%) were reported to have a pediatric (or medical) home. Most children had received preventive and routine health services (such as immunizations, dental care, and vision and hearing screening). Children with chronic health conditions were more likely to receive a well-child checkup and to report having a pediatric home than children without chronic health conditions. About one quarter (25.8%) of children were reported by caregivers to have used emergency room or urgent care services for an illness, injury, accident, or poisoning in the year before the interview. Compared with children living in other settings, children living at home with biological parents were less likely to have received a recent well-child checkup and more likely to have had an overnight hospital stay.

**Mental health services.** Overall, 16.7% of children had received one or more outpatient psychiatric services. Twelve percent (12.0%) had received specialty outpatient mental health services, 7.0% had received help from their family physician for a mental health problem, 10.8% had used school-based mental health services, and 6.4% were using psychotropic medications. When compared with children without behavior problems, children reported to have behavior problems on the Achenbach scales were 4 to 5 times as likely to have received each type of mental health service. Although rates of unmet mental health services needs seen here were lower than those for most U.S. children 3 to 17 years old (Kataoka et al., 2002), rates of unmet mental health needs among these children were still surprisingly high: 65.1% of children who had behavior problems did not receive a single mental health service.

**Special education services.** Almost a quarter (22.6%) of children were receiving special education services through an Individualized Education Plan (IEP), a higher rate than that

reported for all U.S. children 6 to 21 years old. According to teachers, a little more than half of the children had been receiving such services for longer than a year. Nearly two thirds of those with an IEP were classified as speech impaired. Developmental delays, learning disabilities, attention-deficit/hyperactivity disorder, and emotional disturbance were also common IEP classifications. Children in this population with scores on developmental measures indicating needs likely to interfere with school success were more likely to have an active IEP than those children not determined to have such needs. However, 62.8% of children determined to potentially benefit from a referral for special education services did not currently have an active IEP.

### **What Services Do Caregivers and Families Receive?**

***Child welfare services.*** Five to 6 years after the index maltreatment investigation, about a tenth of caregivers reported that they were still receiving services that were either provided by or paid for by the CWS. Among those still receiving CWS services, caseworkers reported that 55.9% received family-based services (e.g., family preservation or reunification), 55.6% received parent support services (e.g., parent training), and 41.4% received family counseling. The families of children living in out-of-home settings were more likely than other families to receive the family-based services.

***Services to address basic needs.*** Slightly less than one third of caregivers (32.7%) reported having received some type of assistance for meeting basic living needs (e.g., transportation; food assistance; financial assistance, excluding Temporary Assistance for Needy Families or Supplemental Security Income; housing). Nearly one third of caregivers reported having received regular childcare assistance; 19.3% reported having received services to directly benefit themselves (e.g., job-related services, participation in organized support groups, legal aid); and 11.9% reported having received home assistance services (e.g., home management training). Families living below the federal poverty level were more likely to receive services to meet basic living needs and services to directly assist the caregiver.

***Caregiver mental health and substance abuse services.*** More than a quarter (26.5%) of in-home caregivers had mental health assessments indicating need, but only 25.8% of the group in need received a mental health service. Most commonly, caregivers who received a mental health service reported using psychotropic medication. Only a handful reported visiting a clinic or doctor for mental health problems, and almost none reported using substance abuse services.

### **Exhibits for Children Aged 1 to 4 at Baseline**

A full discussion of children who were older than age 1 at baseline is beyond the scope of this report. Nevertheless, analyses were conducted and exhibits are presented in Appendix B for children aged 1 to 4 at baseline. The analyses paralleled those of the infant sample. Results were similar, with the following notable exceptions:

- Children aged 1 to 4 years old at baseline had *lower* rates of cognitive disability at Wave 5 than children who were infants at baseline.

- Children who were 1 to 4 years old at baseline had somewhat *higher* rates of emotional and behavioral problems at Wave 5 than children who were infants at baseline.
- Children aged 1 to 4 at baseline were *less* likely to be placed outside the home and be adopted than infants at baseline, and the older group's adoptions also took almost 6 months longer when they happened.
- Caseworkers identified *fewer* mental health and substance abuse problems at baseline among caregivers of the children aged 1 to 4 than among caregivers of infants at baseline, which may be related to the higher placement rate for infants.
- Children aged 1 to 4 years old at baseline were less likely to receive child welfare services, family-based services, and parenting support services than children who were infants at baseline.

### **Conclusions and Implications for Child Welfare Services**

Young children are the most likely to be reported to CWS for abuse or neglect, and their cases are the most likely to be substantiated. The innate vulnerability of infants who are abused or neglected makes them of special interest to caseworkers, policy makers, service providers, and the general public. The CWS may indeed have a special responsibility toward these youngest children entering its system.

Findings in this report are in some ways promising. Many children identified in infancy for abuse and neglect fared quite well 5 to 6 years after maltreatment investigation. Most were in good physical health and demonstrated average social competencies. Although their scores on standardized measures of intelligence, academic achievement, and cognitive skills were often below national norms, on average they fell within the typical range of ability. Most children were living at home with at least one biological parent. Of those in out-of-home care, most were living in a permanent home with adoptive parents, kin, or other caregivers.

Despite these positive outcomes, a substantial subpopulation of children experienced placement disruptions, challenges to their developmental well-being, and ongoing unmet service needs. More than half continued to live in poverty. Even for adoptive parents, about half reported income at less than 200% below the federal poverty level, suggesting the need for continuing supportive services for this group. Of those children who were placed outside the home, most had multiple placements and had spent almost 2 years in placement. These findings point to the challenges faced by families, children, and caseworkers in establishing permanent, stable placements even for these youngest children entering the CWS.

Although a fair proportion of children were developing within the expected ranges of normalcy by the time they were 5 to 6 years old, their scores on measures of intellectual and language functioning tended to be lower than the average for all children. Children showed significantly higher rates of externalizing behavior problems, and 5.9% to 28.9% demonstrated risks for a physical, cognitive, and emotional or behavioral disability. Even though one fifth (22.6%) of children were receiving special education services by the time they were 5 to 6 years

old, at least an additional third were likely candidates because of cognitive, language, or behavioral-emotional problems. Sixty-five percent (65.1%) of children noted to have behavior problems did not receive a single mental health service. These levels of unmet social service needs underscore the important role for the CWS in securing cross-agency ties and service collaboration for children identified through its investigations. Linking children to preventive, developmentally oriented early intervention services may be particularly critical for infants entering the CWS.

When these children were infants, many caregivers had substance abuse and mental health problems, some suffered from domestic violence, and many had poor parenting skills. By the time the children were 5 to 6 years old, more than a quarter (25.7%) of in-home caregivers had mental health assessments indicating need, but only about a quarter of them reported having used a mental health service. These results show that a significant proportion of children are still facing a number of family risk factors that can compromise their ability to adapt and successfully integrate into society. Identifying and meeting caregiver service needs may be especially important for preventing future child maltreatment.

This report describes children who were infants when they experienced their first contact with CWS. NSCAW will continue to follow the life course of other children (e.g., children in early childhood, young adulthood) entering the CWS, in order to gather data about services received, well-being, and placement stability. This information will chronicle the life outcomes for children and families that have come into contact with the CWS and will therefore enrich our understanding of the problems these families face and the solutions that are possible.



## **CHAPTER 1**

### **INFANTS INVOLVED WITH CHILD WELFARE**

#### **A SPECIAL RESPONSIBILITY**

In recent years, the development of very young children (aged 0 to 6 years) has captured the public imagination. The topic has appeared on the covers of major news magazines, garnered attention from celebrities, and led to fads such as playing Mozart during gestation to boost children's IQs. Despite its faddishness, attention to the first years of life is justified, both because of what we have long known about the importance of early childhood for development and because of new knowledge from neuroscience about its impact on children's well-being. This report focuses on a population of children for whom knowledge about early child development is especially critical—children who, as infants, were involved in investigations of child maltreatment by child welfare services. Though they may not grace the cover of magazines or engage celebrity interest, and are far from any parenting fad, as infants many of these children faced major disruption in their development and major risks to their well-being thereafter. Knowledge about the safety, care, and well-being of these children and the service response to their needs is badly needed. Moreover, we need to follow these children over time, to see how their well-being as infants may be related to their ongoing development. In children aged 5 to 6, we can see what role the challenges that began in infancy may play as they adapt to school and start to make friends. This report concentrates on these children at age 5 to 6 years.

This report uses data from the National Survey of Child and Adolescent Well-Being (NSCAW), a longitudinal study of a national probability sample of children involved with child welfare. NSCAW originated in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, which directed the Department of Health and Human Services to carry out a national study of children who are at risk for maltreatment or are otherwise involved with the child welfare system (CWS; see NSCAW Research Group, 2002; U.S. Department of Health and Human Services, Administration for Children and Families, 2005b). NSCAW has gathered data on children's safety, permanency of living situations, well-being, and services at baseline (approximately 4 months after the completion of a child welfare investigation or assessment), 1½ years, 3 years, and 5 years from baseline. Baseline data were collected in 1999–2000, while data from the 5- to 6-year follow-up were collected in 2005–2006.

This report is the first in a series presenting findings from the Wave 5 follow-up. It focuses on the 962 children who were infants (0 to 12 months) when first involved in investigations of abuse and neglect and whose caregivers were available to participate in the Wave 5 follow-up. This represents 85% of the children in this group at baseline (see below). By the time of this follow-up, these children were 5 to 6 years old.

Our research questions are as follows:

- How well are these children doing in terms of development, physical and mental health, and success beginning school?
- To what extent have their living situations remained stable or changed, and are they living in permanent homes?

- What services are children and caregivers receiving and do the services match their needs?

Although a full investigation of older children was beyond the scope of this report, the results of additional analyses of children who were 1 to 4 years old at baseline are presented in a series of exhibits in Appendix B. These analyses parallel the analyses for the infant population for the most part, and exhibits with the same numerals (e.g., Exhibit 1-2, Exhibit B.1-2) generally contain parallel information.

### **The Nature of the Special Responsibility**

Our society has a special responsibility for infants who become involved with the CWS through investigations of child maltreatment. Abuse or neglect during this most vulnerable age can place infants in immediate peril. In 2004, an estimated 671 infants died from child abuse and neglect in the United States (U.S. Department of Health and Human Services, 2006a). Child maltreatment during infancy can have a profound effect on children's physical and cognitive development, even affecting the structure and functioning of their brains (see e.g., Stien & Kendall, 2003). It can also interfere with fundamental components of children's well-being and development, such as those described as the critical focus of early intervention: "(1) self-regulation, (2) the establishment of early relationships and (3) knowledge acquisition and the development of specific skills" (National Research Council and Institute of Medicine, 2000, p. 5).

Previous research, including research using NSCAW, shows that less than one third of investigations overall lead to a substantiation of the abuse or neglect allegation. However, a number of allegations are not substantiated for lack of evidence, even when caseworkers judge children to have suffered harm or be at moderate to high risk (U.S. Department of Health and Human Services, 2008a). Moreover, research has found that even children in unsubstantiated cases have disproportionate exposure to risks, have disproportionate rates of developmental deficits and mental health problems, and, in some cases, experience family violence at home and disruption in care. In many ways, outcomes for children in unsubstantiated cases are little different from those for children in substantiated cases.

Society's responsibility for these children is even larger when child welfare services takes custody of the children. CWS takes custody when a child is placed in foster care and often when placed with kin. CWS then has legal responsibility for ensuring that children are kept in a safe and stable environment, are returned home whenever possible, and receive services needed to address maltreatment, ensure positive development, or both. Although most of the children are long past their involvement with CWS, 5 or 6 years after the index investigation that made them eligible for NSCAW, we nevertheless have a responsibility to understand their development. Child abuse and neglect can have long-term negative effects on child victims' cognitive, emotional, and social development.

Moreover, many children faced multiple risk factors impeding their development and many faced developmental delays and behavioral and emotional difficulties that can have a long-term negative effect on subsequent achievement of critical skills. As we discuss below, follow-up reports at 18 and 36 months showed a high prevalence of continuing difficulties.

## **Purpose of the Report**

Our purpose is to gather information to help us better understand these children's needs, inform policy makers and practitioners, and support service improvements. We provide an overview of these children's status at age 5 to 6 years. Using data from caregivers and from standardized assessments of the children themselves, we present data on their well-being, current safety, the stability and permanency of their current living situation, and the services they and their caregivers receive. Given the limited scope of this report, this analysis raises many more questions than it can address. One of our goals is to stimulate more NSCAW research to explore such matters as case pathways, change over time, patterns of disability and resiliency, systems issues and effects, and impact at multiple levels.

NSCAW is available to all qualified researchers through the National Data Archive on Child Abuse and Neglect (NDACAN) at Cornell University (see [www.ndacan.cornell.edu](http://www.ndacan.cornell.edu)). To date, numerous peer-reviewed journal articles and other publications have appeared using NSCAW data (see Wallace, Nahm, Luba, & Cross, 2006), and additional analyses by dozens of different investigators are in progress.

## **NSCAW Methods**

The methodology of NSCAW provides a number of advantages for this analysis, while also entailing some limitations. We give a brief overview of the methodology here; detailed explanations of methods are presented in several available documents (Christ & Biemer, 2005; NSCAW Research Group, 2002; U.S. Department of Health and Human Services, 2005b).

The NSCAW cohort includes 5,501 children aged birth to 14 years (at the time of sampling), who had contact with the CWS within a 15-month period beginning in October 1999. These children were selected from 92 Primary Sampling Units (PSUs) in 97 counties nationwide. The sample of investigated/assessed cases included both cases that received ongoing services and cases that did not receive services, either because they were not substantiated or because it was determined that services were not required.

This sample design required oversampling of infants (to ensure there would be enough cases going through to permanency planning), sexual abuse cases (to ensure there would be enough cases to have sufficient statistical power to analyze this kind of abuse alone), and cases receiving ongoing services after investigation (to ensure adequate power to understand the process of services). This approach allows for generation of national estimates for the full population of children and families entering the system, with power to consider key subgroups of the child welfare population. Weighted percentages are used to provide the most accurate population estimates possible (Christ & Biemer, 2005).

Exhibit 1-1 gives an overview of how and from whom data are collected in NSCAW. NSCAW provides the widest range of informants of any major study of child welfare. Children, caregivers (permanent, foster, and kin), caseworkers, and teachers all participate. Interviews include use of standardized instruments measuring safety, child development, child well-being, service delivery and other constructs, as well as questionnaire items specially designed for this study. Data were collected from children and caregivers in face-to-face interviews conducted in their homes. To help ensure respondents' privacy and comfort reporting personal information,

**Exhibit 1-1**  
**Timeline of NSCAW Data Collection**

	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>	<b>Wave 4</b>	<b>Wave 5</b>
<b>Start and end dates</b>	11/15/99– 04/30/01	10/01/00– 03/31/02	04/01/01– 09/30/02	08/01/02– 02/28/04	09/05/05– 11/15/07
<b>Months after close of investigation</b>	2–6	12	18	36	59–96
<b>Respondent</b>					
Child	X		X	X	X
Current caregiver	X	X	X	X	X
Investigator/services caseworker	X	X	X	X	X
Teacher	X		X	X	X

sensitive data collection in the home was conducted through an audio computer-assisted self-interviewing system, in which caregivers, following voiced instructions given to them through headphones, entered data directly into laptop computers.

Wave 5 (the 5- to 6-year follow-up) was atypical in that it was fielded by age cohort rather than by the time interval since investigation or assessment close. Children in the infant cohort (younger than 13 months old at the time of sampling) were fielded first, when they were 5 to 6 years old, from September 2005 to February 2006. Children 13 to 48 months old at the time of sampling were fielded next, from February to December 2006. Young adults who had turned 18 years old by April 30, 2006, were fielded in July 2006. The remaining children's cases were fielded from March to November 2007.

The data collected touched on a wide range of constructs in four domains: safety, permanency, well-being, and service delivery. Below is a partial list of the constructs measured:

- Investigation outcomes
- Child placement, reunification, and adoption
- Living environment
- Cognitive development
- Social skills and support
- Child physical and mental health
- Child behavior problems
- School functioning
- Parental aggression and neglect
- Parental risk factors

- Child welfare services
- Child mental health services
- Family services

There are some differences in the data collected for each case, depending on whether the main child caregiver was a permanent or nonpermanent caregiver. The designation *nonpermanent* is used for caregivers of children in out-of-home placements: formal kinship care, in which a child lives with relatives; family foster care, where care is provided by an unrelated foster parent; or, rarely, other residential settings (e.g., residential treatment center, group home). The designation *permanent* is given to caregivers of children in in-home situations: living with biological or adoptive parents or informally with relatives. The main questionnaire differences by type of caregivers are the following: (1) only permanent caregivers are queried about alcohol dependence, drug dependence, involvement with the law, discipline and child maltreatment, and domestic violence (females only); (2) only nonpermanent caregivers are queried about services received by foster caregivers; and (3) foster and adoptive parents are queried about permanency planning. Detailed description of the instruments used is provided in the baseline report, available at [http://www.acf.hhs.gov/programs/opre/abuse\\_neglect/nscaw/](http://www.acf.hhs.gov/programs/opre/abuse_neglect/nscaw/). (For a brief overview, see Appendix A.)

***The 5- to 6-year follow-up for children who were infants at baseline.*** Baseline data were collected 4-5 months after the close of the index CWS investigation. Data collection at 1½ years, 3 years, and 5 years included the vast majority of the same variables as the baseline set. The mean time between the 5- to 6-year follow-up and the previous 3-year follow-up (when children were between 3 and 4 years old) was 30 months, with a range of 21 to 44 months. Thus, at Wave 5, children were between 5 and 6.5 years old.

We learned from caregivers on attempts at follow-up interviews that 10 children among those who were infants at baseline had died. Thus the eligible child and caregiver sample for the purpose of calculating response rates was 1,186 (1,196 in the original sample minus 10 deceased). The overall weighted response rate was 85.1%; the weighted response rate for children was 84.5%. For Wave 5 analysis, placement of children was classified as in home with biological parents, in home with adoptive parents, in home with kin or other caregiver, or out of home. The “kin or other” in-home caregivers were 89.4% kin, and 10.6% nonrelative caregivers (e.g., family friends).

***Analysis in this report.*** This report uses simple data analytic methods to profile infants involved with CWS at a 5- to 6-year follow-up on a number of different variables related to child well-being, placement and permanency and service delivery. We report means and percentages and associated standard errors. In the vast majority of analyses, we compare groups by the key demographic variables of child sex, child race-ethnicity, and children’s living setting at the follow-up. We also compare outcomes by severity of maltreatment, and presence of disability or a chronic health condition, and report these results when they are statistically significant. Most analysis uses straightforward bivariate methods such as contingency table analysis with a Pearson  $\chi^2$  test (adapted for use with a complex survey sample) and comparison of means using *t* or *F* tests.

A simple analysis plan like this has limitations of course. The most important concerns comparisons on 5- to 6-year follow-up outcomes that involve certain group variables: child living setting, disability status (physical, cognitive or emotional) and chronic health condition. The interpretation of differences on outcomes by groups represented by these variables is ambiguous. We will not be able to determine whether being a member of a certain group made a certain outcome more likely, or whether children on a path to a certain outcome tend to end up in certain groups. If, for example, children who are adopted are more likely to have a chronic health condition, we do not know whether this is because agencies give priority in arranging adoptions to children with health conditions, or if adoptive parents are more conscientious about getting health care for their children and identifying chronic problems. Future NSCAW research that takes advantage of the longitudinal nature of NSCAW data will yield more interpretable results, but is beyond the modest scope of this report.

### **This Population at the Wave 5 Follow-up**

Exhibit 1-2 gives an overview of sociodemographic characteristics at the Wave 5 follow-up of those children who were infants at baseline, by type of living arrangement at this follow-up. About half the sample is male, 99% of children are 5 or 6 years old. Less than half (43%) are White, 30% are Black, 21% are Hispanic, and 6% are “Other.” About 73% are in kindergarten and 18% are in first grade. Exhibit 1-3 gives a similar overview of the caregivers at the 5- to 6-year follow-up by type of living arrangement for children. The majority of caregivers are females (93%), more than half are 25 to 44 years old, and 13% are less than 25 years old. More than half (55%) are White, 27% Black, 13% Hispanic, and 6% Other. Only one third of caregivers have more than high school education. Almost half live under the federal poverty level. About half of caregivers have fulltime or part time employment. Less than half of caregivers are married but the majority live with other adults in the home (70%). About a quarter have four or more children in the home.

### **Child Development from Age 0 to 6**

The literature on normal child development, as well as previous research on the consequences of child maltreatment, guided the selection of measures used and analyzed in NSCAW. A brief overview of key developmental issues provides a context for understanding the results for children involved in CWS investigations at infancy.

***Social-emotional competence.*** Children who have been maltreated are at risk in terms of their social and emotional competency, which is essential for children to develop a sense of well-being and to function well with peers and in school (see, e.g., Bolger & Patterson, 2001; Bolger, Patterson, & Kupersmidt, 1998; Rogosch, Cicchetti, & Aber, 1995). Key achievements during the first few years include a representation of the self as distinct from other individuals, the recognition of different feelings, and attachment with a significant adult. The literature indicates that parents who are warm, discipline their children appropriately (e.g., consistent in practices, provide clear expectations for behavior, offer reasons for actions), and provide opportunities for their children to have peer contact are more likely to have children who are socially and emotionally competent (Denham & Grout, 1992; Ladd & Hart, 1992).

**Exhibit 1-2**  
**Child Characteristics**  
**Infant Population at Wave 5**

<b>Child Characteristic</b>	<b>Total<sup>1</sup></b> <b>% (SE)</b>	<b>In Home:</b> <b>Biological</b> <b>Parent<sup>2</sup></b> <b>% (SE)</b>	<b>In Home:</b> <b>Adoptive</b> <b>Parent<sup>3</sup></b> <b>% (SE)</b>	<b>In Home: Kin</b> <b>and Other<sup>4</sup></b> <b>% (SE)</b>	<b>Out of Home<sup>5</sup></b> <b>% (SE)</b>
<b>Total</b>	100	61.7 (3.6)	16.7 (1.9)	15.3 (1.8)	6.4 (1.5)
<b>Child's sex</b>					
Male	50.3 (3.2)	55.4 (4.3)	39.0 (4.9)	44.7 (6.3)	43.4 (11.1)
Female	49.8 (3.2)	44.6 (4.3)	61.0 (4.9)	55.3 (6.3)	56.6 (11.1)
<b>Child's age</b>					
4	0.1 (0.1)	0.0 (0.0)	0.0 (0.0)	0.4 (0.0)	0.0 (0.0)
5	67.1 (3.5)	61.9 (4.3)	82.9 (4.0)	74.2 (5.4)	59.6 (12.1)
6	31.6 (3.4)	36.1 (4.2)	17.1 (4.0)	25.4 (5.4)	40.4 (12.1)
7	1.2 (1.5)	2.0 (1.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
<b>Child's race/ethnicity</b>					
Black	30.1 (3.2)	27.3 (3.8)	34.6 (5.7)	38.5 (5.0)	25.2 (9.6)
White	43.3 (3.6)	48.8 (4.9)	32.7 (6.3)	35.7 (5.7)	35.2 (12.2)
Hispanic	20.8 (2.1)	19.4 (3.1)	18.1 (4.7)	23.3 (5.6)	36.0 (11.8)
Other	5.8 (1.4)	4.5 (1.2)	14.6 (5.4)	2.6 (1.5)	3.5 (2.9)
<b>Grade in school</b>					
Not in school <sup>6</sup>	3.5 (0.9)	4.1 (1.4)	2.2 (0.9)	3.4 (2.2)	0.0 (0.0)
Preschool and other <sup>7</sup>	4.5 (1.0)	4.3 (1.4)	7.0 (1.7)	1.9 (1.6)	6.0 (5.8)
Kindergarten	72.9 (2.6)	71.6 (3.4)	77.2 (4.0)	77.3 (5.1)	76.6 (12.9)
First grade	17.9 (2.2)	18.0 (2.6)	13.6 (3.8)	17.5 (4.9)	17.4 (12.3)
Second grade	1.2 (0.9)	2.0 (1.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Asterisks denote statistical significance of differences across setting types for each covariate ( $*p < .05$ ).

<sup>1</sup> *N* (minimum) = 921.

<sup>2</sup> *N* (minimum) = 494.

<sup>3</sup> *N* (minimum) = 224.

<sup>4</sup> *N* (minimum) = 159.

<sup>5</sup> *N* (minimum) = 44.

<sup>6</sup> A valid Pearson  $\chi^2$  test was impossible because of sparse cell sizes.

<sup>7</sup> Includes nursery school, Head Start, and other ungraded placements.

**Exhibit 1-3**  
**Caregiver and Household Characteristics**  
**Infant Population at Wave 5**

Characteristic	Total (N = 921) % (SE)	In Home: Biological Parent (N = 494) % (SE)	In Home: Adoptive Parent (N = 224) % (SE)	In Home: Other (N = 159) % (SE)	Out of Home (N = 44) % (SE)
<b>Total</b>	100	61.7 (3.6)	16.7 (1.9)	15.3 (1.8)	6.4 (1.5)
<b>Caregiver's sex*</b>					
Male	7.3 (1.7)	10.4 (2.6)	1.2 (0.7)	4.0 (2.1)	0.4 (0.4)
Female	92.7 (1.7)	89.6 (2.6)	98.8 (0.7)	96.0 (2.1)	99.6 (0.4)
<b>Caregiver's age**</b>					
< 25	12.9 (2.0)	19.7 (2.9)	0.4 (0.4)	2.3 (1.3)	5.9 (5.8)
25 – 34	36.6 (2.6)	54.9 (3.0)	4.8 (1.3)	10.3 (5.1)	5.6 (3.2)
35 – 44	26.4 (2.2)	21.2 (2.3)	40.7 (5.4)	23.5 (4.9)	45.8 (12.6)
45 – 54	16.5 (1.9)	4.0 (1.6)	37.3 (5.1)	38.7 (4.9)	29.2 (11.2)
> 54	7.7 (1.4)	0.2 (0.2)	16.8 (5.4)	25.2 (5.4)	13.5 (5.2)
<b>Caregiver's race/ethnicity</b>					
Black	26.7 (3.1)	23.0 (3.7)	29.0 (5.7)	38.3 (5.8)	29.4 (10.9)
White	54.7 (3.9)	58.0 (4.7)	52.9 (5.9)	43.6 (5.6)	53.0 (13.5)
Hispanic	13.0 (2.1)	13.2 (2.7)	14.5 (5.6)	13.1 (5.2)	6.3 (3.5)
Other	5.6 (1.4)	5.8 (1.7)	3.6 (1.5)	5.0 (2.3)	11.3 (7.7)
<b>Caregiver's education**</b>					
Less than high school	25.9 (2.2)	30.3 (3.2)	14.0 (5.8)	24.1 (6.2)	18.1 (9.7)
High school	45.4 (2.8)	49.1 (4.3)	43.1 (5.8)	40.5 (5.5)	26.9 (8.5)
More than high school	28.7 (2.3)	20.4 (2.8)	42.9 (5.6)	35.4 (5.5)	55.1 (11.4)
<b>% of federal poverty level**</b>					
< 50%	18.8 (2.3)	27.2 (3.1)	2.5 (1.4)	10.6 (3.7)	0.0 (0.0)
50 – <100%	26.8 (2.3)	30.9 (3.5)	11.2 (2.0)	30.9 (5.5)	17.1 (9.6)
100 – 200%	27.7 (2.2)	23.2 (2.8)	37.3 (5.9)	24.5 (5.4)	55.6 (11.9)
> 200%	26.7 (2.6)	18.8 (3.5)	49.0 (5.2)	33.9 (5.2)	27.3 (10.9)
<b>Caregiver's employment status**</b>					
Work full time	33.4 (2.8)	36.3 (3.8)	32.8 (5.0)	27.8 (4.6)	19.8 (6.9)
Work part time	19.3 (2.4)	18.6 (2.5)	14.1 (2.9)	20.5 (5.0)	36.8 (13.7)
Unemployed, looking for work	8.9 (1.2)	12.5 (1.8)	0.9 (0.4)	4.1 (1.6)	5.4 (3.8)
Doesn't work	35.9 (2.9)	29.7 (3.6)	47.8 (5.1)	46.8 (7.0)	37.7 (11.4)
Other	2.7 (0.8)	2.9 (1.0)	4.5 (2.4)	0.8 (0.6)	0.3 (0.3)
<b>Caregiver's marital status**</b>					
Married	43.2 (3.7)	34.0 (4.1)	60.0 (5.7)	54.6 (7.5)	60.7 (10.9)
Separated/divorced/widowed	28.3 (2.9)	25.6 (3.4)	29.6 (5.9)	38.0 (7.2)	28.3 (10.3)
Never married	28.5 (2.6)	40.4 (3.6)	10.4 (2.9)	7.5 (3.2)	11.0 (3.2)
<b>Number of children in home</b>					
1	28.4 (2.6)	26.1 (3.4)	33.0 (7.0)	36.8 (6.0)	8.5 (7.8)
2	26.3 (2.5)	28.6 (3.1)	24.9 (5.9)	24.2 (4.9)	12.5 (5.1)
3	20.5 (2.2)	20.9 (2.9)	14.8 (2.9)	15.5 (4.8)	43.0 (12.3)
4	12.8 (2.0)	15.5 (2.9)	10.6 (2.6)	8.6 (3.1)	2.3 (1.7)
5 or more	12.1 (2.0)	9.0 (2.0)	16.7 (4.8)	14.9 (5.3)	23.7 (10.6)
<b>Number of adults in home*</b>					
1	29.7 (3.1)	34.0 (3.2)	26.5 (5.9)	23.0 (5.0)	12.1(6.1)
2	49.2 (3.0)	47.1 (3.5)	50.6 (6.1)	49.1 (8.3)	66.7 (11.9)
3	11.9 (1.7)	10.5 (1.9)	10.8 (2.8)	18.8 (5.2)	12.4 (8.9)
4 or more	9.2 (2.0)	8.5 (2.0)	12.2 (5.0)	9.1 (5.1)	8.8 (5.7)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Asterisks denote statistical significance of differences across setting types for each covariate (\* $p < .05$ , \*\* $p < .01$ ).

By school age, children are learning how to negotiate conflicts and to respond to aggressive behaviors. Children who are successful in making and sustaining friendships become better adjusted in school, whereas children who are rejected by their peers are less likely to be well adjusted (Ladd, 1990; Kochenderfer & Ladd, 1996). The ability to regulate emotions, cooperate, help others, display empathy, and form friendships have been found to be critical for later school success (Raver & Zigler, 1997; Webster-Stratton & Reid, 2004; Blair, 2002). Learning-related social skills are also considered critical by teachers. These include listening, following directions and routines, cooperating, participating in group activities, communicating, taking responsibility, and acquiring self-help skills that facilitate independence (Kemp & Carter, 2005; McClelland & Morrison, 2003). Children entering school with poor learning-related social skills often have low academic achievement (McClelland, Morrison, & Holmes, 2000). Moreover, low learning-related social skills are the most important predictors of referral to special education and of school failure in first grade (Cooper & Speece, 1988).

***Behavioral regulation and problems.*** Behavior problems can include externalizing behaviors, such as aggression and delinquency; internalizing behaviors, such as being withdrawn and experiencing anxiety/depression; and social and thought problems. Research indicates that behavior problems in early childhood tend to continue into later childhood and adolescence (Furstenberg, Brooks-Gunn, & Morgan, 1987; Stevenson, Richman, & Graham, 1985). Children who display aggressive, antisocial behaviors when they enter school have social deficits, such as inappropriate play behaviors, lack of social conversation, use of insults, and difficulty in participating in group activities (Coie & Kupersmidt, 1983; Dodge, 1983; Dodge, Lansford & Burks, 2003). As a consequence, antisocial, aggressive children are likely to be rejected by their peer group (Bolger & Patterson, 2001; Coie, Dodge, & Kupersmidt, 1990; Dishion, 1990; Dodge, Coie, & Brakke, 1982), which can lead such children to become more aggressive.

***Intellectual abilities and motivation.*** From earliest infancy, children are acquiring the cognitive structures that allow information to be assimilated from the environment and that promote the linguistic skills that result in communicative skills. These skills include understanding and speaking in words and sentences, maintaining a conversation, and reasoning with and thinking about language. Maltreatment can seriously disrupt these processes (see, e.g., Stien & Kendall, 2003). Maternal responsiveness to the child and age-appropriate stimulation of cognitive/language development (Bradley et al., 2001a, 2001b; Zaslow et al., 2006) help lead to skills in these areas. Motivation and its related behaviors such as persistence, task-direction, and feelings of efficacy emerge during the preschool years and can influence the child's drive to learn (see Busch-Rossnagel, Knauf-Jensen, & Des-Rosiers, 1995; Gottfried, Fleming, & Gottfried, 1998; see McCall, 1995).

### **NSCAW Results from Baseline and Previous Follow-ups**

We enter this analysis already having some knowledge of these children's earlier experience and development from NSCAW data. Exhibit 1-4 provides data from the caseworker report on maltreatment and risk variables for infants at the baseline interview. Regarding the caseworker's baseline report of the most serious maltreatment that the child had experienced, more than a third of cases (35%) were reported for failure to provide, 29% for failure to supervise, 19% for physical abuse, 5% for emotional-moral/legal-educational maltreatment, 2%

**Exhibit 1-4**  
**Caseworker Report on Maltreatment and Risk at Baseline**  
**Infant Population at Wave 5**

	<i>N</i>	<i>% (SE)</i>
<b>Most serious maltreatment type</b>	921	
Physical abuse		19.2 (2.4)
Sexual abuse		1.7 (0.7)
Failure to provide		34.9 (2.7)
Failure to supervise/abandonment		29.0 (3.0)
Emotional, moral/legal, educational maltreatment		4.8 (1.1)
Other		10.5 (1.8)
<b>CWS outcome</b>	877	
Substantiated		38.7 (3.2)
Indicated		8.5 (2.0)
Unsubstantiated		42.5 (3.0)
High risk		3.8 (1.1)
Medium risk		2.0 (0.6)
Low risk		4.6 (1.5)
<b>Level of harm</b>	878	
None		36.9 (3.5)
Mild		25.9 (2.7)
Moderate		20.0 (2.1)
Severe		17.3 (2.1)
<b>Level of risk</b>	802	
None		21.1 (2.6)
Mild		30.2 (2.9)
Moderate		22.6 (2.7)
Severe		26.1 (2.4)
<b>Risk factors</b>		
Prior reports of child maltreatment	872	40.0 (3.4)
Prior investigation of child maltreatment	365	91.6 (2.7) <sup>1</sup>
Prior incident of substantiated child maltreatment	339	66.6 (4.0)
Prior child welfare service history	841	32.4 (2.6)
Child has major special needs or behavioral problems	866	13.8 (1.8)
Active alcohol abuse by primary caregiver	800	14.4 (1.8)
Active alcohol abuse by secondary caregiver	578	18.5 (2.0)
Active drug abuse by primary caregiver	835	29.7 (2.8)
Active drug abuse by secondary caregiver	568	24.4 (3.8)
Primary caregiver has serious mental health problem	834	23.3 (2.8)
Primary caregiver has recent history of arrests	809	20.2 (2.8)
Primary caregiver has intellectual or cognitive impairments	851	11.1 (2.0)
Primary caregiver has physical impairments	867	3.4 (1.3)
Primary caregiver has poor parenting skills	862	42.6 (2.5)
Parent has unreal expectations of child	842	14.8 (1.7)
History of domestic violence against caregiver	813	37.7 (3.3)
Active domestic violence against caregiver	833	22.3 (2.1)
Primary caregiver uses inappropriate or excessive discipline	854	3.6 (1.1)
Secondary caregiver uses inappropriate or excessive discipline	605	6.1 (1.4)
History of abuse or neglect of primary caregiver	754	32.3 (2.8)

*Note:* Only cases with 5- to 6-year follow-up data analyzed. Percentages and standard errors are weighted. *Ns* are unweighted.

<sup>1</sup> Calculated on those cases with prior reports.

for sexual abuse, and 11% for other. It is not entirely clear what “other” represents, but it is possible that it includes cases where mothers of newborns are abusing substances or are exposed to domestic violence. Slightly more than one third of the cases (39%) were substantiated. Another 8% of the cases were indicated, a category used in some jurisdictions that provides a classification for cases in which some evidence exists for maltreatment, but not enough for substantiation. A substantial percentage (42%) were not substantiated. In a small number of cases, the maltreatment reports were not formally investigated because in the jurisdiction of record at least some cases are “assessed,” not “investigated,” and risk is determined. Only 76 infant cases of maltreatment were handled in this way. Placing these cases alongside the substantiated, indicated, and unsubstantiated cases, 4% were at high risk, 2% were at medium risk, and 5% were at low risk. Thus, approximately half of the cases were either not substantiated or were at low risk.

Caseworkers also indicated the kinds of risks that were present in the home. In the infant group, over 40% of families had prior reports of maltreatment, of which 92% were investigated. Two thirds of those investigated were substantiated. Thus, 339 of the families with infants at baseline had a substantiated case of maltreatment prior to the investigation that brought them into the study, although it is not known whether the prior maltreatment involved the index child or caregiver. Nevertheless this high rate of reports indicates a less than optimal environment for child rearing. Other risks that were present in a substantial percentage of the cases include poor parenting (43%), a history of domestic violence against the primary caregiver (38%), active domestic violence against the primary caregiver (22%), a history of maltreatment of primary caregiver (32%), and active drug abuse by the primary caregiver (30%).

Analyses of the data from previous NSCAW reports (see, U.S. Department of Health and Human Services, 2005a, 2005b) provide an idea of how the youngest children were faring in the first three waves (18 months) following the initial investigation. A caveat is that previous NSCAW documents reported results for children who were between the ages of 0 and 2 at baseline. Therefore, they include not only all of the children for this report (ages 0 to 12 months at baseline), but also a substantial number of children between 1 and 2 years of age.

At baseline (5 months after the initial investigation), the large majority (87%) of the children aged 0 to 2 remained in home. By the 1½-year follow-up, the proportion in home had increased only slightly, to 89%. These youngest children were at high risk for developmental problems. For example, at both baseline and Wave 3, more than 50% scored as high risk for developmental delays (according to the Bayley Infant Neurodevelopmental Screener). The cognitive and language development of these children also lagged behind that of their peers: At both baseline and Wave 3, average scores on the Battelle Developmental Inventory and Preschool Language Scale-3 hovered around the 25th percentile.

Compared to older children, those between the ages of 0 and 2 at baseline were relatively unlikely to have received any services, in spite of their developmental risks. By the 1½-year follow-up, only 6% of children who remained in home had received any outpatient mental health service. By the 1½-year follow-up, only 13% had special education needs identified by a professional, 24% had been tested for a learning or developmental problem, 7% had an Individualized Education Plan or an IFSP, and 5% were currently receiving special services. Among children out of home at the 1½-year follow-up, the proportions receiving services were

substantially higher. For example, 19% had received outpatient mental health services, 61% had been tested for a learning or developmental problem, and 11% were receiving special education services.

Providing services to strengthen families is critical to prevent maltreatment and to maintain children in their homes. Caseworkers reported that by the 1½-year follow-up, three fourths of the families of out-of-home children aged 0 to 2 years, which represents 11% of families, had received some type of family-based service, including intensive family preservation services (13%) and less intensive family preservation service (23%). In addition, nearly three fourths (71%) of families whose children were out of home received some type of parenting support services, whether parent training (66%), family counseling (38%), or both. Among the families of children who remained in home (89% of the families), the proportions receiving services were substantially lower than among those who were removed from the home, but still notable: 27% received family-based services, and 29% received parenting support services. In addition, many caregivers of children who remained in home reported having received services that helped them meet basic needs, provided either by CWS or other agencies. The services of this type most commonly received were child care (52%); food, financial help, or transportation (49%); and job-related aid, legal aid, or support groups (32%).

In summary, analyses of previous waves indicate that the youngest children in NSCAW are at high risk of developmental delays, but relatively low proportions of the children have received any services; receipt of family-based and parenting support services is more common. The receipt of services is strongly related to the placement status of the child: services to both children and their families are much more common in cases where the child was removed from the home. In the following analyses, we will assess how the youngest of these children (ages 0–12 months at baseline) were faring at the 5- to 6-year follow-up and we will track trends in their well-being over time.

## **Guide to the Report**

Chapter 2 reviews data on child well-being in terms of caregiver aggression and neglect, health, disability, behavior problems and a variety of measures related to school readiness. Chapter 3 discusses results related to child placement and permanence of children in their living environments. Chapter 4 discusses the services that children and their caregivers receive. Appendix A explains the measures and specially derived variables used.

Appendix B contains tables that provide preliminary results of the Wave 5 follow-up for a different age group of NSCAW children: young children who were aged 1 to 4 years old when they were involved in an investigation of child maltreatment by child welfare services. The Wave 5 young child follow-up was conducted March to December 2006, or about 6 years after the index investigation; 902 children or their caregiver participated in this 6-year follow-up. The data collection methods were identical to those that were reported for the infant sample, with the exception of a few measures that differed on the basis of appropriateness for the age group studied. The research questions addressed by the young child tables were essentially identical to those of the infant. For the most part, tables in Appendix B parallel the tables presented for the infant sample.

## CHAPTER 2 CHILDREN'S WELL-BEING

Ideally, all 5- and 6-year-olds would be physically healthy and growing, their minds would be developing, they would be enjoying school and new friends, their health would be robust, and they would experience self-esteem and a sense of well-being free from depression, anxiety, and behavioral problems. When they enter school, they would be cognitively, emotionally, and socially ready. But the later well-being of infants involved in child maltreatment investigations is at risk, both from whatever maltreatment they may have suffered and from a host of associated risks to development that have been amply documented in previous reports from the National Survey of Child and Adolescent Well-Being (NSCAW).

In addition to our natural interest in children's well-being, there is a policy interest as well, in that the responsibility of child welfare system (CWS) services to promote child well-being is codified in federal regulations (see U.S. Department of Health and Human Services [DHHS], 2000). The federal rule establishing the Child and Family Services Review (CFSR) process sets child well-being as a CWS goal and evaluates state child welfare agencies in part on their efforts to maintain and improve children's well-being. Federal policy holds that CWS has responsibility for promoting children's well-being as well as their safety and permanency in their living situation.

Previous research on the youngest children entering NSCAW indicates that the well-being of many of these children was compromised when they were infants and toddlers. As noted earlier, over half of these children showed early signs of developmental delay at earlier measurement points. Notable proportions lagged in cognitive and language development. One question addressed in this chapter is whether these children have been able to overcome their early challenges.

The report of results in this chapter begins with caregivers' reports of their aggression toward and neglect of their children. Next, there is an analysis of health. Then we examine measures of disability and basic living skills. The next section analyzes child behavior problems. There follows an analysis of cognitive, emotional, and social development as measures of children's readiness to enter school. An analysis of their school functioning as based on teacher reports completes the picture of well-being. When appropriate, children's scores are compared to national norms for similarly aged children.

The report also examines how child characteristics are related to different indicators of well-being. Findings are examined in relation to a child's sex, race, and living situation at the 5- to 6-year follow-up. Finally, the report examines the impact of several factors related to the index maltreatment report at baseline; these include the type of maltreatment, the severity of physical abuse or neglect, or the number of different types of maltreatment experienced. When findings related to maltreatment were significant, they are presented in the exhibits. Where such results are not shown or discussed, there was no impact of the maltreatment variables on children's well-being. Note that the limitation mentioned in Chapter 1 applies here: significant group differences on follow-up outcomes do not necessarily mean that being in those groups *caused* those outcomes. Earlier differences on well-being variables may have predisposed children to be in certain groups, as with different living settings or different disability

classifications; more complex analyses of NSCAW well-being outcomes at the 5- to 6-year follow-up is needed.

### **Key Caregiver Aggression and Neglect Results**

- Nearly all parents (99%) reported having used some form of nonviolent discipline, primarily explaining why something was wrong and putting the child in time out or sending the child to his or her room.
- Psychological aggression was reported by 78% of caregivers, mainly shouting, yelling, or screaming at the child, or threatening to spank the child.
- Minor physical assault or corporal punishment was reported by nearly two thirds of caregivers (65%).
- Neglect was reported by 12% of caregivers, mostly that they were so caught up with problems that they were not able to show or tell their child that they loved him/her.
- Severe assault and very severe assault were reported by 4% and 0.2% of caregivers respectively.
- Reports on psychological aggression, minor assault, severe assault, and neglect are somewhat lower than in a previous Gallup survey of the general population of parents self-reporting aggression toward their children. Caregivers may have under-reported unsafe behaviors in NSCAW, especially because of the risk of being re-reported to CWS.

### **Key Children's Physical Health Results**

- The vast majority of caregivers (93.5%) reported that their child was in good, very good, or excellent health.
- A fifth of caregivers reported that their child had a chronic health problem. The majority of these children were reportedly suffering from asthma (13% of the total population).
- Approximately 6% of children were reported to have experienced some type of injury, accident, or poisoning in the previous year.
- Children living at home with adoptive parents were the most likely to be reported to have chronic health conditions (32%), compared with children living in other settings.

### **Key Children's Behavioral Results**

- Seventeen percent of children, according to caregivers' report, are in the clinical range on the externalizing behaviors scale (behaviors such as aggression, hyperactivity, and oppositional behavior).

- For internalizing behavior (behaviors signaling anxiety, depression and fears), caregivers reported that only 6% are in the clinical range.
- Girls exhibited slightly but significantly more externalizing behavior problems than boys, as reported by caregivers.
- The percentage in the clinical range on externalizing behavior, according to teacher report, was 9%.
- Only 4% of children were reported by teachers to exhibit proactive aggression; only 7% exhibited reactive aggression.

### **Key Children’s Cognitive, Emotional, and Social Development Results**

- Mean scores on tests of cognitive functioning, language skill, and academic achievement were in the low end of the average range, which was significantly below the normative mean.
- Girls had significantly higher scores than boys on both the total language and the auditory comprehension scales of the PLS, and Letter Word Identification scores of the Woodcock-Johnson.
- Children in adoptive homes displayed higher scores on five measures of cognitive language and academic functioning than children in other home settings.
- Teachers rated a lower percentage of this population as demonstrating excellent assertiveness, self-control, and cooperation than of the general population.
- Teachers rated 40% of children as below grade level in language arts and 35% as below grade level in mathematics.

### **Caregiver Aggression and Neglect**

These children were originally involved with CWS because of a report of abuse, neglect or both against them. An important aspect of their well-being, then, is whether they are experiencing aggression or neglect from their caregivers at the 5- to 6-year follow-up. We could not accurately measure this through data on re-reports from the caseworker interview, however, because only 12% of these children had received CWS services since the last follow-up, and also because a recent analysis suggests that caseworkers were not able to provide accurate data on whether there was a later re-report of abuse and neglect in their cases (Biemer, Chiflikyan, Dowd, & Smith, 2007). There is also reason to suspect the accuracy of the Violence Exposure Scale (Shahinfar, Fox, & Leavitt, 2000), a component of the child interview which had questionable reliability overall in NSCAW (see Biemer, Christ, & Wiesen, 2006), and is particularly problematic with 5- and 6-year-olds.

The caregiver interview, however, did ask caregivers about their aggression toward and neglect of their children, using the Conflict Tactics Scale–Parent-Child Version (CTS-PC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998), and we report results from the CTS-PC

here. Caregivers are asked about what tactics (primarily related to discipline) they used in their conflicts with their children. Included are both nonviolent disciplinary tactics and tactics that are mildly or seriously aggressive, from spanking to hitting, slapping, and injurious actions (see Appendix A). The CTS-PC also asks about neglect. It should be noted that caregivers were repeatedly warned in the informed consent process that abusive or neglectful behaviors would be reported to CWS because of mandated reporting laws, which could strengthen reluctance to disclose aggressive tactics. We conducted a comparison of the proportions of caregivers reporting psychological aggression, assault, and neglect between caregivers in the NSCAW survey and a nationally representative sample of parents of children aged 5 to 6 (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). This analysis indicated that the NSCAW caregivers reported somewhat lower prevalence than the general population on nearly all CTS-PC aggression and neglect scales. It seems likely, therefore, that caregivers tended to withhold information on abusive and neglectful behaviors. Even as an underestimate, however, these results tell us something about the caregiver environment and the risks that some of the children in this population still face at ages 5 and 6.

We present the proportions of caregivers who used each type of tactic in the past year by selected characteristics in Exhibit 2-1. For all tactics, the proportions of caregivers who reported ever having used a tactic were very similar to the proportions of caregivers who reported having used it in the past year. In the past year, nearly all parents (99%) reported having used some form of nonviolent discipline. The most common techniques were explaining why something was wrong (95%) and putting the child in time out or sending the child to his or her room (94%). The use of psychological aggression was reported by 78% of caregivers, primarily shouting, yelling, or screaming at the child (69%) or threatening to spank the child (59%). The use of minor physical assault or corporal punishment was reported by nearly two thirds of caregivers (65%), primarily spanking on the bottom with a bare hand (59%) or slapping on the hand, arm, or leg (34%). Much lower proportions of caregivers reported any type of severe assault (4%) or very severe assault (0.2%). Approximately 12% of caregivers reported some form of neglect in the past year—primarily that they were so caught up with problems that they were not able to show or tell their child that they loved him/her (9%). Inability to access needed health care (4%) and inability to provide needed food (3%) were the next most common forms of neglect mentioned.

There were no significant differences between boys and girls in the types of tactics reported. Considering race/ethnicity, minor assault/corporal punishment was most common among non-Hispanic Whites (75%), severe physical assault was most common among non-Hispanic Blacks (8%), and neglect was least common among non-Hispanic Whites (8%). The caregivers of children who had never been in out-of-home placement were significantly more likely to report minor assault/corporal punishment (71%), severe physical assault (5%), and very severe physical assault (0.4%). The percentage of severe physical assault was very close to the percentage of in-home caregivers who scored on the severe violence scale for children aged 0 to 2 at baseline and the 1½-year follow-up (see U.S. Department of Health and Human Services, 2005b).

**Exhibit 2-1**  
**Caregiver Aggression and Neglect Prevalence by Case Characteristics**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	Nonviolent Discipline % (SE)	Psychological Aggression % (SE)	Minor Assault/ Corporal Punishment % (SE)	Severe Physical Assault % (SE)	Very Severe Assault % (SE)	Neglect % (SE)
<b>Total</b>	899	99.3 (0.3)	77.5 (2.4)	65.2 (2.8)	3.5 (1.0)	0.2 (0.1)	12.3 (1.7)
<b>Sex</b>							
Male	457	99.7 (0.1)	80.8 (3.2)	69.2 (3.9)	4.4 (1.6)	0.2 (0.1)	11.0 (2.3)
Female	442	98.8 (0.6)	74.2 (3.0)	61.1 (3.6)	2.6 (0.7)	0.2 (0.2)	13.6 (2.3)
<b>Race/ethnicity</b>				*	**		**
Black	355	98.2 (1.0)	73.7 (5.5)	57.3 (5.3)	7.5 (2.1)	0.7 (0.4)	17.3 (3.1)
White	316	99.9 (0.1)	81.0 (3.3)	74.5 (4.2)	1.2 (0.7)	0.0 (0.0)	7.8 (1.6)
Hispanic	165	99.4 (0.4)	75.2 (6.2)	58.6 (7.0)	3.5 (2.8)	0.0 (0.0)	13.1 (3.9)
Other	58	100.0 (0.0)	78.2 (7.4)	59.5 (10.1)	0.0 (0.0)	0.0 (0.0)	19.4 (7.2)
<b>Ever in out-of-home placement</b>				*	*	*	
Yes	404	98.7 (0.8)	76.2 (4.8)	56.6 (4.3)	1.7 (0.7)	0.0 (0.0)	8.9 (2.0)
No	457	99.6 (0.2)	80.1 (3.0)	70.5 (3.8)	4.6 (1.4)	0.4 (0.2)	14.0 (2.5)
<b>Child setting</b>				*	*	*	
In home, biological parent	485	99.7 (0.2)	79.9 (3.0)	68.3 (3.5)	4.7 (1.4)	0.3 (0.2)	14.7 (2.4)
Ever out of home	90	99.8 (0.2)	82.5 (5.3)	53.5 (7.1) <sup>a</sup>	2.4 (1.7) <sup>*a</sup>	0.0 (0.0) <sup>*a</sup>	19.0 (5.8)
Never out of home	368	99.7 (0.2)	81.7 (3.3)	71.0 (3.9)	5.1 (1.6)	0.4 (0.2)	13.9 (2.7)
In home, adoptive parent	220	99.6 (0.4)	79.5 (5.1)	59.0 (5.0)	1.5 (0.8)	0.0 (0.0)	7.6 (2.7)
In home, kin, or other caregiver	158	97.4 (1.8)	68.9 (5.6)	63.2 (6.3)	1.5 (0.8)	0.0 (0.0)	8.3 (2.7)
<b>Physical abuse</b>						*	
Yes	209	99.2 (0.5)	79.6 (4.3)	63.5 (6.3)	2.9 (2.1)	0.0 (0.0)	11.8 (3.6)
No	617	99.3 (0.4)	76.0 (3.4)	65.6 (3.1)	3.8 (1.2)	0.3 (0.2)	12.7 (2.0)
<b>Failure to provide</b>				*		*	
Yes	410	99.7 (0.2)	80.3 (3.1)	72.3 (3.1)	6.2 (2.1)	0.1 (0.1)	11.6 (2.1)
No	417	98.9 (0.6)	74.4 (3.6)	59.3 (4.2)	1.5 (0.5)	0.3 (0.2)	13.1 (2.7)
<b>Failure to supervise</b>							*
Yes	281	99.0 (0.8)	73.9 (4.2)	65.8 (4.2)	3.8 (1.8)	0.5 (0.3)	17.2 (3.7)
No	546	99.5 (0.2)	78.9 (2.5)	64.5 (3.4)	3.5 (1.2)	0.1 (0.1)	9.6 (1.5)

*Note:* Based on caregiver self-report using the Conflict Tactics Scale–Parent-Child version. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ,  $**p < .01$ ).

<sup>a</sup> Ever out of home significantly different from never out of home.

The type of maltreatment for which caregivers were reported at baseline was significantly associated with the types of tactics reported by current caregivers. Note of course that many of the caregivers at this follow-up are different from the caregivers who may have maltreated children at baseline, because of placement and other changes in care. When physical abuse was reported at baseline, no current caregivers committed very severe assault, while a very small but significantly higher percentage (0.3%) of caregivers committed very severe assault during this last follow-up period when physical abuse was not reported at baseline. This may be a function of physically abused children being removed from the home close to baseline and now living with substitute caregivers. When failure to provide was reported at baseline, caregivers were significantly more likely to report minor assault/corporal punishment at this follow-up (72% vs. 59% for caregivers of children who were not reported for failure to provide), but were less likely to report very severe assault (0.1% vs. 0.3%). Finally, when failure to supervise was reported at baseline, caregivers at this follow-up were significantly more likely to report neglect (17% vs. 10%).

Previous results on racial/ethnic differences on discipline, corporal punishment, and aggression against children have varied (see Gershoff, 2002, for a relevant literature review), so it is difficult to compare the current results to them. Differences by race and ethnicity could reflect cultural differences in discipline practices as well as differential exposure by race/ethnicity to risk factors that may predispose caregivers to more aggressive responses to their children.

Children who have ever been in out-of-home placement are less likely to experience any form of assault by caregivers. This appears to be due in part to the fact that most children who have ever been out of home are now with adoptive parents or with other in-home caregivers, who report lower levels of assault than biological parents. Moreover, biological parents whose children have ever been out of home report lower levels of assault than those whose children have never been out of home. This may reflect successful CWS action to decrease assault, or fear of revealing aggression by parents who have already have their child removed at least once.

### **Child Physical Health**

Previous NSCAW research indicates that children involved in the child welfare system, particularly those in foster care, are at increased risk for the development of physical health problems as well as chronic health conditions (e.g., Jee, Barth, Szilagzi, Szilagzi, Aida, & Davis, 2006; Leslie, Gordon, Meneken, Premji, Michelmore, & Ganger, 2005). More specifically, previous studies have found anywhere from 26%–82% of children placed in out-of-home care had at least one chronic health condition (Taussig & Culhane, 2005). Findings concerning children's physical health have led some experts to call for comprehensive health screening procedures to be a routine part of social services plans, particularly for children in out-of-home placements (AAP, Committee of Early Childhood, Adoption, and Dependent Care, 2002).

General health characteristics were obtained from caregiver reports. The majority of caregivers (93.5%) reported that their child was in good, very good, or excellent health (Exhibit 2-2). This is comparable with findings within other age groups and across various follow-up periods within NSCAW. It is less than that reported (98.2%) for children between 5 and 11 years

of age across the country, and also less than data on children living in poverty nationwide (95.8%; National Health Interview Survey [NHIS]; Bloom & Dey, 2006).

**Exhibit 2-2**  
**Health of Children**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	In Good Health <sup>1</sup> % (SE)	Caregiver Reports Serious Chronic Health Problem <sup>2</sup> % (SE)
<b>Total</b>	961	93.5 (1.3)	20.5 (2.4)
<b>Sex</b>			
Male	491	92.2 (2.0)	21.2 (3.2)
Female	470	94.8 (1.3)	19.8 (2.8)
<b>Race/ethnicity</b>			
Black	378	91.7 (2.1)	22.1 (3.5)
White	329	94.5 (2.1)	19.9 (3.4)
Hispanic	329	92.6 (3.0)	18.5 (4.9)
Other	62	98.0 (1.1)	21.7 (6.1)
<b>Child setting</b>			**
In home, biological parents	493	94.3 (1.7)	18.8 (2.7) <sup>a</sup>
In home, adoptive parents	224	94.3 (2.3)	31.7 (5.1) <sup>b</sup>
In home, kin, or other caregiver	159	91.3 (3.4)	13.5 (3.3) <sup>a</sup>
Out of home	44	93.4 (4.2)	21.8 (10.8)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Statistical significance is noted by asterisks in the column above the statistically significant result (\*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> “Good health” was defined as those children whose caregivers reported that they were in “good, very good, or excellent” health.

<sup>2</sup> “Serious Chronic Health Condition” was defined here as one of a number of caregiver-reported diagnoses, as detailed in Appendix A.

Nonetheless, slightly more than a quarter of caregivers (26.5%) reported that their child had a health problem that “lasts a long time or comes back again and again.” When narrowed to include *only* serious chronic health diagnoses (e.g., asthma, diabetes, eczema), approximately 20% of children were reported to be experiencing such conditions, with the majority of them suffering from asthma (13%), followed by severe allergies, other respiratory conditions, and eczema (Exhibit 2-2). Although the rates of chronic health conditions might appear high, it should be noted that recent NHIS findings indicate that 13% of children nationwide who are between 5 and 11 years of age are reported to have asthma (Bloom & Dey, 2006).

Most children reported to have a chronic health condition were also reported to be in relatively good health, with only 20% of caregivers describing the health of their children with chronic health conditions as “fair” or “poor.” When compared with children living in other settings, children living at home with adoptive parents were by far the most likely to be reported to have chronic health conditions, followed by children in out-of-home care and those living at

home with biological parents. There were no differences in the reports of chronic health conditions by sex, race/ethnicity or type of abuse at baseline.

Approximately 6% of children were reported to have experienced some type of injury, accident, or poisoning that needed the care of a doctor or nurse during the past 12 months. The injuries themselves were most commonly cuts, scrapes, or puncture wounds or broken bones (Exhibit 2-3). The most common circumstances surrounding these accidents or injuries were outdoor play-related injuries (22.3% of the reported injuries), rough-housing with other kids/peers (18.3%), and animal- or insect-inflicted injuries (14.3%). There were no differences in reports of accidents and injuries by sex, race/ethnicity, type of abuse at baseline, current home setting, or the presence of a chronic health condition.

**Exhibit 2-3**  
**Most Common Chronic Health Conditions and Injuries or Accidents**  
**Infant Population at Wave 5**

Health Condition	% (SE)
<b>Chronic health problem (N = 961)</b>	
Asthma	13.3 (2.0)
Severe allergies	3.9 (1.1)
Other respiratory condition	2.4 (0.7)
Eczema/other skin disorder	1.1 (0.4)
Repeated ear infections	0.8 (0.4)
<b>Serious injury, accident, or poisoning (N = 59)<sup>1</sup></b>	
Cuts, scrapes, puncture	2.3 (0.8)
Broken bone, dislocated joint	1.0 (0.4)
Other	2.5 (0.7)

*Note:* All analyses are on weighted data; *Ns* are unweighted.

<sup>1</sup> Caregivers were asked to report on serious accidents and injuries only since the last interview.

In summary, the overwhelming majority of children were reported to be in good, very good, or excellent health, though somewhat less than the general population. Only a small percentage had suffered serious accidents or injuries requiring the care of a doctor. About one fifth of these children were reported to have a serious chronic health condition, most commonly asthma, with the rate of asthma the same as in the general population. Children with a history of out-of-home placement also were more likely to have chronic health problems. However, these children who were infants when they became involved with CWS do not seem to have the same level of health problems reported by Taussig and Culhane (2005) for the population of children of all ages in foster care.

**Child Disability and Basic Living Skills**

We also looked at children’s risk for development of a cognitive, emotional/behavioral, or physical disability. It is reasonable to consider risk for cognitive, emotional/behavioral, and physical disabilities as indicators of service needs according to the federal definition of “disability” within the Individuals with Disabilities Education Improvement Act of 2004(or IDEA). This could be especially important, as an IDEA disability classification often serves as

the precursor to special education service qualification. Within this report, disability risk was operationalized via standardized measures, as well as caregiver or teacher report. *Risk for a cognitive disability* was determined to include any child with a score at the 5- to 6-year follow-up of 2 standard deviations below the mean on the Preschool Language Scales (Zimmerman, Steiner, & Pond, 1992) or the Kaufman Brief Intelligence Test or K-BIT (Kaufman & Kaufman, 1990). *Risk for an emotional or behavioral problem* was determined to include any child with a score greater than 63 according to either caregiver or teacher report on the Total Problems, Externalizing or Internalizing Scales of the Child Behavior Checklist (Achenbach, 1991). *Risk for physical disability* was determined based upon either the caregiver or teacher report. A child was considered at risk for a physical impairment if the caregiver reported having been told that his or her child had a hearing impairment, visual impairment (including blindness), orthopedic impairment, or multiple disabilities at any point over the course of the study. A child was also considered to be at risk for a physical disability if the teacher reported an Individualized Education Plan (IEP) classification due to visual, hearing, orthopedic, or other physical disability.

Using these definitions of risk, 13% of children were determined to be at risk for a cognitive disability, 29% at risk for an emotional/behavioral problem, and 6% at risk for a physical disability (Exhibit 2-4). There were no differences in risk for cognitive, emotional/behavioral, or physical disability risks by child sex, race/ethnicity, or the child's setting at 5- to 6-year follow-up. Children who were assessed as physically maltreated at baseline were *less* likely to have risks for cognitive and physical disabilities than other children, perhaps because other children were involved with CWS for reasons (e.g., neglect, parents' having difficulty caring for them) that were more associated with risks for cognitive and physical disabilities.

A child's ability to meet his or her basic functional needs was measured via the daily-living skills domain of the Vineland Screener (Sparrow, Carter, & Cicchetti, 1993), a shortened version of the Vineland Adaptive Behavior Scale (VABS; Sparrow, Balla, & Cicchetti, 1984). For 3- to 5-year-olds, basic daily-living skills assessed included activities such as dressing, toilet-training competence, telling time, using the telephone, using the stove or microwave, and understanding danger from strangers. For children 6 and older, assessed skills included following instructions, understanding how to compliment friends or family members, asking permission to use other's property, and knowing how to avoid trouble situations. According to the VABS manual, scores greater than 84 represent adequate to high functioning and scores below 70 represent low functional ability (Sparrow, Balla, & Cicchetti, 1984). For children described in this report, the average Vineland standard score was 86.04 (SE = 1.1). This indicates that, on the average, children had at least an adequate ability to meet their typical daily basic living needs. Approximately 23% (SE = 2.2) scored below 70 on the daily-living skills domain of the VABS indicating that they did not have an adequate ability to meet their daily living needs. Being at risk for a cognitive, emotional/behavioral, or physical disability increased the likelihood of having some functional impairment in daily-living skills (Exhibit 2-3). For instance, 44% of those at risk

**Exhibit 2-4**  
**Child Risk for Cognitive, Emotional/Behavioral, and Physical Disabilities**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	Risk for Cognitive Disability % (SE)	Risk for Emotional/ Behavioral Problem % (SE)	Risk for Physical Disability % (SE)
<b>Total</b>	921	13.0 (2.1)	28.9 (2.6)	5.9 (1.0)
<b>Sex</b>				
Male	472	15.9 (3.5)	26.3 (3.8)	6.8 (1.4)
Female	449	10.0 (2.3)	31.6 (3.5)	5.0 (1.5)
<b>Race/ethnicity</b>				
Black	367	13.3 (3.0)	32.8 (4.4)	7.0 (1.9)
White	310	11.7 (3.4)	28.7 (4.4)	4.5 (1.5)
Hispanic	179	15.7 (4.8)	26.2 (5.7)	4.1 (1.7)
Other	60	—	19.4 (4.3)	—
<b>Child setting</b>				
In home, biological parents	493	12.4 (3.0)	25.8 (3.3)	4.5 (1.2)
In home, adoptive parents	224	5.6 (1.3)	27.0 (5.0)	10.2 (3.0)
In home, kin, or other caregiver	159	21.3 (6.0)	26.6 (6.5)	—
Out of home	44	—	70.4 (8.5)	—
<b>Physical maltreatment at baseline</b>		*		*
Yes	213	6.5 (2.3)	31.8 (6.4)	2.8 (1.3)
No	634	15.6 (2.8)	26.7 (2.4)	6.1 (1.2)

*Note:* See Appendix A for definitions of risk of cognitive disability, emotional/behavioral problem, and physical disability. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ). Cells are left empty when sample sizes are too small to allow for meaningful estimates ( $N < 9$ ).

for a cognitive disability, 37% of those at risk for an emotional or behavioral problem, and 49% at risk for a physical disability demonstrated problems meeting daily living needs on the VABs (e.g., scores below 70).

### Behavior Problems

Child maltreatment can have enduring negative effects on children's mental health (see, e.g., Cicchetti & Lynch, 1995; Kendall-Tackett, Williams, & Finkelhor, 1993), and previous research has found that maltreated children may have increased behavior problems (Shonk & Cicchetti, 2001). However, the relationship between maltreatment in infancy and the mental health status of children at age 5 and 6 has received little attention. At baseline and previous follow-ups, the children in this analysis were simply too young to measure their mental health in any valid and practical way. At this follow-up, however, reasonably valid and reliable teacher and caregiver checklist measures of child behavior problems are available.

In previous NSCAW analyses, a worrisome proportion of the other children scored in the clinical range when they were in this age range. For example, the baseline report (U.S.

Department of Health and Human Services, 2005b) reported that 37% of the 4- to 5-year-olds and 40% of the 6- to 10-year-olds scored in the borderline-clinical-to-clinical range on the Child Behavior Checklist, the caregiver checklist of child behavior problems. Burns and colleagues' study of children's mental health in NSCAW reported similar statistics with a slightly different threshold (Burns, Phillips et al., 2004). Thus large proportions of children who were aged 5 to 6 years at NSCAW baseline had mental health problems, significantly greater than the proportion in the clinical range in the general population (see Kataoka, Zhang, & Wells, 2002). Similarly, 37% of the children who were aged 4½ to 6½ at the 1½-year follow-up scored in the borderline clinical or the clinical range (U.S. Department of Health and Human Services, Administration for Children and Families, 2008b). These findings suggest some urgency in the analysis of the behavior problems of children who were infants at baseline and aged 5 and 6 at the latest follow-up.

**Caregiver report.** Interviewed caregivers completed the Child Behavior Checklist, a 118-item checklist of behavior problems children might have. Externalizing behavior refers to misbehavior that is manifest in the child's external environment, problems such as aggression, hyperactivity, and oppositional behavior. The percentage of children in the clinical range on the Externalizing Score (17.1%) was over twice as high as the percentage in the general population.

On the other hand, only 5.5% of the population was in the clinical range on the internalizing score, a percentage similar to that in the general population. Thus, caregivers reported that these 5 and 6 year olds were about average on behaviors signaling anxiety, depression, and fears. On the Total Problems score, which combines results from the Externalizing and Internalizing scores, 18.5% of children scored in the clinical range, again substantially higher than the percentage in the general population.

These children had significantly higher scores than average children, but there were few variables within this population that predicted higher or lower scores, as shown in Exhibit 2-5. One that did was surprising. Girls exhibited significantly more externalizing behavior problems than boys.

**Teacher report.** Teachers completed the Teacher Report Form (TRF), a measure of behavior problems that parallels the Child Behavior Checklist in content and scoring (Exhibit 2-6). The percentage in the clinical range on externalizing behavior was 8.8%, which is only modestly higher than the percentage in the clinical range in the normative population. For internalizing behavior, 7.6% of this population was in the clinical range, about what would be expected for children in general. For the Total score, the percentage in the clinically significant range (7.9%) was only slightly higher than one would expect in the normative population. Among the variables we tested, only one, race/ethnicity, was significantly related to the percentage of children with TRF scores in the clinical range. A significantly higher percentage of children who were Black or in the "Other" category were in the clinical range on the externalizing scale compared with the White and Hispanic categories.

**Exhibit 2-5**  
**Caregiver Report of Children’s Behavior Problems (Child Behavior Checklist)**  
**Infant Population at Wave 5**

	<i>N</i>	<b>In Clinical Range for Total Score % (SE)</b>	<b>In Clinical Range for Internalizing Score % (SE)</b>	<b>In Clinical Range for Externalizing Score % (SE)</b>
<b>Total</b>	961	18.5 (1.8)	5.5 (1.0)	17.1 (1.8)
<b>Sex</b>				*
Male	491	18.6 (2.8)	6.4 (1.9)	14.0 (2.4)
Female	470	18.4 (3.0)	4.5 (1.4)	20.3 (3.1)
<b>Race/ethnicity</b>				
Black	378	18.9 (3.3)	7.8 (2.0)	16.9 (3.3)
White	329	19.5 (3.3)	4.0 (1.4)	17.9 (3.1)
Hispanic	187	18.7 (4.9)	6.4 (3.3)	18.7 (5.1)
Other	62	7.3 (3.1)	0.9 (0.5)	4.8 (2.1)
<b>Child setting</b>				
In home, biological parents	493	16.5 (2.5)	4.8 (1.4)	14.0 (2.2)
In home, adoptive parents	224	18.3 (3.8)	3.3 (1.4)	18.2 (4.6)
In home, kin, or other caregiver	159	17.1 (4.7)	8.0 (3.1)	10.3 (3.2)
Out of home	44	14.5 (5.4)	12.8 (8.8)	67.1 (9.6)
<b>Chronic health condition</b>				
Yes	221	20.2 (3.9)	6.4 (1.9)	20.4 (4.3)
No	740	18.1 (2.0)	5.2 (1.2)	16.2 (1.8)
<b>Physical disability</b>				
Yes	35	33.7 (12.3)	13.0 (10.0)	8.7 (5.6)
No	926	18.0 (1.8)	5.2 (1.0)	17.4 (1.9)
<b>Cognitive disability</b>				
Yes	109	20.4 (6.3)	7.2 (3.3)	22.2 (7.1)
No	811	18.2 (1.9)	5.3 (1.1)	16.8 (1.8)
<b>Physical abuse (baseline)</b>				
Yes	225	15.2 (4.0)	4.6 (1.6)	17.8 (5.0)
No	660	18.9 (2.2)	5.3 (1.4)	16.4 (2.1)

*Note:* Instrument used is the Child Behavior Checklist. All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ).

**Exhibit 2-6**  
**Teacher Report of Children’s Behavior Problems**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	In Clinical Range for Total Score % (SE)	In Clinical Range for Internalizing Score % (SE)	In Clinical Range for Externalizing Score % (SE)
<b>Total</b>	608	7.9 (1.7)	7.6 (1.9)	8.8 (1.6)
<b>Sex</b>				
Male	311	5.3 (2.2)	9.0 (3.3)	5.3 (1.2)
Female	297	10.5 (2.7)	6.2 (1.8)	12.4 (2.8)
<b>Race/ethnicity</b>				*
Black	244	11.7 (3.8)	7.5 (2.8)	16.2 (3.7) <sup>a</sup>
White	214	6.0 (3.8)	7.7 (3.2)	5.5 (1.8) <sup>b</sup>
Hispanic	108	5.5 (4.2)	8.5 (5.0)	2.6 (0.9) <sup>b</sup>
Other	44	8.6 (5.0)	4.5 (3.2)	14.2 (5.5)
<b>Child setting</b>				
In home, biological parents	318	5.9 (2.0)	6.8 (2.7)	7.5 (2.2)
In home, adoptive parents	134	7.7 (3.5)	4.8 (2.1)	10.7 (3.6)
In home, kin, or other caregiver	114	8.5 (3.4)	6.0 (3.4)	13.6 (4.6)
Out of home	31	22.1 (13.2)	19.0 (13.2)	5.1 (4.4)
<b>Chronic health condition</b>				
Yes	135	8.8 (3.3)	14.6 (6.2)	8.8 (3.1)
No	473	7.6 (2.0)	5.6 (1.6)	8.8 (2.0)
<b>Physical disability</b>				
Yes	25	6.4 (6.4)	2.3 (2.1)	16.3 (8.9)
No	583	7.8 (1.7)	7.8 (2.0)	8.5 (1.6)
<b>Cognitive disability</b>				
Yes	57	19.0 (8.0)	12.8 (7.3)	13.9 (6.5)
No	540	6.3 (1.6)	6.5 (1.9)	8.3 (1.7)
<b>Physical abuse (baseline)</b>				
Yes	151	7.0 (2.9)	12.2 (5.0)	8.5 (2.9)
No	411	7.9 (2.1)	4.8 (1.6)	8.0 (1.7)

*Note:* Instrument used is the Teacher Report Form (TRF). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

We examined the Attention subscale of the Teacher Rating Form as an indicator of attention problems in this group (Exhibit 2-7). Although the ratings of attention were in the average range, the mean score (52.1) was somewhat elevated as compared to the normative group (50). Girls’ scores were significantly higher than boys’, but otherwise there were no significant group differences.

Teachers rated children’s aggressive behaviors on Dodge and Coie’s (1987) Teacher Checklist of Aggression. (Exhibit 2-7). These children were fairly nonaggressive on average, especially concerning proactive or nonprovoked aggression. Although reactive aggression scores were a little higher, the scores of the group as a whole indicated that teachers rated the children between “seldom” and “sometimes” on average. Black children were rated higher than White children on reactive aggression, but otherwise no group differences were significant.

**Exhibit 2-7**  
**Teacher Ratings of Attention and Aggressive Behaviors**  
**Infant Population at Wave 5**

	TRF Attention Problems		Proactive Aggression		Reactive Aggression	
	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)
<b>Total</b>	636	52.1 (0.2)***	618	4.2 (0.1)	620	6.7 (0.2)
<b>Sex</b>		***				
Male	328	51.5 (0.2)	315	4.3 (0.2)	317	7.0 (0.4)
Female	308	52.8 (0.3)	303	4.0 (0.2)	303	6.5 (0.3)
<b>Race/ethnicity</b>						*
Black	259	52.5 (0.4)	252	4.4 (0.3)	253	7.5 (0.4) <sup>a</sup>
White	218	52.2 (0.4)	210	3.9 (0.2)	210	6.1 (0.3) <sup>b</sup>
Hispanic	114	51.3 (0.3)	113	4.2 (0.2)	114	6.8 (0.4)
Other	44	52.1 (0.4)	42	4.2 (0.4)	42	7.3 (0.7)
<b>Current setting</b>						
In home, biological parents	330	52.0 (0.3)	319	4.1 (0.1)	319	6.7 (0.3)
In home, adoptive parents	145	52.2 (0.4)	142	4.0 (0.2)	142	6.3 (0.3)
In home, kin, or other caregiver	117	52.6 (0.8)	116	4.4 (0.3)	116	7.4 (0.5)
Out of home	32	52.3 (0.8)	31	4.3 (0.6)	33	7.2 (0.8)

*Note:* Instruments used are the Teacher Report Form (TRF) and the Teacher Rating Instrument of Proactive and Reactive Aggression. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample, which equals 50 for TRF attention problems. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

### School Readiness

Previous research suggest that many children who have been maltreated have deficits in cognitive, language, social, and behavioral skills, with some differences beginning in infancy (Bolger, Patterson, & Kupersmidt, 1998; Culp, Watkins, Lawrence, Letts et al., 1991; Kim & Cicchetti, 2003; Shonk & Cicchetti, 2001). The baseline NSCAW report on children during infancy and preschool indicates that more than half (53%) of all children aged 3 to 24 months whose families were investigated for maltreatment were considered to be at high risk for developmental delay or neurological impairment (U.S. Department of Health and Human Services, 2005b). Among children aged 3 or younger, 30% lagged significantly behind average children in both cognitive and language skills. When followed up 1½ years after investigation, children who were 2 years or younger at baseline continued to have significant risks for developmental delay and neurological impairment, and their functioning on measures of cognition and language development was below average.

Given these children’s history of developmental challenges, it is important to examine their functioning as they make the transition to school. The analyses below examine development in terms of global cognitive functioning, language skills, social competence, attention, aggression, peer relationships, and academic performance. We examine children’s outcomes in

these areas overall and by background factors (i.e., sex, race/ethnicity, chronic health conditions) and case characteristics (i.e., maltreatment type, number of out-of-home placements, current setting, severity of physical abuse, and severity of neglect).

There are limitations in the analysis relating to school adjustment. Some children had entered the school system and have information available from their teachers, while 8% had not yet reached kindergarten, resulting in a lack of critical information on their integration to formal schooling. Because of their limited time in formal schooling—most of these children were only in kindergarten—teachers and caregivers may not yet have identified their educational needs.

### **Cognitive and Language Development**

Overall, the children performed in the average range on the Kaufman Brief Intelligence Test (K-BIT; Exhibit 2-8). However, overall scores were about one half of a standard deviation below the mean for children in general on the composite as well as the vocabulary scale and the nonverbal matrices scales. Black children scored significantly lower than one or more other race/ethnicity groups on each K-BIT score. In addition, K-BIT scores differed by setting, children in adoptive homes having higher scores than children in their homes with kin or other nonparental caregivers.

Scores on the Preschool Language Scale (PLS) were also in the average range (Exhibit 2-8), though they were also significantly lower than those of children in general. The sample size for the PLS is lower because it is not used with 6-year-olds. The total language score and the expressive language score were each about one half of a standard deviation below the mean. Girls had significantly higher scores than boys on both the total language and the auditory comprehension scales. Children in out-of-home care had significantly lower PLS total and auditory comprehension scores than children who were living at home with either their biological or adoptive parents. No other differences in cognitive or language scores were found as a function of background or case characteristics.

### **Early Academic Achievement**

Children completed several subtests of the Woodcock Johnson III Tests of Achievement, although only children who were at least 6 were old enough to take the Calculation test. Although mean scores tended to be in the average range, both the Passage Comprehension test, assessing reading comprehension, and the Applied Problems test, measuring math ability were significantly below the mean for children on average (Exhibit 2-9). The difficulties of the population who were involved with CWS at baseline were especially clear on Calculation. Of the 6-year-olds who were eligible for this test, nearly 27% were given missing standard scores because of their inability to successfully complete test items at the lowest level. For the other subtests, between 1% and 2% did not have standard scores.

**Exhibit 2-8**  
**Cognitive and Language Test Scores**  
**Infant Population at Wave 5**

	<b>K-BIT Composite</b>		<b>K-BIT Vocabulary</b>		<b>K-BIT Matrices</b>		<b>PLS Total</b>		<b>PLS Expressive</b>		<b>PLS Comprehension</b>	
	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)
<b>Total</b>	914	92.9 (1.0)***	914	92.5 (1.1)***	921	94.5 (1.0)***	686	92.7 (1.4)***	686	91.7 (1.6)***	686	94.8 (1.4)***
<b>Sex</b>							*					*
Male	469	93.0 (1.4)	469	92.5 (1.5)	472	94.8 (1.4)	354	90.0 (1.7)	354	89.2 (1.9)	354	92.5 (1.5)
Female	445	92.7 (1.1)	445	92.6 (1.2)	449	94.2 (1.2)	332	95.3 (2.0)	332	94.1 (2.2)	332	97.1 (1.7)
<b>Race/ethnicity</b>		***		***		**						
Black	367	88.1 (1.1) <sup>a</sup>	367	87.3 (1.2) <sup>a</sup>	367	91.1 (1.2) <sup>a</sup>	286	92.1 (1.5)	286	93.4 (1.4)	286	92.0 (1.7)
White	310	96.5 (1.5) <sup>b</sup>	310	97.6 (1.5) <sup>b</sup>	310	96.1 (1.5) <sup>b</sup>	219	95.1 (2.9)	219	92.6 (3.1)	219	98.2 (2.4)
Hispanic	172	91.9 (1.6)	172	88.4 (2.2) <sup>b</sup>	179	96.6 (1.6) <sup>b</sup>	138	88.9 (3.4)	138	87.6 (4.1)	138	92.1 (2.4)
Other	60	93.8 (1.5) <sup>b</sup>	60	95.3 (1.6) <sup>b</sup>	60	93.4 (2.1)	38	92.6 (3.3)	38	90.9 (5.0)	38	95.3 (2.6)
<b>Current Setting</b>		**		*		*		**				**
In home, biological parents	488	93.6 (1.4)	488	92.9 (1.4)	483	95.5 (1.4)	354	93.5 (2.1) <sup>a</sup>	354	92.2 (2.2)	354	95.4 (1.9) <sup>a</sup>
In home, adoptive parents	223	94.7 (1.0) <sup>a</sup>		95.2 (1.2) <sup>a</sup>	224	95.1 (1.0)	184	96.0 (1.1) <sup>a</sup>	184	95.2 (1.8)	184	97.3 (1.2) <sup>a</sup>
In home, kin, or other caregiver	158	89.0 (2.3) <sup>b</sup>	223	89.9 (2.8) <sup>b</sup>	159	90.1 (1.9)	118	90.0 (4.1)	118	87.8 (4.5)	118	93.9 (3.2)
Out of home	44	90.3 (2.0)	158	88.2 (4.4)	44	94.1 (2.3)	30	81.1 (4.6) <sup>b</sup>	30	82.6 (5.0)	30	82.8 (4.6) <sup>b</sup>

*Note:* K-BIT = Kaufman Brief Intelligence Test. PLS = Preschool Language Scale. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, means were tested against means of the standardization sample, which equals 100 for all scales in this exhibit. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Means that have different superscripts are significantly different from each other ( $\alpha = .05$ ).

**Exhibit 2-9**  
**Early Achievement Test Scores at 5 to 6 Years of Age Infant Population at Wave 5**

	WJ Letter Identification		WJ Passage Comprehension		WJ Calculation		WJ Applied Problems	
	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)
<b>Total</b>	904	100.8 (0.7)	897	97.5 (0.7)*	256	94.4 (1.7)	899	91.6 (0.9)***
<b>Sex</b>								
Male	460	98.6 (1.0)	458	97.2 (1.0)	132	95.7 (2.6)	455	91.1 (1.3)
Female	444	103.0 (1.0)	439	97.8 (0.9)	124	93.1 (1.7)	444	92.2 (1.0)
<b>Race/ethnicity</b>								*
Black	358	100.3 (1.1)	358	98.8 (1.1)	85	89.8 (2.3)	360	88.6 (1.2) <sup>a</sup>
White	306***	100.8 (1.1)	300	97.0 (1.0)	100	95.8 (2.3)	304	93.9 (1.4) <sup>b</sup>
Hispanic	176	101.3 (1.2)	176	96.7 (1.7)	48	94.5 (3.2)	172	91.9 (1.4)
Other	60	101.2 (1.9)	60	97.8 (1.5)	23	103.9 (5.9)	59	90.0 (2.8)
<b>Chronic conditions</b>						**		
Yes	200	101.8 (2.5)	197	97.7 (2.2)	47	88.3 (2.5)	198	91.1 (1.9)
No	703	100.5 (0.8)	699	97.5 (0.8)	209	95.6 (2.0)	700	91.7 (0.9)
<b>Type of maltreatment</b>								**
Physical abuse	208	103.0 (1.6)	206	98.5 (1.3)	71	97.2 (3.6)	206	92.2 (1.8) <sup>a</sup>
Neglect	513	99.8 (0.9)	511	97.1 (1.1)	137	93.0 (1.8)	513	92.7 (0.8) <sup>a</sup>
Other	111	99.6 (2.1)	109	98.5 (1.8)	48	93.8 (4.1)	109	84.9 (2.7) <sup>b</sup>
<b>Current setting</b>						***		**
In home, biological parents	486	100.0 (1.0) <sup>a</sup>	482	96.7 (1.0) <sup>a</sup>	147	95.3 (2.3) <sup>a</sup>	481	92.2 (1.2)
In home, adoptive parents	221	104.6 (1.1) <sup>b</sup>	221	101.8 (1.5) <sup>1,b</sup>	46	101.5 (3.0) <sup>2,a</sup>	221	95.2 (1.1) <sup>3,a</sup>
In home, kin, or other caregiver	155	99.6 (1.9) <sup>a</sup>	152	97.1 (1.2) <sup>a</sup>	47	90.8 (2.6) <sup>b</sup>	155	86.5 (3.4) <sup>b</sup>
Out of home	41	101.0 (2.0) <sup>a</sup>	41	95.1 (21.7) <sup>a</sup>	16	83.8 (2.1) <sup>b</sup>	41	88.9 (3.2) <sup>b</sup>
<b>Severity of neglect</b>		**		**				
Mild	131	98.0 (1.5)	130	95.5 (1.7) <sup>4,a,b</sup>	45	91.6 (2.6)	130	92.6 (1.4)
Moderate	83	96.8 (2.6)	82	91.6 (2.8) <sup>a,c</sup>	24	91.0 (4.0)	84	90.3 (2.2)
Serious	73	102.0 (2.7)	72	102.2 (2.7) <sup>c,e</sup>	13	89.8 (4.6)	73	90.2 (2.1)
Severe	65	102.1 (2.1)	64	97.8 (1.2) <sup>b,e</sup>		87.8 (1.5)	65	91.5 (2.7)
Grave	75	104.2 (2.7)	75	101.2 (1.7) <sup>d</sup>		97.4 (7.1)	75	95.0 (3.3)

Note: Instruments used are the Woodcock-Johnson III Tests of Cognitive Abilities (WJ). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, means were tested against means of the standardization sample, which equals 100 for all scales in this exhibit. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> Children living with adoptive parents had better scores on the WJ Passage Comprehension than children living with biological parents, with kin, or in out-of-home placements.

<sup>2</sup> Children living with biological and adoptive parents had better scores on the WJ Calculation than children living with kin or out of home.

<sup>3</sup> Children living with adoptive parents had better scores on the WJ Applied Problems than children living with kin or out of home.

<sup>4</sup> Information presented in the next chapter shows that children who suffered more serious neglect were more likely to be adopted. These comparisons show that children with the most serious type of neglect had better scores on the WJ Passage Comprehension than children who suffered less severe types of neglect, suggesting that the finding of elevated Passage Comprehension scores among those who were adopted explains why those with more severe cases of neglect at baseline had higher scores.

Girls had significantly higher Letter Word Identification scores than boys, but boys had significantly higher Calculation scores. Black children had significantly lower scores on Woodcock-Johnson Calculation scores than White and “Other” children and lower on Woodcock-Johnson Applied Problems than White children. Woodcock-Johnson scores also differed by setting. Children who had been adopted had significantly higher scores than children in all other groups on Letter Identification and Comprehension and higher scores than children in two groups on Applied Problems. Children who were in out-of-home setting had significantly lower scores than others on Calculation.

Severity of neglect at baseline was significantly related to Passage Comprehension in an unexpected way. Those experiencing mild or moderate neglect at baseline had lower scores than those experiencing severe or grave neglect. The data indicate that the more serious the neglect, the greater the likelihood of adoption [ $\chi^2(12) = 49.0, p = .0001$ ], suggesting that the finding of elevated Passage Comprehension scores among those who were adopted explains why those with more severe cases of neglect at baseline had higher scores. The relationship between severity of neglect and Calculation is difficult to interpret because samples for this analysis were small—many children were not proficient enough to be scored on this test. It was difficult to test the effect of severity of physical abuse because of small cell sizes, and it was not significantly related Woodcock Johnson scores.

Teachers rated children’s performance in academic subjects using a 5-point scale (far below grade to well above grade). Exhibit 2-10 shows the percentage of children rated as below grade/far below grade for four subject areas: Language Arts (e.g., oral language skills, preliteracy, reading, writing, spelling), mathematics, Social Studies, and Science. Although the majority of the children received ratings in each subject area that indicated academic performance that was at grade-level to far above grade-level performance, a sizable percentage performed below or far below grade level in language arts and mathematics (39% and 35.1%, respectively). While no national norms exist for comparison, if ratings were normally distributed, we would expect about 16% to be below average grade level. There were no differences in language arts or mathematics performance ratings by child or background characteristics. However, science and social studies ratings differed by current setting. The highest percentage of children who received below/far below grade level ratings for social studies (19.9%) was for those in home with their biological parent. The highest percentage of children who received below/far below grade level ratings for science (44.5%) was for those out of home. No other differences were statistically significant.

## **Social Competence**

Teachers and caregivers completed several measures of social competence, rating both social skills in total and specific social skills. Although the mean total social skills score (96.4) was in the average range, it was significantly below the mean of children in general (Exhibit 2-11). A greater percentage of children were rated as having “fewer” social skills than in the general population of children (23.5% vs. 15.9%). Children whose most serious maltreatment at baseline was classified as other were rated lower than children whose maltreatment was classified as physical abuse. There were no other differences by child or background characteristics on either mean scores or percentage having fewer social skills.

**Exhibit 2-10**  
**Number and Percentage Below Grade Level in Different Academic Domains**  
**(Teacher Report)**  
**Infant Population at Wave 5**

	Language Arts		Mathematics		Social Studies		Science	
	<i>N</i>	% (SE)	<i>N</i>	% (SE)	<i>N</i>	% (SE)	<i>N</i>	% (SE)
<b>Total</b>	237	39.0 (3.4)	203	35.1 (2.9)	67	16.7 (3.3)	74	20.2 (3.8)
<b>Sex</b>						*		**
Male	135	43.2 (4.3)	109	36.7 (4.4)	40	24.0 (4.6)	47	31.2 (5.9)
Female	102	34.7 (4.3)	94	33.5 (4.1)	27	10.3 (3.7)	27	10.2 (3.4)
<b>Race/ethnicity</b>								
Black	95	38.9 (5.7)	87	36.5 (5.1)	32	19.1 (5.6)	40	26.8 (6.8)
White	71	37.3 (5.0)	60	29.7 (4.8)	16	14.0 (5.5)	15	13.1 (5.6)
Hispanic	52	43.0 (8.4)	40	46.5 (8.4)	13	16.8 (7.3)	14	23.7 (9.1)
Other	18	38.5 (7.6)	15	28.5 (7.4)	6	—	5	—
<b>Current setting</b>						*		**
In home, biological parents	125	38.9 (4.3)	103	33.1 (3.9)	35	19.9 (4.5) <sup>a</sup>	39	23.1 (5.1) <sup>a</sup>
In home, adoptive parents	48	33.6 (5.6)	42	33.0 (6.8)	11	13.8 (5.7)	10	5.8 (2.0) <sup>b</sup>
In home, kin, or other caregiver	39	38.9 (7.6)	37	34.6 (7.9)	11	5.5 (2.4) <sup>b</sup>	13	8.8 (4.0) <sup>b</sup>
Out of home	16	41.0 (16.2)	14	46.6 (17.2)	6	—	9	44.5 (16.8)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Cells are left empty when sample sizes are too small to allow for meaningful estimates ( $N < 9$ ).

Teachers' ratings indicated that there were a significantly greater percentage of children in this population (19.2%) with fewer assertive behavior skills than among all children. Similarly, a significantly greater percentage of children were rated as having "fewer" self-control behaviors (19.1%) and cooperative behaviors (27.3%). There were correspondingly smaller percentages of children involved with CWS who had more of these skills than among all children (Exhibit 2-11). While 14.7% of boys were rated as having "more" self-control behaviors, only 3.5% of the girls were so rated (Exhibit 2-12). Social skill scores did not differ by race/ethnicity or case characteristics.

Caregivers also rated children on social skills. Because separate scales were used for preschool and elementary school children, we performed separate analyses and results are not tabled. Caregiver ratings of overall social skills of both preschool children and elementary children were in the average range ( $M_{\text{preschool}} = 96.9$ ;  $M_{\text{elementary}} = 93.3$ ), but significantly lower than for children in general. There were no differences by sex or maltreatment type. However, preschool children of different race/ethnicity groups differed significantly on social skills, Wald  $F(3) = 3.69$ ,  $p < .05$ . Pairwise contrasts indicated that Hispanic children were rated lower than White children. Social skills ratings of elementary school children differed by severity of neglect, Wald  $F(4) = 7.03$ ,  $p < .001$ . Pairwise contrasts indicated that those children who were reported to be seriously neglected at baseline had *higher* social skills ratings than each other group (i.e., mild neglect, moderate neglect, severe neglect, and grave neglect). In addition, those whose neglect was classified as mild had higher ratings than those whose neglect was classified as severe. The reason for these differences is not clear.

**Exhibit 2-11**  
**Social Competence Ratings by Teachers**  
**Infant Population at Wave 5**

	N	SSRS Total Mean (SE) <sup>1</sup>	SSRS Assertion Ratings		
			Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE) <sup>2</sup>
<b>Total</b>	613	96.4 (1.0)***	19.2 (2.6)	68.9 (3.4)	11.9 (2.1)***
<b>Sex</b>					
Male	309	97.8 (1.4)	22.3 (3.8)	66.3 (4.4)	11.4 (0.3)
Female	304	95.1 (1.2)	16.2 (3.0)	71.4(0.4)	12.4 (2.7)
<b>Race/ethnicity</b>					
Black	247	93.2 (1.6)	23.2 (4.6)	70.4 (0.5)	6.4 (1.8)
White	209	99.2 (1.7)	16.8 (4.3)	66.0 (5.3)	17.2 (3.6)
Hispanic	114	96.7 (1.9)	18.4 (5.3)	71.1 (6.9)	10.4 (5.7)
Other	42	95.6 (2.9)	18.1 (5.5)	74.6 (5.8)	7.3 (4.4)
<b>Type of maltreatment</b>		*			
Physical abuse	151	99.7 (1.8) <sup>3,a</sup>	11.4 (3.4)	66.6 (6.4)	22.0 (6.1)
Neglect	342	96.1 (1.4)	19.4 (3.3)	72.0 (3.6)	8.7 (1.8)
Other	120	92.5 (1.9) <sup>b</sup>	30.5 (6.8)	62.2 (6.6)	7.3 (0.3)
<b>Current setting</b>					
In home, biological parents	317	97.5 (1.6)	15.6 (3.1)	71.2 (3.8)	13.2 (2.7)
In home, adoptive parents	141	97.1 (2.1)	16.3 (3.9)	76.6 (5.0)	7.1 (3.8)
In home, kin, or other caregiver	112	93.7 (1.8)	30.8 (8.4)	59.1 (8.0)	10.2 (3.3)
Out of home	32	93.6 (2.4)	16.7 (6.2)	64.0 (18.0)	19.3 (13.9)

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, the mean was tested against the mean of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup>The mean of the normative sample is 100.

<sup>2</sup>The percentage showing more behaviors in the normative sample is 16.

<sup>3</sup>Children whose main type of maltreatment was physical abuse had better SSRS Total scores than children whose main type of maltreatment was classified as “other” (including sexual abuse, abandonment, and emotional abuse).

When behavior ratings of preschool and elementary children were combined (Exhibit 2-13), 21.8% had fewer social skills than the general population of children on average. This is significantly higher than among children in general, and there is a corresponding smaller percentage of these children with more social skills. Among boys, 15.7% of the males were rated as having more social skills than the general average, but only 5.8% of the girls were rated as highly. A significantly smaller percentage of the population in this report had caregiver ratings in the “more” category for self-control and cooperativeness than would be expected based on the normative sample (9.7% and 10%, respectively; Exhibit 2-13). Differences in the distribution of these ratings were found for several subgroups.

**Exhibit 2-12**  
**Additional Social Competence Ratings by Teachers**  
**Infant Population at Wave 5**

	<i>N</i>	SSRS Self-Control Ratings			SSRS Cooperation Ratings			
		Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE) <sup>1</sup>	Fewer Behaviors % (SE) <sup>2</sup>	Average Behaviors % (SE)	More Behaviors % (SE)	
<b>Total group</b>	611	19.1 (2.5)	71.8 (2.8)	9.1 (1.8)	611	27.3 (3.2)	63.1 (3.5)	9.6 (1.8)
<b>Sex</b>		*						
Male	309	15.9 (2.7)	69.4 (4.5)	14.7 (3.7)	309	28.5 (3.7)	63.7 (4.5)	7.7 (2.8)
Female	304	22.3 (0.4)	74.1 (0.4)	3.5 (0.1)	302	26.1 (4.4)	62.5 (4.7)	11.4 (2.7)
<b>Race/ethnicity</b>								
Black	247	26.2 (4.3)	65.9 (4.8)	7.9 (1.8)	246	33.9 (5.1)	54.2 (5.8)	11.9 (3.3)
White	209	15.7 (3.7)	72.6 (3.9)	11.7 (3.4)	208	21.2 (4.4)	70.2 (0.5)	8.6 (2.5)
Hispanic	114	13.5 (4.5)	81.3 (6.3)	5.2 (0.3)	114	28.0 (7.8)	62.3 (8.1)	9.7 (5.0)
Other	42	25.2 (8.5)	65 (0.9)	9.8 (6.8)	42	34.9 (8.3)	61.6 (8.3)	3.5 (2.3)
<b>Current setting</b>								
In home, biological parents	37	18.9 (3.3)	70.3 (3.6)	10.8 (2.6)	37	25.6 (0.4)	62.9 (4.6)	11.5 (2.7)
In home, adoptive parents	141	16.3 (3.9)	77.4 (4.4)	6.3 (2.2)	140	29.5 (6.5)	60.2 (6.2)	10.3 (4.1)
In home, kin, or other caregiver	112				111	23.6 (6.2)	70.9 (6.5)	5.4 (2.2)
Out of home	32	25.0 (7.6)	65.3 (8.1)	9.7 (4.5)	32	46.6 (11.5)	52.6 (11.5)	0.8 (0.8)

*Note:* Instrument used is the Social Skills Rating System (SSRS). Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ ). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance.

<sup>1</sup> The percentage showing more behaviors in the normative sample is 16.

<sup>2</sup> The percentage showing fewer behaviors in the normative sample is 16.

Racial/ethnic differences were found in ratings of assertiveness. The Hispanic subgroup had the highest percentage assertive behaviors that were classified as “fewer” (32.5%); the group classified as “other” had the lowest percentage of “fewer” assertive behaviors (7.4%; Exhibit 2-13). There were also differences in the distribution of assertive behaviors as a function of setting. The subgroup of children who were in homes with kin or other caregiver had the highest percentage classified with “fewer” assertive behaviors (27.6%), whereas the group in adoptive homes had the lowest percentage classified with “fewer” assertive behaviors (9.5%) and the highest percentage classified with “more” assertive behaviors (21.2%).

Differences in self-control behaviors were also found as a function of setting. However, the subgroup who were in adoptive homes had both the highest percentage rated with “fewer” self-control behaviors (21.6%) and the highest percentage rated with “more” self-control behaviors (15.7%; Exhibit 2-14). Finally, girls had a higher percentage than boys of being rated with “fewer” cooperative behaviors (18.3% v. 12.3%) and a lower percentage of being rated with “more” cooperative behaviors (6% v. 14%; Exhibit 2-14).

**Exhibit 2-13**  
**Child Social Competence Ratings by Parents**  
**Infant Population at Wave 5**

	<i>N</i>	SSRS Total Behavior Ratings			SSRS Assertion Ratings		
		Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE)	Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE)
<b>Total</b>	959	21.8 (1.9)	67.4 (2.8)	10.8 (2.0)	21.7 (2.4)	64.7 (2.5)	13.6 (2.1)
<b>Sex</b>		***					
Male	491	19.1 (2.9)	65.2 (3.9)	15.7 (2.7)	25.0 (3.6)	59.3 (3.6)	15.7 (2.7)
Female	468	24.5 (3.0)	69.7 (3.4)	5.8 (1.9)	18.3 (2.9)	70.2 (3.1)	11.4 (2.7)
<b>Race/ethnicity</b>		*		*			
Black	378	21.9 (3.4)	68.0 (3.8)	10.2 (2.6)	19.9 (3.6)	66.4 (3.7)	13.7 (3.2)
White	328	16.9 (3.0)	71.3 (4.4)	11.8 (3.2)	19.5 (4.4)	65.4 (4.1)	15.1 (3.2)
Hispanic	186	33.0 (5.7)	61.0 (4.4)	6.0 (2.1)	32.5 (5.0)	59.4 (5.4)	8.1 (3.1)
Other	62	14.8 (4.6)	61.0 (8.3)	24.2 (6.4)	7.4 (2.9)	71.1 (8.0)	21.5 (7.7)
<b>Current setting</b>		*					
In home, biological parents	492	21.5 (3.0)	67.1 (4.0)	11.5 (2.8)	23.6 (3.5)	62.1 (3.5)	14.3 (3.0)
In home, adoptive parents	224	17.4 (3.1)	66.0 (4.7)	16.6 (3.8)	9.5 (2.2)	69.4 (4.5)	21.2 (4.3)
In home, kin, or other caregiver	159	26.3 (4.9)	68.2 (4.6)	5.4 (2.1)	27.6 (5.9)	64.1 (5.6)	8.4 (3.1)
Out of home	43	22.3 (10.0)	76.5 (10.2)	1.3 (1.3)	15.0 (9.0)	77.8 (10.3)	7.2 (5.9)

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\*\* $p < .001$ ).

**Exhibit 2-14**  
**Additional Social Competence Ratings by Parents**  
**Infant Population at Wave 5**

	<i>N</i>	SSRS Self-Control Ratings			SSRS Cooperation Ratings		
		Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE) <sup>1</sup>	Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE) <sup>1</sup>
<b>Total</b>	959	18.7 (2.0)	71.6 (2.6)	9.7 (1.9)	15.2 (1.8)	74.7 (2.5)	10.0 (1.3)
<b>Sex</b>					**		
Male	491	18.3 (2.7)	69.4 (3.5)	12.3 (2.6)	12.3 (2.5)	73.7 (3.5)	14.0 (2.3)
Female	468	19.1 (2.9)	73.8 (3.6)	7.0 (2.0)	18.3 (3.0)	75.8 (3.6)	6.0 (1.7)
<b>Race/ethnicity</b>							
Black	378	19.6 (3.3)	69.0 (3.9)	11.4 (2.8)	14.8 (3.2)	76.0 (3.5)	9.2 (1.9)
White	328	14.7 (3.2)	74.8 (4.6)	10.5 (3.0)	15.4 (2.4)	72.4 (3.9)	12.2 (2.8)
Hispanic	186	26.1 (5.0)	69.0 (4.7)	4.8 (2.0)	14.7 (4.1)	80.6 (4.4)	4.6 (1.6)
Other	62	16.0 (6.0)	73.0 (7.0)	11.1 (4.2)	16.0 (6.6)	66.4 (9.3)	17.6 (5.5)
<b>Current setting</b>							
In home, biological parents	492	19.8 (2.5)	70.3 (3.6)	9.9 (2.8)	15.2 (2.6)	72.6 (3.5)	12.2 (2.1)
In home, adoptive parents	224	21.6 (5.0)	62.8 (6.0)	15.7 (3.6)	10.8 (2.6)	81.0 (3.4)	8.2 (2.2)
In home, kin, or other caregiver	159*	11.4 (3.1)	82.7 (4.0)	5.9 (2.5)	23.8 (6.4)	71.8 (6.7)	4.4 (1.9)
Out of home	43	15.4 (9.0)	83.2 (9.1)	1.4 (1.3)	4.8 (2.2)	91.2 (3.5)	4.1 (2.2)

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ).

<sup>1</sup>The percentage showing more behaviors in the normative sample is 16.

## School-Related Perceptions

Children were asked about their relationships with peers at school and their degree of engagement in school. They completed the Loneliness and Social Dissatisfaction Scale (Cassidy & Asher, 1992), which assesses feelings of loneliness and dissatisfaction with peer support at school (Exhibit 2-15). Data from the scale developers are reported separately for males and females, which requires comparisons to be sex-specific. Both boys and girls had significantly higher loneliness scores than the average group in Cassidy and Asher's sample ( $M_{\text{males}} = 19.3$  and  $M_{\text{females}} = 19.5$ ), indicating that children involved as infants with CWS were more lonely than average children at age 5 to 6. There was a significant difference in loneliness ratings by severity of neglect. Children whose neglect was characterized as grave indicated greater loneliness than children whose neglect was classified as mild, moderate, or serious. In addition, a significant difference was found in the percentage classified as lonely among the children as a function of severity of neglect; there were a somewhat higher percentage of children classified as lonely among those who had experienced severe neglect.

**Exhibit 2-15**  
**Children's Reports of School-Related Perceptions**  
**Infant Population at Wave 5**

	Loneliness			School Engagement	
	<i>N</i> (Min)	Mean (SE)	% (SE)	<i>N</i> (Min)	Mean (SE)
<b>Total</b>	860	23.6 (0.3)	36.2 (2.3)	218	34.0 (0.7)
<b>Sex</b>					
Male	429	23.4 (0.4)	34.9 (3.1)	108	33.4 (0.9)
Female	431	23.7 (0.4)	37.4 (3.5)	110	34.5 (0.8)
<b>Race/ethnicity</b>					
Black	346	24.6 (0.6)	46.5 (4.4)	77	32.5 (0.8)
White	289	23.1 (0.5)	31.2 (3.6)	84	35.2 (0.9)
Hispanic	169	23.0 (0.2)	28.5 (5.2)	36	33.6 (1.6)
Other	53	23.5 (0.8)	44.1 (9.5)	21	34.0 (1.2)
<b>Chronic health condition</b>					
Yes	187	23.2 (0.7)	33.9 (5.2)	37	34.3 (2.2)
No	672	23.7 (0.3)	36.8 (2.7)	181	33.9 (0.6)
<b>Current setting</b>					*
In home, biological parents	463	23.4 (0.4)	33.3 (3.2)	128	33.9 (0.7) <sup>a</sup>
In home, adoptive parents	203	23.0 (0.6)	33.6 (5.0)	36	35.6 (1.0) <sup>b</sup>
In home, kin, or other caregiver	153	24.5 (0.5)	51.7 (6.8)	39	31.4 (1.0) <sup>b</sup>
Out of home	41	24.4 (1.4)	34.0 (12.0)	14	35.7 (3.5)
<b>Severity of neglect</b>		*	*		
Mild	126	24.1 (0.9) <sup>1, a</sup>	36.8 (6.4) <sup>1, a, c</sup>	38	33.2 (0.8)
Moderate	80	23.6 (0.8) <sup>a</sup>	33.3 (5.7) <sup>a, c</sup>	20	34.7 (1.2)
Serious	68	22.1 (0.7) <sup>a</sup>	21.1 (6.8) <sup>c</sup>	12	35.1 (3.1)
Severe	63	24.3 (1.2)	49.4 (7.0) <sup>a, b</sup>	19	36.4 (1.1)
Grave	71	27.7 (1.3) <sup>b</sup>	66.1 (8.4) <sup>b</sup>	12	33.1 (1.1)

*Note:* Instruments used are the Loneliness and Social Dissatisfaction Scale and the School Engagement Scale. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample.

Statistical significance is noted by asterisks in the column above the statistically significant result ( $*p < .05$ ).

Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> Children whose neglect was characterized as grave indicated greater loneliness than did children whose neglect was classified as mild, moderate, or serious.

The measure of school engagement addressed both children's participation (e.g., completing assignments, paying attention) and their psychological identification with school (e.g., get along with teachers, enjoy school). The mean of 34 indicates that children were positively engaged on average. Children who had never been out of the home and children who had been adopted had higher scores than children who lived with kin or other in-home arrangements.

## **Conclusions**

The results on children's well-being at the 5- to 6-year follow-up are mixed. Most children who entered CWS as infants were in good health, as healthy generally as children who live below the federal poverty level (Bloom & Tonthat, 2002). On average, at 5 to 6 years they displayed cognitive, language, and academic skills within the normal range. However, these findings must be tempered by several less than positive results.

Using a very stringent definition of risk, we found a substantial percentage of the group at risk for cognitive, emotional, or physical disabilities. In particular, 29% of the children were considered to be at risk for an emotional/behavioral problem, and 23% of the children were compromised in their ability to meet their daily living needs.

Although the children's average cognitive and language scores at 5 to 6 years were in the typical range, their mean scores on measures were significantly below the general population mean. The K-BIT verbal and the PLS language scores are comparable with those reported by other researchers who have shown that their samples of maltreated children differed from nonmaltreated samples at early school age (Eigsti & Cicchetti, 2004; Perry, Doran, & Wells, 1983). A substantial proportion of the children had scores low enough to be in the generally accepted range for services in school systems. Notably, this group of children tended to look no better on these measures than children who were 3 to 5 years old at baseline and 4.5 to 6 years old at the 1½-year follow-up. The children studied in this report were involved in CWS investigations during infancy; many of their families had received services and more than one fifth were eventually adopted. Although it was expected that they would have had a chance to show better developmental outcomes in these domains than the children whose maltreatment was reported later, this was not found. Given the importance of cognitive and language skills for success in school, it would not be surprising if many children subsequently show learning difficulties.

If we add the 27% of children whose Woodcock-Johnson Calculation raw scores were 0 to the 2.5% whose scores were more than 1.5 standard deviations below the mean, almost one third of children were performing below expectation on this scale. Although we do not know the percentage of children in the normative group with raw scores of 0, the large percentage of NSCAW children who have basic difficulty with arithmetic computation is cause for alarm. Almost one fifth were in the risk range on Applied Problems, but the percentage in the risk range on Letter Word Identification and Passage Comprehension was within normal limits. Correspondingly, teachers rated more than one third of children as below or far below grade level in language arts and mathematics achievement. These data suggest that these children are at heightened risk for academic problems. Since 73% of these children were still in kindergarten, it is too soon to understand the full impact on school achievement.

The children also displayed average scores, as a group, on measures of social competence. However, teacher ratings indicated that more than 27% of children had cooperation ratings in the below average range, and teacher and caregiver ratings showed that only 10% had “more” self-control and cooperative behaviors than children in general. Moreover, children had significantly higher loneliness scores than children in general. This finding agrees with previous reports showing that children with histories of maltreatment had difficulty interacting with peers, were less socially competent, and had been avoided or rejected by peers (Bolger & Patterson, 2001; Bolger, Patterson, & Kupersmidt, 1998; Rogosch, Cicchetti, & Aber, 1995). The importance of such skills for school success is well known and suggests that these children are at risk for difficulties managing at school.

Even more troubling is the finding, consistent with previous research (Shonk & Cicchetti, 2001), that children showed increased externalizing behavior problems compared to the general child population. More than twice the expected percentage of children had an Externalizing score in the clinical range. Although children did not display internalizing problems, such problems are more difficult for observers to detect. The studies where such problems have been identified include older children (Kaufman & Cicchetti, 1989; Toth, Manly, & Cicchetti, 1992).

One of our most surprising findings is of sex differences in an unexpected direction. Girls had significantly lower scores on calculation, higher scores on the teacher-rated attention problems scale, less-developed self-control behaviors as rated by teachers, higher externalizing behavior scores as rated by parents, and overall less-developed social behaviors as rated by parents. Although adolescent girls have been reported to perform less well on quantitative measures, such a difference among very young children has not been documented in research. We are also unaware of other research reporting girls showing more behavior problems. Moreover, this finding differs from results reported about children 3 to 5 years of age in previous NSCAW waves. The reasons for the finding are not clear and require further research. Differences may stem from actual sex differences, differences in teachers’ appraisal of girls and boys with CWS involvement, or both.

We did not expect so few differences by child and case characteristics. In particular, we found almost no differences by type of maltreatment. Previous research has reported that physical abuse as compared with neglect was linked to more difficulties with peers (Hildyard & Wolfe, 2002; Wodarski, Kurtz, Gaudin, & Howing, 1990), and children who were neglected have been found to display greater language deficits (Allen & Oliver, 1982; Culp et al., 1991) and poorer motivation for school than were children who were physically abused (Eckenrode, Laird, & Doris, 1993; Wodarski et al., 1990).

On the other hand, we did find that the type of living situation was related to children’s cognitive, language, and achievement scores, social competence ratings, academic engagement, and chronic health problems. Children who were adopted had higher scores on two of the Woodcock Johnson tests and more optimal social behaviors. We believe that these children were likely to have had a more stable environment in which to develop, although we cannot rule out the possibility that causality runs in the opposite direction, that children with these advantages were more likely to be adopted. As shown in the description of characteristics of caregivers, adoptive caregivers are older, better educated, and less likely to be living in poverty. On the

other hand, it must be acknowledged that differences between children were likely to influence which setting they had entered by the Wave 5 follow-up.

Children in out-of-home care at the 5-to-6-year follow-up had lower scores on a variety of cognitive measures and social skills. Our findings are in line with those who have reported high rates of language and learning problems in children living in foster care (Evans, 2001; Evans, Scott, & Schulz, 2004; Halfon, Mendonca, & Berkowitz, 1995; Sawyer & Dubowitz, 1994).

Although the differences among the neglect groups in terms of social skills were not completely interpretable, we did find that children whose neglect was indicated as “grave” were lonelier. As is known, the capacity to form friendships develops from the earliest relationships between caregivers and children as well as from early experiences with peers. It may be that those children whose neglect was of a more serious nature lacked those early experiences critical for forming friendships. In fact, previous research has shown that children with histories of neglect are unpopular and have fewer peers with whom to play (Bolger et al., 1998; Erickson, Egeland, & Pianta, 1989).

Our findings indicate that a substantial proportion of the children are at risk for school-related problems. Their readiness to learn may be compromised by poorly developed language skills, social skills, and peer relationships. Although few child and case characteristics were associated with their outcomes, there do appear to be some subgroups at heightened academic and behavioral risk. Future NSCAW analyses will provide a greater understanding of the trajectories of risk and resilience among young maltreated children.



## **CHAPTER 3**

### **CHILD PLACEMENT AND PERMANENCY**

The child welfare system (CWS) aims to ensure children's safety and well-being at home, but, in a minority of cases, CWS makes the judgment that children cannot safely stay at home and places children outside the home. Out-of-home placements include kinship care, in which a child lives with relatives; nonkin foster care, or, rarely, other residential settings (e.g., residential treatment center, group home).

Once children are placed, CWS will try to reunify them with their parents or other caregivers whenever possible. But this process often takes considerable time either for families to make the changes to enable reunification or for the court to determine with certainty that a family will be unable to make those changes. Too often placement has led to long-term stays in foster care that do not provide children with the stable, consistent, permanent family environment that they need to be happy and develop fully (U.S. Department of Health and Human Services, Children's Bureau, 2003a ). When reunification is impossible, the biological parents' rights to their children are terminated and children adopted. But it can take considerable time for adoptive parents to be found and a considerable wait for the adoption to be finalized, even after a child is living in the adoptive home. Nevertheless, the goal is to place children in permanent homes in a timely way.

In passing the Adoption and Safe Families Act (ASFA) of 1997, Congress recognized the need for permanency and included guidelines for states to achieve permanency for children in placement (U.S. Department of Health and Human Services, 2003b). Among other provisions ASFA decreased from 18 to 12 months the time in foster care for making permanency decisions, and required termination of parental rights when children are in foster care 15 of the previous 22 months (Pinderhughes, Harden, & Guyer, 2007). ASFA also made it easier for states to pursue concurrent planning, which involves working toward reunification but also planning for an alternative permanent setting at the same time (Child Welfare Information Gateway, 2005). Other state and federal reforms aim to reduce the time to finalization of adoption for children in foster care (e.g., Governor's Office of Regulatory Reform, 2003). Yet only a minority of states met standards for stability, reunification, and adoption in the 2001–2002 Child and Family Services Reviews (CFSRs; U.S. Department of Health and Human Services, Children's Bureau, 2003b). In addition, states needed much improvement on achieving permanency outcomes. Finally, adoption was least likely of all services to be designated as a quality service in the states.

Thus, developing permanent homes for children expeditiously is an important goal of child welfare services. Reunification is preferred, but when this is impossible the aim is for timely adoption. Historically, adoption rates for very young children like this group are higher than for older children (Wulczyn, Hislop & Harden, 2002), in large degree because their age makes them more desirable for many prospective adoptive parents.

In this section, we present data on these children's history of placement since the index investigation when they were infants and on their progress toward permanency. We examine reunification, termination of parental rights and adoption. Time is a key variable here, so we investigate time in placement and time to adoption. As we did in Chapter 2 with respect to child well-being, we also examined the relationship of several factors to permanency and placement

outcomes. Two variables we consistently used were child sex and race. We also analyzed the association between a variety of maltreatment characteristics and placement or permanency. These included the type of maltreatment reported at baseline, the severity of physical abuse or neglect, and the number of types of maltreatment experienced. Consistent with the previous chapter, children's disabilities continue to be of special interest. Consequently, we frequently present placement and permanency findings specifically for the subgroups of children at-risk for physical, emotional or cognitive disabilities.

A major caveat needs to be acknowledged: The data presented here stop at age 5 to 6, but the outcomes measured here remain to be determined for some of these children. Some may yet be reunified, experience termination of parental rights, or be adopted. Thus the analysis of reunification, termination of parental rights, and adoption do not possess fully accurate rates, because we have not followed all cases out to final disposition.

### **Key Children's Placement Results**

- More than one third of these 5- and 6-year-olds have been placed out of the home at some point in their lives.
- Of the children who were placed, 24% had two placements during their lifetime, and 27% had three or more placements.
- Of children placed, about half the group was in placement for less than 2 years, 38% were in placement for 2 to 4 years, and 13% were in placement for more than 4 years.
- White children were less likely to be placed outside the home (27% of cases), compared with 43% or higher for every other racial/ethnic group.
- Two thirds of children with a physical disability were placed.
- Nearly half of children who experienced physical abuse leading to hospitalization or permanent physical damage were placed.

### **Key Reunification Results**

- Of the children who were out of home at some point during the 5- to 6-year analysis period, 17% were reunified with their birth parents.

### **Key Termination of Parental Rights Results**

- Parental rights were terminated in over one third of the infants-at-baseline population
- More than half of children with a chronic medical condition experienced termination of parental rights.

### **Key Adoption Results**

- Slightly fewer than one fifth of the children were adopted by age 5 to 6.

- Most of those who were adopted had been placed outside the home (78%).
- The median time between placement and adoption was 729 days, almost 2 years.
- Adoption increased as foster care decreased over time.
- Adoption had an upward trend over time: the percentage of children living in adoptive homes was about 1% at baseline, 13% at the 3-year follow-up, and 17% at the 5- to 6-year follow-up.

## Placement

More than one third of these 5- and 6-year-olds have been placed out of the home at some point in their lives (Exhibit 3-1). For most of these children, placement came early. At baseline, when they were infants, within 4–5 months after the index investigation, 30.7% of the infants-at-baseline were in out-of-home care (Exhibit 3-2). This is substantially higher than the 11% reported for the NSCAW population as a whole at baseline (U.S. Department of Health and Human Services, 2005b).

Of the children who were placed, 24% had two placements during their lifetime and 27% had three or more placements. One CFSR goal is to limit children to no more than two placements within a 12-month period (U.S. Department of Health and Human Services, 2001), but analyzing the timing of these placements is beyond the scope of this report, so we do not know the extent to which this goal is met for these children.

We examined whether number of out-of-home placements differed by demographics, severity of maltreatment, and chronic health condition and disabilities. Placement differed significantly by the race/ethnicity variable. White children were placed outside the home in 27% of cases, while the percentage placed was 43% or higher for every other racial/ethnic group. Other research has also documented racial differences in placement in foster care (e.g., U.S. Department of Health and Human Services, 2005a).

Almost two thirds of children with a physical disability were placed, a number of them more than once. This was significantly higher than for children without a physical disability. Not surprisingly, severity of abuse at baseline made a difference in terms of placement. Severity of physical abuse was not statistically significant, mainly because of small cell size. But nearly half of children who experienced physical abuse leading to hospitalization or permanent physical damage were placed, more than twice the percentage of those with lesser physical abuse. Severity of neglect was significantly related to placement too. A much higher percentage of children were placed if neglect was serious, severe, or grave than if it was mild or moderate. Finally, the *number of types* of maltreatment (e.g., physical abuse, neglectful supervision) was significantly related to placement: 49% of children who had experienced more than one type of maltreatment were placed outside the home compared to 32% who had experience only one type of maltreatment.

**Exhibit 3-1**  
**Number of Out-of-Home Placements**  
**Infant Population at Wave 5**

	N	Percentage (SE)			
		0 Placements	1 Placement	2 Placements	3 or More Placements
<b>Total</b>	921	62.6 (2.7)	18.4 (1.8)	8.8 (1.2)	10.2 (2.3)
<b>Sex</b>					
Male	475	64.5 (3.9)	16.7 (2.7)	8.6 (2.1)	10.2 (3.1)
Female	446	60.6 (3.2)	20.2 (2.6)	9.0 (1.9)	10.2 (2.4)
<b>Race/ethnicity</b>		*			
Black	361	53.1 (5.4) <sup>a</sup>	25.8 (3.5)	11.6 (3.1)	9.5 (2.4)
White	317	73.2 (3.2) <sup>1,b</sup>	14.1 (2.2)	6.1 (1.4)	6.5 (1.8)
Hispanic	177	56.8 (6.8) <sup>a</sup>	15.8 (4.5)	9.1 (3.2)	18.2 (6.9)
Other	61	53.3 (8.5) <sup>a</sup>	20.9 (5.6)	10.9 (4.2)	15.0 (7.3)
<b>Chronic health condition</b>					
Yes	214	53.7 (5.0)	19.5 (3.7)	10.7 (2.4)	16.1 (4.3)
No	706	64.9 (2.8)	18.2 (1.9)	8.3 (1.4)	8.6 (2.2)
<b>Severity of neglect</b>		**			
Mild	132	81.9 (5.3) <sup>2,a</sup>	10.7 (4.3)	2.5 (1.6)	4.9 (1.9)
Moderate	83	65.7(6.9) <sup>2, c</sup>	14.3 4.4)	12.3 (5.8)	7.7 (3.6)
Serious	74	39.5 (11.0) <sup>b</sup>	30.9 (10.3)	13.9 (6.2)	15.7 (8.6)
Severe	70	29.1 (8.7) <sup>b</sup>	32.8 (6.9)	13.9 (4.7)	24.3 (7.7)
Grave	81	49.4 (8.7) <sup>b</sup>	22.6 (5.7)	11.0 (4.6)	17.0 (7.0)
<b>Physical disability</b>		*			
Yes	58	34.7 (8.2)	23.5 (7.8)	27.5 (7.7)	14.3 (7.3)
No	863	64.3 (2.7)	18.1 (1.8)	7.7 (1.3)	9.9 (2.3)

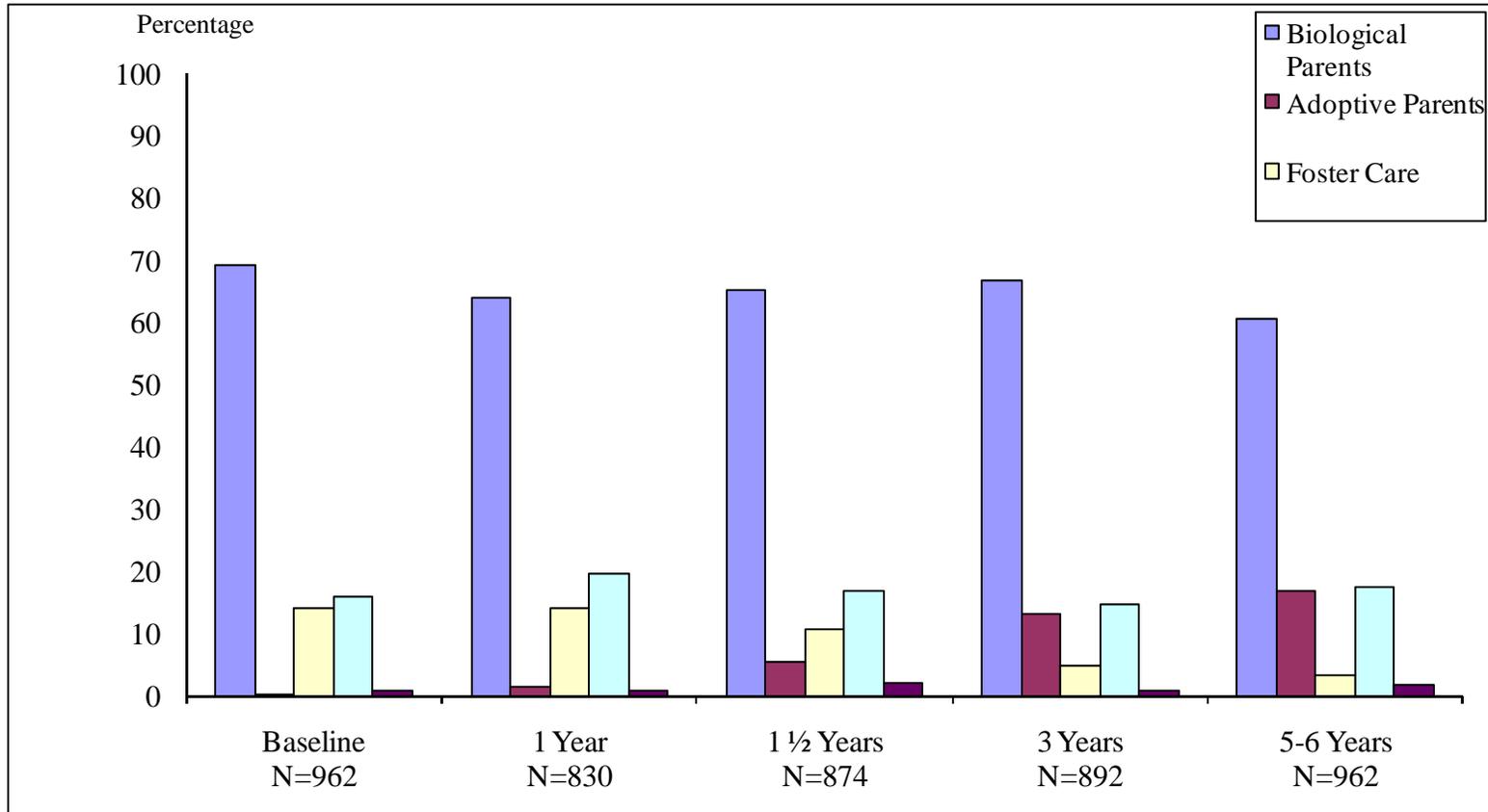
*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another (within the same category) represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> White children are significantly less likely to be placed out of home than Black, Hispanic, or “Other” children.

<sup>2</sup> Children with mild neglect were less likely to be placed out of home than children with serious, severe, or grave neglect. Children with moderate neglect were less likely to be placed out of home than children with serious and severe neglect.

We also assessed placement over time. Exhibit 3-2 presents the percentage of children in five different settings at each time point of NSCAW measurement. This provides a general picture of children’s living environments over time, though there are two significant caveats. We do not know about possible changes in setting in the significant intervals (18 months to approximately 2 years) *in between* measurement time points, in part because of the lack of CWS data for the majority of families. The figure also does not distinguish between children who were in home because they had always been at home and children who were in home because they were placed and then reunified.

**Exhibit 3-2  
Distribution of Children by Settings at Each Time Point  
Infant Population at Wave 5**



A large majority of children were with their original caregivers at each time point, either because they had never left home or they had returned home. Nonkin foster care was provided for 14.1% at baseline, but that declined steadily over time, dropping sharply to 5% at the 3-year follow-up and 3% at the five year follow-up. Correspondingly, adoption had an upward trend: the percentage of children living in adoptive homes was 1% at baseline, 13% at the 3-year follow-up, and 16.9% at the 5- to 6-year follow-up. Parallel to the foster care drop, the sharpest *increase* in adoption was at the 3-year follow-up. The use of kinship care was fairly consistent, ranging from 14.6% to 19.6%, with no apparent trend over time. Other settings (e.g., residential treatment) were used rarely, which is not surprising, given the age of these children.

Even though the rate of kinship care was fairly consistent, its implications for permanence changed over time. In another analysis (not shown in a table) for the infant-at-baseline population, we considered at each study time point whether kinship care was considered an “out-of-home” or “in-home” placement, the former representing a temporary and the latter a permanent home. At baseline, only 17.4% of kinship placements were considered in home (SE = 4.9). At the 1½-year follow-up, this increased to 35.7% (SE = 6.0), and at the 3-year follow-up, to 52.9% (SE = 8.5). By the 5-year follow-up, 82% of kinship placements were considered permanent (SE = 4.3). Thus there was a trend toward permanence in kinship care just as there was for adoption. Further analysis is needed to determine to what extent this represents the same placement with kin changing from temporary to permanent over time, versus different kinship placements tending at earlier points to be temporary and at later points permanent.

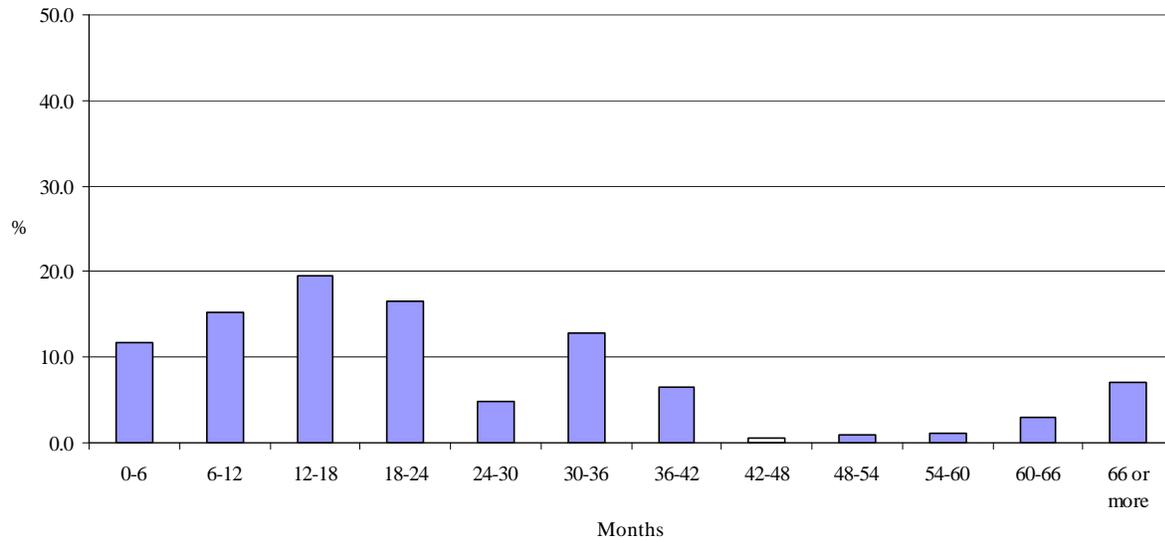
Ideally, children should spend as little time in placement as possible, but time in placement is nevertheless substantial in many cases. The report presents the mean amount of time in placement and the time between placement and adoption, but it should be acknowledged that this analysis of time is limited, because it does not take into account the fact that children assessed at this follow-up may yet be reunified or adopted. More sophisticated analysis using event history analysis is needed to assess probability and timeliness of these events more accurately (see e.g., Barth, Courtney, Berrick, & Albert, 1994), but this analysis is beyond the scope of this report and should be addressed in future NSCAW research.

The average time children were in placement was 723 days, which is 1.98 years (this variable is a sum if children had multiple stays in placement). This ranged from 40 days to 2,100 days. See Exhibit 3-3 for the distribution of time in placement in months. A little less than half the group (49.2%) was in placement for less than 2 years. The percentage in placement 2 to 4 years was 38.3%. The percentage in placement more than 4 years is substantially less, but still comprises 12.5% of children in placement. Note that some of these 5- and 6-year-olds had been in placement 66 months or more, almost their entire lives. Time in placement did not vary by sex, race/ethnicity, chronic health condition, or presence of emotional problems (Exhibit 3-4).

## **Reunification**

Of the children reportedly maltreated as infants who were out of home during the 5- to 6-year analysis period, 17% were reunified at some point with their birth parents. No demographic, abuse severity, or child functioning variable was significantly related to the percentage reunified.

**Exhibit 3-3**  
**Time in Placement**  
**Infant Population at Wave 5**



Note: N = 447.

**Exhibit 3-4**  
**Time in Placement (in Days)**  
**Infant Population at Wave 5**

	<i>N</i>	Mean (SE)
<b>Total</b>	447	723 (64)
<b>Sex</b>		
Male	224	667 (68)
Female	223	776 (98)
<b>Race/ethnicity</b>		
Black	197	613 (57)
White	130	739 (109)
Hispanic	84	931 (142)
Other	32	573 (55)
<b>Chronic health condition</b>		
Yes	123	892 (126)
No	324	665 (63)
<b>Emotional problems</b>		
Yes	143	838 (108)
No	304	670 (77)

Note: All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance.

This 17% must be interpreted cautiously. As explained above, it is possible that reunification may still be sought and achieved for some of these children after 5 and 6 years, and the rate of reunification can be calculated only when a disposition has been reached for all children in this group. This is particularly true when placement has occurred at different time points for these children (fairly recently for some children).

Nevertheless, the fact that 17% reunified over 5 to 6 years provides us with a rough idea of the role of reunification among cases of infants involved in maltreatment investigation. It suggests that there was only a fairly small probability of reunification once children maltreated as infants were removed from the home. Adoption (43% of those removed from the home) and kinship care (31% of those removed from the home) were much more frequent outcomes once children were removed.

### **Termination of Parental Rights**

When parents severely abuse or neglect a child, abandon the child, or put the safety and well-being of the child at risk because of criminal behavior, substance abuse or dependence, mental illness or other problems, CWS can petition courts for termination of parental rights (TPR). This is generally a necessary step to free children for adoption. Exhibit 3-5 reports the percentage of children in out-of-home placement who experienced TPR and how that varied by characteristics of the child and maltreatment. Because TPR is almost always limited to children who are removed, we limited the analysis to those who had an out-of-home placement. It should be noted that data was missing on termination of parent rights in cases in which there was no caseworker interview. This includes 26% of cases in which adoption was finalized. Thus, given that TPR routinely precedes adoption, data is missing on TPR on finalized adoptions and in other cases in which TPR has taken place but the case was closed and as a consequence there was no active file with CWS, neither a caseworker's interview to confirm TPR.

Parental rights were terminated in over one third of cases that had at least one placement out of home. Over half of children with a chronic medical condition experienced TPR. On the other hand, children with a cognitive disability were less likely than others to experience TPR, though the small cell size meant that the significance of this difference was .0547, just above the  $\alpha < .05$ . No other variables examined had a meaningful relationship to TPR.

### **Adoption**

Slightly fewer than one fifth of children were adopted by age 5 to 6 (Exhibit 3-5). Most of those who were adopted had been placed outside the home (78%), but 22% were adopted from the homes they were in at baseline without having been placed during the study period (SE = 4.6). Although several categories in Exhibit 3-5 have percentages adopted that seem high or low; numbers in these groups are small and standard errors relatively large for many categories. There were only two statistically significant predictors of adoption. Children with a chronic health condition were nearly twice as likely to be adopted as those without a chronic health condition. Children with a cognitive disability, on the other hand, were about one third *less* likely to be adopted than children without a cognitive disability.

**Exhibit 3-5**  
**Termination of Parental Rights (TPR) and Adoption**  
**Infant Population at Wave 5**

	TPR		Adopted <sup>1</sup>	
	N	% (SE)	N	% (SE)
<b>Total</b>	780	19.6 (2.4)	962	17.0 (1.9)
<b>Sex</b>		*		*
Male	401	14.6 (2.2)	492	13.7 (2.1)
Female	379	25.3 (3.9)	470	20.4 (2.8)
<b>Race/ethnicity</b>				
Black	322	20.8 (3.6)	378	18.7 (3.1)
White	255	14.0 (2.7)	330	12.5 (2.6)
Hispanic	149	28.3 (6.3)	187	15.7 (3.9)
Other	49	17.9 (6.2)	62	43.7 (10.0)
<b>Chronic health condition</b>		**		**
Yes	182	32.9 (5.6)	221	25.3 (3.8)
No	598	16.0 (2.3)	740	14.9 (2.1)
<b>Physical disability</b>				
Yes	53	25.0 (7.7)	63	30.0 (7.9)
No	727	19.3 (2.4)	899	16.2 (1.8)
<b>Cognitive disability</b>		*		**
Yes	91	9.8 (3.1)	109	7.1 (2.1)
No	657	21.3 (2.6)	811	19.3 (2.3)
<b>Emotional/behavioral problems</b>				
Yes	247	21.4 (4.3)	294	16.6 (3.2)
No	533	18.8 (2.7)	667	17.2 (2.1)
<b>Severity of neglect</b>		***		***
Mild	91	6.0 (2.9) <sup>a</sup>	135	3.9 (1.7) <sup>a</sup>
Moderate	73	16.1 (5.9)	86	11.3 (4.2) <sup>a,b</sup>
Serious	69	19.1 (5.8) <sup>2,b</sup>	77	20.3 (5.5) <sup>3,b,c</sup>
Severe	67	31.0 (7.3) <sup>2,b</sup>	70	31.4 (8.5) <sup>3,c</sup>
Grave	70	31.4 (7.8) <sup>2,b</sup>	83	34.9 (7.1) <sup>3,c</sup>

*Note:* All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> Defined as in an adoptive home at the 5- to 6-year follow-up.

<sup>2</sup> Caregivers of children who suffered serious, severe, or grave neglect were more likely to have their parental rights terminated than caregivers whose children suffered mild neglect.

<sup>3</sup> Children who suffered more severe neglect were more likely to be adopted than children who suffered less severe neglect.

Typically, termination of parental rights precedes adoption unless there is no caregiver with parental rights. A large majority (85.3%) of children whose parents had their rights terminated were adopted before the 5- to 6-year follow-up, but this left almost 15% of children with TPR not adopted. There were no significant differences on this percentage by demographic variables (sex, race/ethnicity), by severity of abuse, or by current disabilities or chronic health condition.

If children cannot be reunified, it is important for their attachment to a permanent home and for their well-being generally to complete an adoption as soon as possible. The Child and Family Service Review process has a standard that 32% of children should spend no more than 2 years in placement before being adopted.

Nevertheless, adoption can take considerable time. There are more children available for adoption than can be adopted, and it may take considerable time to find adoptive parents. It takes time for parents and children to prepare for adoption through preplacement visits. Even after children move in, considerable time can pass before the adoption works its way through the court system and the adoption is finalized. Moreover, systems issues can lead to delays, as the 2002 Child and Family Service Reviews of the states found (U.S. Department of Health and Human Services, 2003b).

The average time between first placement and adoption was 848 days (more than 2½ years; Exhibit 3-6). This is somewhat inflated by outliers, but the median (729) is still substantial. Among this group of children, infants at the time they were involved with CWS, a much higher percentage were adopted within 2 years of placement (49%) than the Child and Family Service Review standard. Race/ethnicity was the only significant predictor of either time in placement or the percentage of children in placement for more than 2 years before adoption. Hispanic children had a significantly longer wait than other groups, though this result was based on only 23 Hispanic adopted children.

**Exhibit 3-6**  
**Time from First Placement to Adoption Finalization (in Days)**  
**Infant Population at Wave 5**

	<i>N</i>	<b>Mean (SE)</b>
<b>Total</b>	172	848 (65)
<b>Sex</b>		
Male	80	830 (69)
Female	92	863 (90)
<b>Race/ethnicity</b>		*
Black	73	699 (57) <sup>a</sup>
White	60	835 (59) <sup>a</sup>
Hispanic	23	1,229 (147) <sup>b</sup>
Other	13	638 (126) <sup>a</sup>
<b>Chronic health condition</b>		
Yes	67	944 (111)
No	105	777 (46)
<b>Physical disability</b>		
Yes	19	748 (105)
No	153	861 (168)
<b>Emotional problems</b>		
Yes	50	927 (84)
No	122	817 (84)

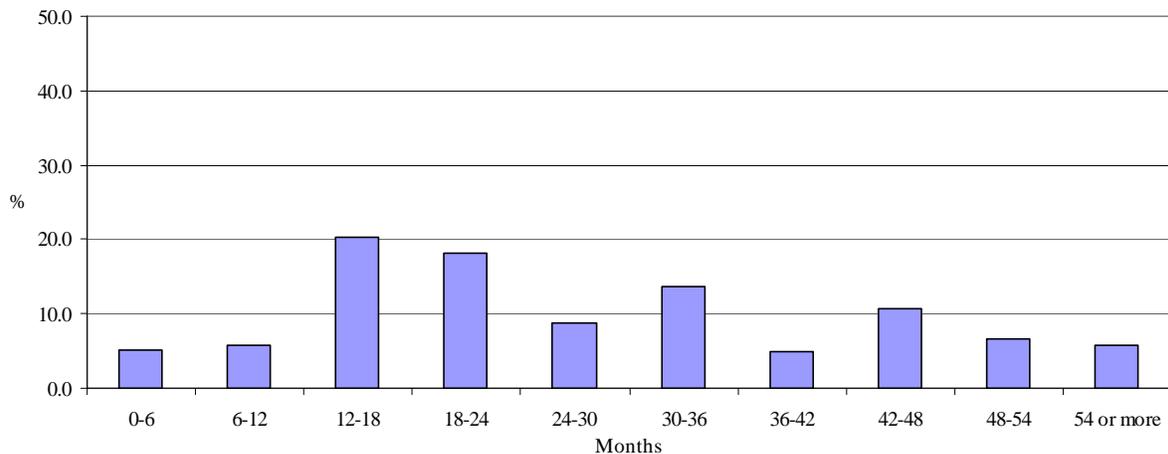
*Note:* Time was counted from the first placement that was not followed by a reunification. Cell sizes for cognitive disability were too small to report means. All analyses are on weighted data; *N*s are unweighted. Statistical significance is noted by asterisks in the column above the statistically significant result (*\*p* < .05). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

Exhibit 3-7 shows the distribution of time between first placement and adoption in months. The range in time span was considerable, from just over one month to about 70 months. A plurality of cases took between 12 and 24 months, but there were meaningful proportions of cases for every interval of duration beyond including 54 months or more.

In many cases, much of the time before adoption took place after parental rights were terminated. The time between TPR and adoption averaged 403 days. This is somewhat skewed by a small number of very high values, but the median (302 days) is still substantial. This time span ranged from 0 days (two cases in which adoption took place on the same day as TPR) to 1,218 days (about 3 years and 4 months). Time from TPR to adoption did not vary by sex, race/ethnicity, chronic health condition, or presence of emotional problems (Exhibit 3-8).

Though this time span appears long, we do not know to what extent this reflects waiting to identify adoptive parents versus waiting for a preadoptive placement to lead officially to adoption. Child welfare agencies frequently place children in preadoptive families, preparing for the possibility of adoption by that family if efforts at reunification fail (Pecora, Whittaker, Maluccio, Barth, & Plotnick, 2000). The effect of waiting for adoption to be official may be less stressful than actually waiting for adoptive parents.

**Exhibit 3-7**  
**Time from First Placement to Adoption Finalization**  
**Infant Population at Wave 5**



*Note: N = 172.*

**Exhibit 3-8**  
**Time from Termination of Parental Rights to Adoption (in Days)**  
**Infant Population at Wave 5**

	<i>N</i>	Mean (SE)
<b>Total</b>	155	403 (32)
<b>Sex</b>		
Male	76	429 (38)
Female	79	384 (53)
<b>Race/ethnicity</b>		
Black	58	378 (53)
White	53	415 (40)
Hispanic	33	424 (99)
Other	8	—
<b>Chronic health condition</b>		
Yes	54	455 (70)
No	101	373 (29)
<b>Emotional problems</b>		
Yes	49	423 (35)
No	106	394 (44)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Cells are left empty when sample sizes are too small to allow for meaningful estimates ( $N < 9$ ). Cell sizes were too small to report means for cognitive and physical disabilities.

### Conclusion

At each time point, a solid majority of these children involved in investigations as infants were in home, and placement and permanency issues did not apply to them. Still, about one third of these children were placed outside the home. Together these data tell a story about them, a story of disruption and difficulty followed by an evolution over a long time period to greater permanency. The disruption was considerable early on: The vast majority of those who were placed entered placement as infants, and a majority of those placed had two or even three or more placements. As other research has shown, Black, Hispanic, and “Other” children were significantly more likely to be placed than White children; this finding, which has been reported previously for all children involved with CWS as a whole, is also true specifically of infants involved with CWS. As other experts have noted (U.S. Department of Health and Human Services, 2003[a,b]), this disparity points to the need for special preventive measures to be offered to families and to Black, Hispanic, and “Other” communities both to prevent child maltreatment and to be able to use less intrusive and restrictive methods for responding to it. Some of this effort needs to focus specifically on infants.

As has been shown before, progress toward permanency is slow, although there are hopeful signs for these children. On average, children who were placed spent nearly 2 years of their short lives in out-of-home placement. From that point on results were more encouraging. The percentage of children in foster care decreased substantially to a very small percentage by age 5 to 6, paralleled by a substantial increase in the percentage of children adopted. Thus there is evidence of substantially improved permanency by ages 5 and 6. On average, more than a year

passed between termination of parental rights and adoption, although for many of these children at least some of this time elapsed while the children were with the caregivers who adopted them.

These results suggest some success for CWS in achieving permanency for these children, who were infants when first involved in the CWS system. However, given the high placement rate, prevention of placement remains an important goal, and given the number of children with 2 or 3 or more placements, stability of placements is still an issue. The time spans before permanency, though longer than ideal, actually exceeded the standards set by the CFSR process.



## CHAPTER 4 CHILD AND FAMILY SERVICES

### Introduction

The preceding chapters have provided evidence that 5- to 6-year-old children reported for maltreatment as infants often experience social and behavioral problems, cognitive deficits, chronic health problems, or physical disabilities. These conditions and their functional impairments are likely indicators of the need for health, mental health, or special education services. Previous research has indicated that children in the child welfare system (CWS), particularly those placed in out-of-home care, do successfully access a diverse array of services, occasionally even more than children in the general population (e.g., Halfon, Berkowitz, & Klee, 1992; Jonson-Reid, Drake, Kim, Porterfield, & Han, 2004). Given the high levels of need among children in the CWS, however, much of this research also indicates that their unmet need for services remains high (e.g., Burns et al., 2004). Ensuring that these children receive adequate and appropriate services is critical to their future positive development.

Services to strengthen and support children's caregivers and families are also important. Many families of children in the CWS confront a range of problems such as parenting stress, lack of social support, intimate-partner violence, parental substance abuse, or mental health problems, which makes it difficult for them to parent effectively. In this context, providing services to strengthen and support caregivers and families may help support children's development and prevent future child maltreatment.

The purpose of this chapter is to examine what services children, caregivers, and families received, which children and caregivers were more likely to receive different services, and whether service utilization was sufficient to meet needs. Analyses examine the following types of services:

- Children's preventive and urgent health care services,
- Children's outpatient and inpatient mental health services,
- Children's special education services,
- Family CWS services, including family-based and parenting support services,
- Services to address basic needs like shelter and child care, and
- Caregiver mental health and substance abuse services.

Data on service needs and utilization are derived from caseworker, caregiver, and teacher interviews. Which source was used for each service depended upon data availability and which reporter was best positioned to provide information on each type of service. For instance, information on use of CWS services relied on caseworker reports, information regarding special education services relied on teacher reports, and information on use of children's health and mental health services relied on caregiver reports.

For most services, we examined the degree to which need for a particular service matched actual service receipt. We were also interested in which types of caregivers, families, and children were more likely to receive different kinds of services. Consequently, we analyzed findings in relation to a child's sex, race, and placement setting at the 5- to 6-year follow-up. We also examined the impact of other family characteristics on service delivery when they were deemed conceptually relevant. For instance, we examined the impact of the type of child maltreatment on utilization rates of CWS services and the impact of poverty on basic family needs assistance.

It was beyond the scope of this report to examine the impact of caregiver or child welfare services on child outcomes such as placement or well-being. It was also outside the scope of this report to compare the relative influence of various predictors of service utilization rates and patterns. This chapter is primarily intended to provide a descriptive picture of the services received by children who are now 5 to 6 years of age and their families. The chapter is divided into two sections: services to children and services to families or caregivers. Key results for children's services are summarized below.

### **Key Results for Children's Services**

- Most children have received some preventive health service since their last NSCAW interview (30 months on average). Eighty-eight percent have had a well-child checkup in that time period, and nearly all (99%) are reported up to date on immunizations. The proportions of children having received dental care, vision testing, or hearing testing, however, are somewhat lower (70% to 77%).
- Children with chronic health conditions are more likely to receive well-child checkups and to have a consistent health care service location than children without such conditions.
- Children living at home with biological parents are less likely than children living in other settings (e.g., adoptive parents) to have had a recent well-child checkup and are more likely to have used emergency room or urgent care services.
- An estimated 16.7% of children were reported to have received outpatient mental health services since their last interview, most often specialty mental health services.
- Children currently placed out of home were almost twice as likely to use any outpatient mental health service or specialty mental health service as children living in other settings.
- Children whose assessments indicated need for mental health services were more likely to receive them; however, approximately 65% of children in need of mental health services still received none.
- An estimated 22.6% of all children were reported to have an active Individualized Education Plan (IEP) currently. Most of these children were classified as speech impaired, developmentally delayed, or learning disabled.

- Approximately two thirds of children with cognitive disabilities had an IEP, and only one third of children with emotional problems had an IEP. Thus many children potentially in need of special education services were not receiving them.

### **Children’s Preventive and Urgent Health Services**

Caregivers reported that most children had received preventive and routine health services since the last interview (Exhibit 4-1).<sup>1</sup> The time since the last interview averages 30 months, with a range from 21 to 44 months. Almost all children (98.5%) were reported to be up to date with their immunizations, and a sizable majority had recently participated in a well-child checkup (88.2%). The high rate of immunizations is particularly notable. At baseline, children aged 0 to 2 years were significantly less likely to be up to date on their immunizations than older children, but almost all of the children who were infants at baseline were up to date with their immunizations by 5 and 6 years of age. The increase is likely because, by the time of the 5- to 6-year follow-up, nearly all of these children had started school, and states require that children be up-to-date on their immunizations to enroll in kindergarten. During the time since the last interview, most children (70% to 77%) also received dental care, vision testing, or hearing testing. Almost all (95.7%) children were reported to have at least one place their child “usually goes when sick or needs advice.” This parallels national findings from the NHIS, indicating that approximately 95% of children have a usual place of health care (Bloom & Dey, 2006). Slightly fewer than half (46%) of children had received all of these preventive health care services (dental care, vision and hearing testing, well-child checkup, and immunizations) since the last interview.

The proportion of children receiving these preventive health services did not vary according to the child’s sex. Race and the child’s current placement setting, however, were associated with access to health services. Black children were significantly more likely than children of other races to receive all of the preventive health services, and were more likely to have recently received a well-child checkup. When compared to children living at home with either adoptive parents or other in-home caregivers and children living out of home, children living at home with their biological parents were the *least* likely to have recently received a well-child checkup or recent vision testing. Previous reports have documented greater health care utilization and medical care costs for children in foster care than among other groups of children receiving medical assistance coverage (e.g., Halfon, Berkowitz, & Klee, 1992).

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<sup>1</sup> Unless noted otherwise, caregivers were asked to report on their or their child’s service utilization since last contact with NSCAW (or last interview). Service utilization reports do not represent lifetime utilization; they only represent utilization during the specific time period. For 92% of the children, this represented the time between Wave 4 and Wave 5 data collection periods (a recall period of 12 to 24 months). Eight percent of the children at Wave 5 did not have service utilization data from Wave 4. So, this small portion reported on service utilization over the course of more than 2 years. It should be noted that longer reporting periods may increase the opportunity for caregiver recall bias.

**Exhibit 4-1**  
**Preventive and Routine Child Health Services**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	All Preventive Services <sup>1</sup> % (SE)	Reported To Have a Usual Health Care Location % (SE)	Dental Care Since Last Interview % (SE)	Vision Testing Since Last Interview % (SE)	Hearing Testing Since Last Interview % (SE)	Well-Child Checkup Since Last Interview % (SE)	Up-to-date Immunizations % (SE)
<b>Total</b>	941	46.4 (2.9)	95.7 (1.2)	70.2 (2.4)	76.9 (2.6)	77.0 (2.6)	88.2 (1.7)	98.5 (0.4)
<b>Sex</b>								
Male	480	43.6 (4.1)	95.7 (1.8)	70.0 (3.8)	73.7 (4.2)	75.1 (4.0)	86.8 (2.5)	98.7 (0.5)
Female	461	49.2 (3.4)	95.8 (1.6)	70.4 (2.6)	80.1 (2.9)	78.9 (2.9)	89.5 (2.4)	98.3 (0.7)
<b>Race/ethnicity</b>							*	
Black	368	56.9 (5.0) <sup>a</sup>	95.8 (1.0)	77.2 (3.6)	81.3 (4.6)	81.8 (4.0)	93.9 (1.7) <sup>3,a</sup>	98.1 (0.7)
White	323	42.6 (3.5) <sup>2,b</sup>	97.2 (1.6)	65.9 (3.4)	75.0 (3.8)	74.4 (3.5)	84.6 (3.1) <sup>b</sup>	98.1 (0.8)
Hispanic	184	40.3 (5.7) <sup>2,b</sup>	95.0 (2.2)	71.0 (5.3)	73.3 (5.9)	75.3 (5.7)	88.8 (3.7)	99.5 (0.5)
Other	61*	41.0 (8.6)	85.4 (11.0)	61.2 (9.1)	81.2 (5.1)	77.1 (7.9)	81.5 (6.5)	99.4 (0.4)
<b>Child setting</b>					*		**	
In home, biological parents	489	42.3 (3.3)	95.0 (1.4)	67.8 (3.2)	74.2 (4.1) <sup>a</sup>	76.5 (3.5)	84.0 (2.7) <sup>a</sup>	98.7 (0.5)
In home, adoptive parents	219	54.6 (6.1)	95.0 (4.2)	74.1 (5.4)	83.3 (3.7) <sup>a</sup>	79.4 (4.6)	94.0 (2.3) <sup>5,b</sup>	99.8 (0.2)
In home, kin, or other caregiver	154	52.9 (5.8)	98.0 (1.0)	68.2 (5.9)	79.4 (5.0) <sup>a</sup>	82.1 (4.2)	96.7 (1.5) <sup>5,b</sup>	98.5 (0.9)
Out of home	39	50.0 (13.7)	97.2 (2.7)	82.8 (6.0)	96.0 (3.3) <sup>4,b</sup>	77.9 (11.7)	90.4 (5.7)	96.1 (4.0)
<b>Chronic health condition</b>			**				**	
Yes	218	42.7 (5.6)	99.4 (1.4)	66.0 (5.7)	75.2 (5.2)	75.1 (5.4)	95.1 (2.0)	98.2 (1.0)
No	723	47.4 (3.3)	94.7 (1.3)	71.3 (2.8)	77.3 (2.6)	77.5 (2.7)	86.4 (2.1)	98.6 (0.5)

*Note:* All preventive and routine health care is caregiver-reported since last interview. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

<sup>1</sup> Includes having had up-to-date immunizations and recent dental, vision, hearing, and well-child checkups.

<sup>2</sup> Black children were more likely to receive all preventive services since the last interview than White or Hispanic children.

<sup>3</sup> Black children were more likely to have a well-child check-up since the last interview than White children.

<sup>4</sup> Children out of home were more likely to have their vision tested since the last interview than children living in home with biological parents, children living with adoptive parents, or children living with kin.

<sup>5</sup> Children living with adoptive parents and children living with kin or other caregiver were more likely to have a well-child check-up since the last interview than children living with biological parents.

Consistent with these findings, children living out of home and those adopted were more likely than children living at-home with biological parents or other caregivers to access health care services. It should be noted that only 1% of children in out-of-home placement or living at home with biological parents or some other caregiver had no health insurance, compared to 4% of children living at home with biological parents (not shown). Thus children living at home with biological parents may have slightly greater financial barriers to health service utilization than those in other groups.

As reported earlier, approximately 20% of children had a serious chronic health condition. Access to preventive and routine child health services would be particularly important for this population of children. When compared to children without chronic health conditions, children with chronic health conditions were significantly more likely to have recently received a well-child checkup (95.1%) and to have reported having at least one place they usually go when sick or need health care advice (99.4%).

Caregivers also reported on children's use of urgent care services for illnesses or injuries since the last interview (Exhibit 4-2). Slightly more than one quarter of these children were reported to have used emergency room (ER) or urgent care services for illness or an injury, accident, or poisoning since the last interview. Overnight hospital admissions for illnesses and injuries were much less common (4%). Six percent of caregivers reported contact with a physician or nurse for serious accidents, injuries, or poisonings since the last interview. It should be noted that these may be the same families who reported having used emergency-room care. Nationally, it is estimated that 10% of children aged 5 to 6 are treated for serious accidents, injuries, or poisonings in any given year (National Center for Injury Prevention and Control, n.d.).

Although children's sex, race, and chronic health condition status had no significant association with the likelihood of receiving urgent care health services, the child's current living situation did have a significant association. Children living at home with their biological parents were more likely to have had an overnight hospital admission for an illness or injury and more likely to have received care from a doctor or nurse for serious injuries, accidents, or poisonings than children living out of home or children living in home with either adoptive parents or nonbiological parents.

In summary, children aged 5 to 6 years old who entered the CWS in their infancy have relatively good access to preventive health services and access that is comparable to other children in the United States. Children living in home with biological parents had less access to preventive health services and greater use of urgent care services than those living in adoptive homes or in out-of-home placements. For children with a history of maltreatment, active involvement with the CWS may increase access to routine preventive health services and decrease reliance on urgent health care services.

**Exhibit 4-2**  
**Child Urgent Medical Care**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	Emergency Room or Urgent Care for Illness or Injury Since Last Interview % (SE)	Hospital Admission for Illness or Injury Since Last Interview % (SE)	Care from Doctor or Nurse for Serious Injury, Accident, or Poisoning Since Last Interview % (SE)
<b>Total</b>	959	25.8 (2.2)	4.1 (0.9)	5.5 (1.0)
<b>Sex</b>				
Male	489	26.5 (3.4)	3.7 (1.2)	7.7 (1.9)
Female	470	25.1 (3.1)	4.6 (1.3)	3.3 (1.0)
<b>Race/ethnicity</b>				
Black	378	21.8 (3.4)	4.0 (1.3)	5.3 (1.5)
White	328	31.5 (4.2)	4.3 (1.3)	6.7 (1.9)
Hispanic	187	19.6 (5.3)	3.3 (2.1)	2.3 (0.9)
Other	62	26.3 (8.2)	6.7 (4.6)	9.6 (5.1)
<b>Child setting</b>				*
In home, biological parents	493	26.9 (3.3)	5.3 (1.4) <sup>1,a</sup>	6.0 (1.6) <sup>a</sup>
In home, adoptive parents	224	21.0 (4.0)	2.1 (0.8) <sup>b</sup>	4.5 (1.1) <sup>a</sup>
In home, kin, or other caregiver	159	24.1 (4.9)	0.6 (0.3) <sup>b</sup>	4.4 (2.0) <sup>a</sup>
Out of home	42	26.4 (12.0)	0.0 (0.0) <sup>1,c</sup>	0.1 (0.1) <sup>2,b</sup>
<b>Chronic health condition</b>				
Yes	221	34.8 (5.0)	7.8 (2.6)	5.3 (1.5)
No	738	23.5 (2.6)	3.2 (0.9)	5.6 (1.2)

*Note:* All urgent medical care is caregiver-reported since the time of last interview. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

<sup>1</sup> Children out of home did not have any hospital admission for illness or injury since the last interview, in contrast to children living in home with biological parents, children living with adoptive parents, or children living with kin. Children living with biological parents were more likely to have a hospital admission for illness or injuries than children living with adoptive parents, with kin, or out of home.

<sup>2</sup> Children out of home were less likely to need care from a doctor or nurse for a serious injury, accident, or poisoning since the last interview than children living in home with biological parents, children living with adoptive parents, or children living with kin.

## Children’s Mental Health Services

Caregivers were asked about whether their child had received help for an emotional, behavioral, learning, or attention problem since the last interview. The questions were framed so that caregivers could respond positively for all service providers or service settings that were applicable. Consequently, children could be reported to have received services from more than one source. Exhibit 4-3 provides reported rates of mental health service use for outpatient mental health services, specialty outpatient mental health services, treatment from a family doctor for a mental health problem, school-based mental health services and use of psychotropic medications. School-based mental health services were analyzed only for children six and older, because few younger children would have access to these services. Outpatient mental health services included any services received from a specialty mental health provider, family doctor, or school professional for an emotional or behavioral problem. Specialty outpatient services referred to services received from a private mental health clinician (i.e., psychiatrist, psychologist, social worker, or psychiatric nurse not working within a community health center), a community mental health center, therapeutic nursery at a mental health or community health center (for 5-year-olds only), or via in-home counseling or crisis services. Caregivers were also asked whether children had received inpatient psychiatric services, which represented all restrictive forms of mental health care, including hospital or emergency room care for mental health problems, residential or group home treatment, emergency shelter, or day treatment. Because only a small number of children were reported to have received inpatient psychiatric services since the time of the last interview (0.8%, SE = .4, unweighted  $N = 14$ ), these services are not included in Exhibit 5-3.<sup>2</sup>

Overall, 16.7% of children were reported to have received outpatient mental health services since their last interview (Exhibit 4-3). A total of 12% received specialty outpatient mental health services. The most commonly utilized specialty outpatient service was “help received from a private mental health professional” (7.5%, not shown). Seven percent of children were reported to have been in contact with their family physician about a mental health problem, and 6.4% were reported to be currently using psychotropic medications. Among 6-year-olds, 10.8% reported having used school-based mental health services.

The most recent national estimates indicate that approximately 2% to 3% of children 3 to 5 years of age and 6% to 9% of children 6 to 17 years of age reported (or were reported) having used mental health services within a 12-month period (Kataoka et al., 2002). Previous analyses have shown that, when compared to all U.S. children, rates of mental health service utilization are higher within a child welfare population. For instance, Burns et al. (2004) found that approximately 7% of 2- to 5-year-olds and 16% of 6- to 10-year-olds at the baseline NSCAW interview had used at least one mental health service over the course of a year. Rates of mental

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<sup>2</sup> For derived categories of service utilization (e.g., “outpatient service use”), an individual was considered to have utilized services in that category if they positively endorsed at least one service question item among those included in the overarching category (even when data was missing in other questions). If an individual validly answered “no” to one or more service questions in an overarching category but had missing responses for one or more other questions in the category, the person was coded as having missing data for the category (rather than concluding that services were not utilized).

**Exhibit 4-3**  
**Caregiver Report of Utilization of Child Mental Health Services**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	Outpatient Mental Health Services <sup>1</sup> % (SE)	Specialty Outpatient Services % (SE)	Family Doctor % (SE)	School-Based Services <sup>2</sup> % (SE)	Current Use of Psychotropic Medication % (SE)
<b>Total</b>	954 <sup>3</sup>	16.7 (2.1)	12.0 (1.9)	7.0 (1.3)	10.8 (3.2)	6.4 (1.1)
<b>Sex</b>						
Male	489	19.6 (3.3)	13.7 (2.3)	8.8 (2.0)	14.2 (5.8)	8.2 (1.7)
Female	470	14.1 (2.9)	10.5 (2.7)	5.2 (1.5)	7.3 (3.1)	4.5 (1.3)
<b>Race/ethnicity</b>				**		
Black	376	16.5 (3.8)	10.6 (2.7)	5.5 (1.9)	23.8 (9.2) <sup>4</sup>	7.4 (1.9)
White	329	16.8 (3.0)	11.0 (2.5)	10.6 (2.5) <sup>a</sup>	9.5 (4.8)	5.8 (1.3)
Hispanic	187	19.2 (5.4)	18.3 (5.3)	1.6 (0.7) <sup>b</sup>	1.0 (0.7)	7.0 (2.8)
Other	62	12.2 (4.4)	6.1 (3.4)	7.9 (3.6)	1.4 (1.5)	3.0 (1.6)
<b>Child setting</b>			*			**
In home, biological parents	493	10.9 (2.3) <sup>a</sup>	7.5 (2.0) <sup>a</sup>	5.9 (1.8)	10.5 (3.8)	3.1 (1.0) <sup>a</sup>
In home, adoptive parents	224	22.4 (4.1) <sup>5,b</sup>	15.2 (3.7) <sup>a</sup>	10.2 (2.6)	7.5 (4.8)	12.6 (3.3) <sup>6,b</sup>
In home, kin, or other caregiver	158	16.6 (4.8)	11.7 (4.3) <sup>a</sup>	7.4 (2.7)	6.5 (4.2)	10.5 (3.6)
Out of home	43	42.6 (13.4) <sup>5,c</sup>	41.1 (13.2) <sup>7,b</sup>	7.3 (4.2)	1.2 (1.1)	9.3 (4.1)
<b>Child in need of mental health services<sup>8</sup></b>	*		***	***	*	***
Yes	293	34.9 (4.9)	26.6 (4.9)	15.7 (3.3)	22.7 (7.2)	13.4 (2.6)
No	668	6.8 (1.4)	6.1 (1.1)	3.5 (0.8)	5.5 (3.2)	3.5 (0.9)

*Note:* Mental health services were reported by caregivers and measured through an adapted version of the Child and Adolescent Services Assessment (CASA; see Appendix A). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ). Cells are left empty when sample sizes are too small to allow for meaningful estimates ( $N < 9$ ). Caregiver report of mental health service utilization represents services received since last interview.

<sup>1</sup> Any outpatient mental health service included use of specialty outpatient (e.g., professional help from a psychologist or social worker, in-home counseling, community-based mental health center), school-based mental health services (e.g., services from a school guidance counselor, social worker, or psychologist), or mental health services performed by a family doctor.

<sup>2</sup> Only children 6 years or older were asked about school-based services; consequently, the sample size for these items are smaller ( $N = 261$ ).

<sup>3</sup> The total sample size represents all service categories except school-based services (which included only 261 children).

<sup>4</sup> Pearson  $\chi^2$  test not conducted because of small expected frequencies.

<sup>5</sup> Children living with adoptive parents were more likely to receive outpatient mental health services than children living with biological parents, while children living out of home were more likely to receive outpatient mental health services than children living with biological parents, and adoptive parents.

<sup>6</sup> Children living with adoptive parents were more likely to use psychotropic medication than children living with biological parents.

<sup>7</sup> Children living out of home were more likely to receive specialty outpatient mental health services than children living with biological parents, adoptive parents, or kin.

<sup>8</sup> Children were defined as “in need of mental health services” if either a caregiver or teacher reported an elevated score (> 1.5 standard deviations above the mean) on the caregiver-completed Child Behavior Checklist or teacher-completed Teacher Report Form Total Problems, Internalizing, or Externalizing subscales.

health service utilization remain comparatively high among children who were infants at baseline and followed up at age 5 to 6. Previous research has suggested that CWS may act as a gateway to mental health service access. However, the impact of CWS contact on mental health service access is not as relevant here where, 5 years postbaseline, very few children are still receiving some type of CWS service (16%). Consequently, it is striking to find comparable mental health service utilization rates here to those described within previous NSCAW research using baseline interview data for similarly aged children. Mental health service utilization rates for these 5- to 6-year-olds cannot simply be a function of CWS' current involvement in their lives.

Children's sex was not associated with their utilization of any type of mental health services. With one exception, race was not associated with mental health service utilization patterns. Race was associated only with the receipt of mental health services from a family doctor: White children were significantly more likely than Hispanic children to have consulted with their primary care physician about a mental health problem. The absence of racial differences in most mental health service receipt for these children is contrary to research findings from the general population. Nationally, the research literature demonstrates substantial disparities in children's mental health service utilization by race (e.g., Garland, Lau, Yeh, McCabe, Hough et al., 2005).

The child's current home setting was associated with utilization of most types of mental health services. Children currently placed out of home were anywhere from almost twice as likely to more than five times as likely to use outpatient mental health services or specialty outpatient mental health services as children living at home (Exhibit 4-3). Children living at home with adoptive parents were more than twice as likely as children living at home with their biological parents to use outpatient mental health services and four times as likely to be currently taking a psychotropic medication. Generally, children who have ever lived in out-of-home care or who are currently living outside the home appear more likely to use mental health services. This finding is consistent with similar findings in the literature (e.g., Burns et al., 2004; Hurlburt, Leslie, Landsverk, Barth, Burns, Gibbons, Slymen, & Zhang, 2004). These findings also support previously drawn conclusions that the CWS often acts as a gateway into mental health services for children within the CWS (e.g., Leslie, Hurlburt, James, Landsverk, Slymen, & Zhang, 2005).

As would be expected, children's use of mental health services was significantly higher when caregivers or teachers reported that children had behavior problems (operationalized as having an elevated score on the Child Behavior Checklist or Teacher Report Form—see Appendix A). Children reported to have behavior problems were four to five times more likely to have received each type of mental health service than children not reported to have behavior problems. Nonetheless, rates of unmet need for mental health services were high. For instance, the fact that 35% of children reported to have behavior problems received outpatient mental health services means that 65% did not receive these services. Despite the relatively high level of unmet need for mental health services among these children, one study suggests that the unmet need for all children within the general population is even higher: nearly 80% (Kataoka et al., 2002). So, while rates of unmet mental health needs remain high in this target population, involvement within the CWS does appear to increase children's access to mental health services.

## Children's Special Education Services

NSCAW collected data from caregivers on children's need for and receipt of special education services in the time period since the 36-month follow-up interview. For this cohort of children, the time since the 36-month interview represents the period of first school entry (as the children turn 5 to 6 years of age). Consequently, for children who were infants at baseline, the 5- to 6-year follow-up represents the first opportunity to identify school-related special education needs. Caregivers were asked whether they had been told that the child had a learning/developmental problem and, if so, whether the child had an Individualized Education Plan (or IEP) or had received special education services. Nationwide eligibility for special education placement is determined through a comprehensive assessment of the child's abilities, which also forms the basis for the type and level of service a child receives. Children may be diagnosed as having health, cognitive, or emotional challenges that must be addressed within the educational setting.

Approximately 20% of all caregivers reported being told by an education professional since the last interview that their child had a learning problem, special need, or developmental disability (for more specific information see Chapter 3). Of these, 65% were told that these problems would merit special education services. Almost all (95%) caregivers who had been told their children needed special education services reported receiving them.

As shown in Exhibit 4-4, according to either caregivers or teachers,<sup>3</sup> 22.6% of all children were reported to currently have an active IEP. This rate is comparable to rates of special education services for all children within NSCAW at both baseline and 18-month follow-up. The rate of 22.6% is much higher than proportions of children reported to be in federally supported special education programs nationally: 5% of all 3- to 5-year-olds and 9% of all 6- to 21-year-olds (U.S. Department of Education, 2005).

Exhibit 4-4 also shows the percentages of children with active IEPs by sex, race, current placement setting, and need. Boys were more likely to have received an IEP than girls. This is consistent with other studies showing greater representation of boys in special education (Hodapp & Fidler, 1999). Contrary to national research which tends to show greater numbers of children of color receiving special education services (e.g., Artiles, Harry, Reschly, & Chinn, 2002; Hosp & Reschly, 2003), there was no association in this population between child race/ethnicity and IEP receipt. Also, IEP receipt was not related to child setting at Wave 5.

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<sup>3</sup> Teacher data were collected for 82.9% of the infant follow-up cases at this wave. Where teacher report data were missing, the caregiver report was used to positively identify IEP receipt. If teacher data were missing and the caregiver report was negative, a case was coded as missing (rather than assume no IEP existed).

**Exhibit 4-4**  
**Special Education Services**  
**Infant Population at Wave 5**

	<i>N</i>	Child Has an Active IEP <sup>1</sup> % (SE)
<b>Total</b>	676	22.6 (2.8)
<b>Sex</b>		*
Male	353	28.4 (3.6)
Female	323	17.0 (3.6)
<b>Race/ethnicity</b>		
Black	273	20.5 (4.2)
White	234	23.1 (4.7)
Hispanic	119	25.4 (6.3)
Other	46	18.5 (8.4)
<b>Child setting</b>		
In home, biological parents	336	15.8 (3.2)
In home, adoptive parents	163	27.3 (5.3)
In home, kin, or other caregiver	125	32.5 (8.1)
Out of home	34	18.4 (8.0)
<b>Child in need of special education services<sup>2</sup></b>		***
Yes	349	37.2 (5.0)
No	331	8.4 (2.2)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\*\* $p < .001$ ). IEP = Individualized Education Plan.

<sup>1</sup> Active IEP was determined according to either teacher or caregiver report.

<sup>2</sup> “Need for special education services” was determined by a child’s risk of behavior problems, cognitive/learning delays, or functional impairment, as described in Appendix A.

As expected, an active IEP was significantly more common when children were determined to have needs that would be likely to interfere with school success (operationalized as having an elevated score on a standardized measure indicating risk for behavior problems, cognitive delays, language delays, or functional impairments).<sup>4</sup> Although need increased the likelihood of receiving special education services, 63% of children determined to need a referral for special education services were not currently reported to have an active IEP. An examination of specific disability types revealed that most children at risk for cognitive disabilities (64%, SE = 9.2) had a current IEP; meanwhile, only 32% (SE = 5.2) of children at risk for behavioral or emotional problems were reported to have an IEP. It should be noted that estimates here of

<sup>4</sup> Children were considered to be in need of a referral for special education services if they met any of the four following criteria: (1) Total Problem, Internalizing or Externalizing t-scores greater than 65 on either the Child Behavior Checklist or Teacher Report Form, (2) an overall score on the Kaufman Brief Intelligence Test more than two standard deviations below the mean, (3) an overall score on the Preschool Language Scale more than two standard deviations below the mean, or (4) a score of more than two standard deviations below the mean on the Vineland Adaptive Behavior Scale Screener. See Appendix A for a detailed description of these measures.

“need” for special education services do not directly correspond to national eligibility requirements for IEP services. In fact, the exact eligibility for IEP services differs from state to state. However, similar to the approach taken here, most states use clinically elevated scores on quantitative measures to determine eligibility for IEP receipt.

For those children reported by teachers to be currently receiving IEP-related special education services, teachers were asked several questions to describe these services in more detail.<sup>5</sup> Teachers were asked to report upon a child’s IEP classification, receipt of noninstructional IEP services, educational location, and length of time in special education services. Based upon teacher reports, 78% of students receiving special education services were in a regular class, as opposed to a special school or self-contained classroom (not shown). A little over half had been served by special education for more than 1 year. Most students receiving an IEP were classified as speech impaired (65%) and the most commonly received noninstructional service was speech therapy. Other common IEP classifications included developmental delay, learning disability, ADHD, and emotional disturbance.

Although a higher rate of special education placement has been previously noted for children in the child welfare population (e.g., Jonson-Reid et al., 2004), such findings do not necessarily mean that all the special education needs of children in child welfare are being met. It is important to consider special education needs along with associated service utilization. This report continues to find relatively high rates of unmet special education needs among young children just entering the school system. In particular, in this group of children, those with behavioral and emotional problems that might interfere with academic functioning appear to be more commonly overlooked by the education system than those with cognitive deficits.

### **Key Results of CWS Services and Services to Meet Basic Family Needs**

- As would be expected, the number of families engaged in CWS services appears to be decreasing as increasing time passes since initial CWS maltreatment investigation. An estimated 12% of all caregivers reported that they were still in contact with the CWS. The caseworkers responsible for these families reported that 69% of them had received some type of CWS-delivered service since the time of last interview.
- Approximately 56% of families still involved with CWS received family-based services, most often nonintensive family preservation or reunification services.
- An estimated 56% of those involved with CWS received parenting support services, most frequently parent training.
- When asked about receiving services to meet basic needs, the caregivers of children living at home were most likely to report having received either assistance for their

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<sup>5</sup> During the 5- to 6-year infant follow-up, caseworker surveys were attempted for all children whose caregivers reported having received any CWS service since the last interview (12%; unweighted  $N = 143$ ). A total of 143 caseworker interviews were attempted and 129 interviews were completed for an unweighted response rate of 81.8%.

family's basic living needs (e.g., transportation, food, 33%) or regularly needed assistance with child care (30%).

- Services to meet basic needs were more likely received by families living at or below the poverty level. Families of children living at home with biological parents were also more likely to receive these services.
- An estimated 27% of permanent caregivers were determined to be in need of mental health services, and 12% reported having used a mental health service.
- Approximately 26% of permanent caregivers were determined to be in need of substance abuse services, but almost no caregivers reported having used a substance abuse service.
- Biological parents of children living in home were more likely to have mental health and substance abuse needs than other caregivers. They were also more likely to use mental health services.
- While having a mental health need did increase the likelihood that a caregiver received a mental health service, only 26% of those in need of mental health services received one.

### **Family Child Welfare Services**

At the time of the 5- to 6-year follow-up, 12% of all caregivers (unweighted  $N = 143$ ) reported that they were still in contact with CWS and receiving some type of service. Caseworker surveys were attempted for all of these cases; 129 interviews were completed for an 81.8% response rate. Analysis of the receipt of family child welfare services is based solely on data from caseworker interviews. Consequently, it should be noted that results presented here represent the percentage of families reported to be receiving CWS services, not percentages of the entire infant cohort at the 5- to 6-year follow-up. Caseworkers were asked to report upon three different categories of child welfare services: family-based services, parenting support services, and individual parent counseling (Exhibit 5-5). Sixty-nine percent of families still engaged with CWS at the 5- to 6-year follow-up were reported to have received some type of CWS family-based parenting support or parent/guardian counseling service since the time of last interview.

Fifty-six percent of families still involved with CWS were reported by caseworkers to have received family-based services since the last interview period. *Family-based services* are intended to provide support for families who are in crisis or at risk for child maltreatment or child placement into foster homes (Omnibus Reconciliation Act of 1993, Pub. L. 103-66). They also aim to support children's well-being indirectly by increasing the caregiver's ability to provide a good environment for them.

Three different categories of family-based services were recorded. Intensive family preservation or reunification services denote intense, brief services provided in a family's home in the crisis intervention model. The second family-based service category included less

intensive forms of family preservation or reunification services to prevent out-of-home placement.

The third category included all other home-based services. These are less intensive than the other two categories and could involve as little as periodic monitoring visits. For this population of children and families still involved with CWS at the 5- to 6-year follow-up, caseworkers most frequently reported the receipt of other home-based services (44%), followed by nonintensive family preservation or reunification services (20%), and finally intensive family preservation or reunification (15%). In other words, when families did receive family-based services, they most commonly received the least intensive type of such service.

Caseworkers reported that 56% of families still involved with CWS had received a parent support service since the last interview. *Parent support services* specifically aim to support caregivers' capacity to parent. Four different categories of parenting support services were recorded: parent training, parent aid, family counseling, and respite services. When parent support services were received, caseworkers reported that families most typically received parent training (34.9%) or the help of a parenting aide (16.3%). Caseworkers finally reported upon the extent to which *family counseling services* may have been recommended to support caregivers and deal with maladaptive behaviors that may put children at risk. Forty-one percent of caregivers still involved with CWS were reported by caseworkers to be receiving individually based family counseling services.

The handful of children who continued to have some CWS contact 5 to 6 years after the index maltreatment investigation lived in a variety of settings (Exhibit 4-5). As might be expected, child setting did impact CWS service receipt. When compared to children living in other settings, children living in out-of-home placements were the most likely to be involved with some type of CWS service. Almost all of these children in out-of-home care (98%) were reported to have received a CWS service since the time of last interview. Children living out of home were specifically more likely than children living in home with their caregivers (biological or otherwise) to have received family-based services. Caseworkers were reportedly continuing to work toward family reunification with these children. More interesting, 65% of children living at home with their biological parents were reported to have received some CWS service since last interview. Despite these children remaining in their biological home 5 to 6 years past the index investigation, a sizable portion are still actively involved with CWS to the point that they had received either family-based parenting support or individual counseling services. The receipt of CWS services did not vary based upon caregiver race or a variety of maltreatment variables (e.g., type of maltreatment originally investigated).

As the time since the index investigation passes, we would expect fewer families to be involved with the CWS and fewer families to need CWS services. Results from this analysis confirm this trend. Fewer families at the 5- to 6-year infant follow-up period are receiving family-based CWS services than those noted for all families at previous waves. More specifically, at the 18-month follow-up period, 25% of NSCAW families whose children were living at home and 63% of those living out of home were reported to be receiving family-based services. This trend continued for parent support services and family counseling services. Fewer families of children who were infants at baseline were receiving parent support services and family counseling at the 5- to 6-year follow-up than those reported in previous waves.

**Exhibit 4-5**  
**Child Welfare and Other Family Services**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	Any CWS Service <sup>1</sup> % (SE)	Family-Based Services <sup>2</sup> % (SE)	Parenting Support Services <sup>3</sup> % (SE)	Parents/Guardians Counseled Individually % (SE)
<b>Total</b>	129 <sup>4</sup>	68.7 (7.9)	55.9 (9.0)	55.6 (7.3)	41.4 (6.8)
<b>Caregiver race/ethnicity</b>					
Black	36	82.4 (8.6)	75.1 (10.6)	73.7 (10.0)	37.7 (13.3)
White	57	62.5 (11.7)	50.3 (13.6)	48.6 (10.2)	38.3 (9.8)
Hispanic	15	58.0 (18.5)	56.8 (18.5)	44.4 (19.5)	35.7 (16.4)
Other	10	98.3 (1.9)	71.0 (23.1)	92.5 (6.5)	71.0 (23.1)
<b>Child setting</b>			**		
In home, biological parent	55	64.6 (11.6) <sup>a</sup>	50.8 (13.8) <sup>a</sup>	59.3 (11.2)	48.0 (8.3)
In home, adoptive parent	18	45.1 (15.7) <sup>a</sup>	45.4 (15.9) <sup>a</sup>	29.9 (13.8)	28.3 (12.8)
In home, kin, or other caregiver	22	60.7 (14.9) <sup>a</sup>	45.4 (15.9) <sup>a</sup>	45.5 (16.5)	6.6 (13.1)
Out of home	25	97.7 (1.7) <sup>5,b</sup>	94.3 (3.1) <sup>6,b</sup>	72.0 (15.5)	44.1 (17.5)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ). CWS = child welfare system.

<sup>1</sup>Indicates having received any one of the following types of service: family-based services, parenting support services, or individual counseling.

<sup>2</sup>Indicates having received any home-based service including more or less intensive family preservation or reunification services.

<sup>3</sup>Indicates having received parent training, parent aide services, respite care, or family counseling.

<sup>4</sup>All data based on caseworker interviews ( $N = 129$ ); this represents 81.8% of all cases reported by caregivers to have received some CWS service since last interview.

<sup>5</sup>Children out of home were more likely to receive CWS services than children living in home with biological parents, children living with adoptive parents, or children living with kin.

<sup>6</sup>Children out of home were more likely to receive family-based services than children living in home with biological parents, children living with adoptive parents, or children living with kin.

## Services to Address Basic Needs

Being unable to meet your family's basic living needs (e.g., housing, child care, food) likely exacerbates parenting stress, especially for those living in poverty. This stress may then contribute to child maltreatment. Consequently, addressing these basic family needs has long been a central component of child welfare services. In fact, some argue that families would use fewer child welfare services if their basic needs for housing, income, and medical care were met (Lindsey, 1994). This section of the report describes caregiver reports of services to address basic needs.

Only caregivers of children living *at home* (94% of families) were asked if they had received any of 10 services to address basic needs since the last interview. For ease of presentation, these services were grouped into four categories as follows:

1. Assistance for family's basic living needs
  - Food (e.g., from a soup kitchen or food bank)
  - Financial help (other than Transitional Assistance to Needy Families [TANF] or Social Security Income [SSI])
  - Transportation (from caregiver's home)
  - Emergency shelter/housing
2. Child care receipt on a regular basis
3. Services directly to assist caregiver
  - Job-related services (e.g., job training or help finding a job)
  - Legal aid (not related to child welfare custody or child protective issues)
  - Organized support groups
4. Home assistance
  - Home management training (e.g., budgeting or planning meals)
  - Assistance in the home (e.g., someone coming to caregivers' homes to help with cleaning or minor repairs)

Exhibit 4-6 presents caregiver reports of service receipt across these categories and these are broken down by relevant case characteristics. Thirty-three percent of caregivers reported having received some type of assistance to help meet their family's basic living needs. Among those services in this category, caregivers most frequently reported having received transportation (16%) or food assistance (15%), followed by financial help (10%) and emergency shelter or housing services (3%; not shown). Nearly one third of caregivers reported that they had received some regular help with child care since the last interview. Nineteen percent of

**Exhibit 4-6**  
**Services to Address Basic Needs**  
**Infant Population at Wave 5**

	<i>N</i> (Min)	Assistance for Family's Basic Living Needs <sup>1</sup> % (SE)	Child Care <sup>2</sup> % (SE)	Services to Directly Assist Caregiver <sup>3</sup> % (SE)	Home Assistance <sup>4</sup> % (SE)
<b>Total</b>	971	32.7 (2.8)	30.0% (3.1)	19.3% (2.2)	11.9% (1.7)
<b>Caregiver race/ethnicity</b>			**		
Black	326	29.6 (4.4)	27.0 (4.5) <sup>7,a</sup>	15.6 (2.6)	8.9 (1.9)
White	442	27.2 (3.9)	33.1 (3.7) <sup>7,a</sup>	20.7 (2.8)	11.7 (2.5)
Hispanic	130	39.3 (7.1)	7.0 (3.4) <sup>b</sup>	23.2 (7.9)	17.9 (6.0)
Other	59	32.2 (9.2)	36.2 (10.2) <sup>7,a</sup>	16.0 (7.1)	15.0 (7.2)
<b>Poverty status<sup>5</sup></b>		***		*	
At/below poverty level	401	47.8 (4.4)	25.6 (3.9)	26.5 (3.8)	12.7 (2.7)
Above poverty level	488	19.6 (2.6)	34.6 (4.3)	15.8 (3.2)	13.4 (2.1)
<b>Child setting<sup>6</sup></b>		**		**	*
In home, biological parent	493	41.5 (3.9) <sup>8,a</sup>	31.9 (3.7)	25.6 (3.5) <sup>9,a</sup>	13.0 (2.6)
In home, adoptive parent	224	18.4 (4.0) <sup>b</sup>	27.3 (4.8)	15.9 (3.7)	18.2 (4.0) <sup>10,a</sup>
In home, kin, or other caregiver	159	16.4 (4.0) <sup>b</sup>	25.7 (5.6)	8.6 (2.7) <sup>b</sup>	5.8 (2.5) <sup>b</sup>

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> Includes having received any financial assistance, food from a community source, transportation help, or emergency shelter or housing.

<sup>2</sup> Indicates having received child care on a regular basis.

<sup>3</sup> Indicates that the caregiver has received job-related services, legal aid, or has attended any organized support group.

<sup>4</sup> Indicates that having received help with specific home management training or cleaning or help with home repairs.

<sup>5</sup> Using the federal poverty status guidelines, this variable is based upon family income for the child's current home setting at Wave 5.

<sup>6</sup> Child home setting at Wave 5.

<sup>7</sup> White, Black, and "Other" children were more likely to receive child care services than Hispanic children.

<sup>8</sup> Families of children living with biological parents were more likely to receive assistance for family's basic living needs than children living with adoptive parents or children living with kin.

<sup>9</sup> Families of children living with biological parents were more likely to receive services to directly assist caregivers than families of children living with kin.

<sup>10</sup> Families of children living with adoptive parents were more likely to receive home assistance than families of children living with kin.

caregivers reported having received services intended to directly assist their own basic needs, including received job-related services (10%), organized support groups (8%), and legal aid (5%; not shown). The least frequently utilized service category was “home assistance.” Only 12% of caregivers reported having received either home management training (3%) or assistance in the home (10%).

Some family characteristics did predict receipt of services to meet basic needs. For instance, caregivers living below poverty level at the 5- to 6-year follow-up were more likely to report the receipt of services to assist in meeting their family’s basic living needs and services to help themselves. The only significant association between caregiver race and service receipt was for the regular receipt of child care: Hispanic caregivers were least likely to receive child care assistance. The child’s living situation was associated with all basic needs services except child care. Children living at home with biological parents were significantly more likely to receive services to meet basic family living needs and services to assist caregivers than children living at home with either adoptive parents or other caregivers. The children of adoptive parents were more likely to receive home management services than those children living at home with “other” caregivers.

When compared to results from previous waves of NSCAW, fewer families within this group had received services to meet basic needs. With regard to services to directly assist caregivers, 34% of families with children 1.5 to 17 years old and living at home at the 18-month follow-up reported having received services, as opposed to the 19% noted here. Similarly, 46% of families had received services to meet basic family needs at 18 months, compared to 33% here. Little to no change occurred, however, in receipt of home assistance (16% at 18 months vs. 12% here).

In summary, the services most commonly received since last interview according to caregivers’ reports were those related to (1) assistance for family’s basic living needs, and (2) regularly needed assistance with child care. Not surprisingly, caregivers reported to be living at or below the poverty level were more likely than those living above the poverty level to report having received several of these basic need services. Generally, biological parents of children living at home were more likely than adoptive parents or other caregivers caring for children living at home to receive services to assist basic needs. We know that more children living with biological parents were living in poverty at the 5- to 6-year follow-up than children living in other settings. Consequently, this finding likely reflects an income-related inability to provide for a family’s basic needs. Families in poverty are more likely to need services to meet their basic needs and more likely to meet eligibility requirements for the receipt of such services.

### **Caregiver Mental Health and Substance Abuse Services**

Previous studies have found that children of parents with psychiatric disorders are two to three times more likely to experience maltreatment than those who do not have a history of mental health problems (Walsh, MacMillan, & Jamieson, 2002). Children whose parents abuse alcohol or other drugs are almost three times more likely to be abused and over four times more likely to be neglected than children of parents who are not substance abusers (Kelleher, Chaffin, Hollenberg, & Fisher, 1994). Increasing the recognition of caregiver behavioral health needs and providing services to alleviate this suffering are likely important components of maltreatment

prevention. The following section describes the mental health and substance abuse needs of *permanent* (in-home) caregivers, including adoptive caregivers, along with their behavioral health service utilization since last interview (see footnote 1). Exhibit 5-7 describes reported levels of mental health need, substance abuse need, and mental health service utilization.

Permanent caregivers' needs for mental health and substance abuse services were assessed in five ways: (1) caregivers' responses to questions about the degree to which they perceived themselves as needing help for either a mental health problem or a substance abuse problem; (2) caseworkers' responses to similar questions; (3) caregivers' responses to direct questions about substance abusing behaviors; (4) the sections of the Composite International Diagnostic Interview Short Form (CIDI-SF; WHO, 2003; see Appendix A) on major depression, alcohol dependence, and drug dependence; and (5) the Short Form Health Survey (SF-12; Ware, Kosinski, & Keller, 1996; see Appendix A). According to the caregiver reports, 4% reported that they needed either "a lot" or "some" help with a mental health problem, and only 1% reported that they needed either "a lot" or "some" help with an alcohol or drug problem. These rates of self-reported caregiver mental health and substance abuse needs are comparable to those found for all caregivers at the 18-month follow-up. For those families still in contact with CWS (12% of families), caseworkers were asked about caregiver behavioral health needs. Caseworkers reported that 26% of the caregivers within their caseloads needed mental health services, 12% needed alcohol-related services and 26% needed drug abuse services.

When permanent caregivers were asked directly about substance abusing behaviors, 11.1% of permanent caregivers reported having had used some type of drug "on their own" in the last 12 months. For these questions, "on your own" was described as without a doctor's prescription, in larger amounts than prescribed, or for a longer period than prescribed. Among those reporting to have used a drug on their own, use of analgesics (e.g., codeine, Percodan, morphine and other prescriptions painkillers), was the most common category reported (4.8%), followed by marijuana (4.3%), sedatives (2.2%), and tranquilizers (1.6%). Eight percent of permanent caregivers reported consuming four or more alcoholic drinks in a single day during the past year.

In addition to caregiver and caseworker reports of behavioral health service needs, caregivers' risks for mental health and substance abuse problems were also assessed through two standardized measures. Three sections of the Composite International Diagnostic Interview Short Form (CIDI-SF; WHO, 2003, see Appendix A) were used to assess clinical levels of major depression, alcohol dependence, and drug dependence. Impairing mental health problems were also measured through the Short Form Health Survey (SF-12; Ware, Kosinski, & Keller, 1996, see Appendix A). Caregivers scoring within the clinical range on either of these standardized measures were determined to be at risk for a mental health, alcohol or drug problem and potentially in need of behavioral health services.

When findings from all sources of information on the need for mental health services are combined (Exhibit 4-7), 26.5% of caregivers were determined to be in need of mental health services. To put this in context, a recent national study estimated that the same proportion (26%) of all U.S. adults 18 years and older meet diagnostic criteria for any mental disorder over a 12-month period (Kessler, Chiu, Demler, Merikangas, & Walters, 2005). In this report, there were no significant variations in the need for mental health services by caregiver race/ethnicity, but

there were by child setting, with biological parents more likely to need mental health services than adoptive parents. Approximately 26.2% of caregivers were determined to be in need of substance abuse services. Need for substance abuse services was significantly lower among Hispanics than among other racial/ethnic groups, and, similar to findings related to mental health services, need was higher among biological parents than among adoptive parents or other in-home caregivers.

Despite these indicators of need, few caregivers reported receiving any behavioral health services. The NSCAW survey asked caregivers about services provided through inpatient care, day treatment programs, and clinic/psychiatric services. Approximately 12% of all caregivers reported having received any mental health service since the time of last interview, nearly all of which consisted of the use of medication for a mental health problem (11%). A handful reported having visited a clinic or doctor for a mental health problem. Caregivers who are White are significantly more likely than those who are Black to have received services, and biological parents are more likely to have received services than either adoptive parents or other in-home caregivers. The number of caregivers reported having received substance abuse services is even smaller (unweighted  $N = 4$ ), and almost no caregivers reported having utilized hospital-based or residential psychiatric or substance abuse services. Because so few caregivers reported having received services for substance abuse problems, these data are not in Exhibit 4-7.

While having a mental health service need (using the criteria described above) did make it more likely that a caregiver received a mental health service, the large majority of caregivers determined to be in need of mental health services received none (70%). This finding is comparable to other recent reports of caregivers involved with the CWS (Libby et al., 2006). It should be noted that high levels of unmet mental health needs are not unique to this population. A recent national study found that only 41% of adults with a diagnosable mental disorder reported having received professional help within a 12-month period (Wang, Lane, Olfson, Pincus, Wells, & Kessler, 2005).

There are some limitations to the ways in which NSCAW assesses caregiver substance abuse and mental health needs and service use. For instance, the NSCAW survey does not ask caregivers about therapy received in nonclinical settings or group therapy or participation in self-help groups. Consequently, service utilization rates may be underestimated. Caregivers, particularly those under CWS involvement, may also be biased against reporting either substance abusing behaviors or related service utilization. Despite these limitations, the data still suggest that receipt of services in this population is not adequate for the level of need. By any measure of need, no more than a quarter of those in need of mental health services and almost none of those in need of substance abuse services received them.

**Exhibit 4-7**  
**Caregiver Need for Mental Health and Substance Abuse Services and Service Receipt**  
**Infant Population at Wave 5**

	<i>N</i>	<b>In Need of Mental Health Service<sup>1</sup></b> % (SE)	<b>In Need of Substance Abuse Service<sup>2</sup></b> % (SE)	<b>Received Mental Health Service</b> % (SE)
<b>Total</b>	971	26.5 (2.4)	26.2 (2.3)	11.6 (1.6)
<b>Caregiver race/ethnicity</b>			*	*
Black	304	23.5 (3.5)	16.6 (2.9) <sup>3,a</sup>	4.7 (2.3)
White	463	27.1 (3.0)	27.6 (3.9) <sup>3,a</sup>	15.6 (2.2)
Hispanic	138	30.3 (6.5)	7.9 (3.4) <sup>b</sup>	7.3 (3.5)
Other	66	23.2 (7.4)	22.4 (9.4)	13.2 (6.1)
<b>Child setting</b>			***	
In home, biological parent	512	24.6 (3.0) <sup>4,a</sup>	25.8 (3.2) <sup>5,a</sup>	13.1 (2.3)
In home, adoptive parent	236	11.9 (3.4) <sup>b</sup>	9.3 (2.7) <sup>b</sup>	9.8 (3.2)
In home, kin, or other caregiver	168	18.3 (5.3)	13.0 (5.1) <sup>b</sup>	9.7 (4.0)
<b>Need for mental health or substance abuse service</b>				
In need of mental health services	216 <sup>**</sup>	NA	13.1 (1.7) <sup>6</sup>	29.9 (5.3)
In need of substance abuse services	221	13.1 (1.7) <sup>6</sup>	NA	19.6 (4.9)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup> Caregivers were determined to be “in need of mental health services” when they met any one of four criteria: (1) caregiver self-reported need for “a lot” or “some” help for a mental health problem, (2) caseworker report of a caregiver’s need for a mental health services, (3) self-reported scores within the clinical range on either the Dysthymia and Anhedonia scales of the CIDI-SF, or (4) a score exceeding 1.5 standard deviations below the norm (i.e., a score  $\leq 35$ ) on the Mental Health component of the SF-12.

<sup>2</sup> Caregivers were determined to be in need of substance abuse services when they met any one of three criteria: (1) caregiver self-reported need for “a lot” or “some” help for an alcohol or drug problem, (2) caseworker report of caregiver’s need for alcohol or drug abuse services, or (3) or scores within the clinical range on either the Alcohol Dependence or Drug Dependence scales of the CIDI-SF.

<sup>3</sup> Caregivers of Black and White children were more likely to need substance abuse services than caregivers of Hispanic children.

<sup>4</sup> Biological caregivers were more likely to need mental health services than adoptive caregivers.

<sup>5</sup> Biological caregivers were more likely to need substance abuse services than adoptive and kin caregivers.

<sup>6</sup> Of the sample of caregivers, 13.1% had *both* a need for mental health services and a need for substance abuse services.

## Conclusion

The most obvious and promising finding of this chapter is that many children in need of health, mental health, special education, or CWS services did receive them. In fact, being identified as needing a particular service was strongly related to actually receiving such a service. We found that 69% of families still actively involved with CWS were currently receiving some type of CWS-service. Families living below the federal poverty level were more likely to receive services to meet their basic living needs than families with higher incomes. Children with chronic health conditions were more likely to have a consistent pediatric home and to have received a recent well-child checkup than children without chronic health conditions. And finally, children with objectively determined needs for mental health and special education services were far more likely than children without such needs to receive the relevant services.

Involvement with CWS was an important reason some of the children and families in this population received services. The link between CWS and increase rates of service receipt is not unique to children aged 5 to 6 years old who were infants at baseline, but it is consistently supported by previous NSCAW reports and related research (e.g., Leslie, Gordon et al., 2005; Leslie, Hurlburt et al., 2005). The influence of CWS appears to be particularly important with regard to both health and mental health service system access. Having had a history of out-of-home placement (either those now adopted or those currently in out-of-home care) increased the likelihood that a child received both mental health services and well-child checkups. Furthermore, rates of unmet mental health service needs, although still high (65%), were actually found to be lower than published rates of unmet mental health needs for the U.S. child population at large (80%; Kataoka et al., 2002). It should be noted, however, that *current* involvement with CWS is limited as an explanation for increased service use, since only 12% of this population were actively engaged with CWS at the five year follow-up. It is possible that there may be a lasting effect of CWS involvement on engagement with services. Further research should examine this further the influence of CWS involvement on service receipt over time.

When mental health service utilization is examined across children of all ages within the United States, studies most frequently find that mental health services are most commonly provided in schools. For children who were infants at NSCAW baseline, children most typically received more traditional outpatient mental health services. This is not surprising since these children have just started their school experience. On the other hand, 22% of children were reported to already have an active IEP during their early years of school. Further, nearly all caregivers who were told by a professional since the last interview that their child needed special education services reported already receiving them. Once children were identified by the school as needing services, caregivers' reported that most of these children received them. However, many children with needs that might merit a special education referral (e.g., cognitive, developmental, behavioral impairments) were never identified by schools and were not reported by caregivers to have received an IEP.

We know that identifying a child's social, emotional, or behavioral needs is a critical factor in subsequent service utilization. So, while we have highlighted that many children's needs were identified and served, it is critical at the same time to highlight the remaining high levels of *unmet* service needs. For instance, 65% of children with mental health needs did not report having received *any* service since the last interview period. Slightly over half of children

with characteristics indicating the need for a special education referral were currently involved in an active IEP.

Levels of unmet service needs are not limited to children. In fact, unmet behavioral health needs among caregivers were even greater than those observed for children. Almost none of caregivers with substance abuse service needs reported having received some kind of substance abuse-related service. Seventy-six percent of caregivers in need of mental health services reported having received none (compared to national estimates of 60% unmet mental health service needs within the U.S. adult population (Kessler, Berglund, Demler, Jin, & Walter, 2005). Although rates of unmet behavioral health care needs are either comparable to or sometimes lower than as those observed for the general U.S. population, they are still remarkably high. Prior research has indicated that the children of parents with psychiatric disorders and the children of parents who abuse substances are more likely to experience maltreatment than the children of parents without such problems (Kelleher, Chaffin, Hollenberg, & Fischer, 1994; Walsh et al., 2002). Given the association between parental mental illness, substance abuse, and child maltreatment, it may be especially critical to meet caregiver behavioral health needs as a means to potentially prevent future child maltreatment and other developmental risks.

There are also obvious windows of missed service opportunity. For instance, although 88% of children had recently received a well-child checkup and 99% reported having at least one usual location of health care, only 16% of those in need of mental health services had received services from their family doctor for a mental health problem. Particularly for young children, primary care offers a promising point of mental health intervention but primarily appears to be a missed opportunity for these children.

This 5- to 6-year follow-up of children identified by CWS for maltreatment as infants indicates that a substantial proportion of children or caregivers have physical health, mental health, or education needs—or a combination of needs. Although many children did receive necessary services, there were substantial remaining unmet needs. Caregivers were even less likely to receive needed services than their children. So, while services are being delivered at a greater rate to those in need, there is still much room for improvement to best facilitate the healthy development of children and families who have been involved in the CWS.



## REFERENCES

- AAP Committee on Early Childhood, A., and Dependent Care (2002). Health care of young children in foster care. *Pediatrics*, *109*(3), 536–541.
- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4–18 and 1991 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M. (1992). *Manual for the Child Behavior Checklist/2–3 and 1992 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Allen, R. E., & Oliver, J. M. (1982). The effects of child maltreatment on language development. *Child Abuse & Neglect*, *6*(3), 299–305.
- Artiles, A. J., Harry, B., Reschly, D. J., & Chinn, P. C. (2002). Over-identification of students of color in special education: A Critical overview. *Multicultural Perspectives*, *4*, 3-10.
- Ascher, B. H., Farmer, E. M. Z., & Burns, B. J. (1996). The Child and Adolescent Services Assessment (CASA): Description and psychometrics. *Journal of Emotional and Behavioral Disorders*, *4*(1), 12–20.
- Barth, R. P., Courtney, M., Berrick, J. D., & Albert, V. (1994). From child abuse to permanency planning: Child welfare services pathways and placements. New York: Aldine de Gruyter.
- Biemer, P. P., Chiflikyan, R., Dowd, K., and Smith, K. (2007). *What child welfare agency administrative records tell us about the accuracy of survey reports of abuse or neglect*. Paper presented at the proceedings of the International Statistics Institute, Lisbon, Portugal.
- Biemer, P., Christ, S. L., & Wiesen, C. (2006). *Reliability Assessment of the National Survey on Child and Adolescent Well-Being*. Odlum Institute, University of North Carolina. Chapel Hill, NC: UNC.
- Blair, C. (2002). School readiness. Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, *57*(2), 111–127.
- Bloom, B., & Dey, A. N. (2006). Summary health statistics for U.S. children: National Health Interview Survey, 2004. *Vital Health Statistics* *10*(227), 1–85.
- Bloom, B., & Tonthat, L. (2002). Summary health statistics for U.S. children: National Health Interview Survey, 1997. *Vital Health Statistics*, *10*(203), 1–53.
- Bolger, K. E., & Patterson, C. J. (2001). Developmental pathways from child maltreatment to peer rejection. *Child Development*, *72*(2), 549–568.

- Bolger, K. E., Patterson, C. J., & Kupersmidt, J. B. (1998). Peer relationships and self-esteem among children who have been maltreated. *Child Development, 69*, 1171–1197.
- Bradley, R. H., Corwyn, R. F., McAdoo, H. P., & Coll, C. G. (2001a). The home environments of children in the United States part I: variations by age, ethnicity, and poverty status. *Child Development, 72*(6), 1844–1867.
- Bradley, R. H., Corwyn, R. F., & Burchinal, M. (2001b). The home environments of children in the United States Part II: Relations with behavioral development through age thirteen. *Child Development, 72*, 1868–1886.
- Burns, B. J., Phillips, S. D., Wagner, H. R., Barth, R. P., Kolko, D. J., Campbell, Y., et al. (2004). Mental health need and access to mental health services by youths involved with child welfare: a national survey. *Journal of the American Academy of Child Adolescent Psychiatry, 43*(8), 960–970.
- Burns, B. J., Costello, E. J., Angold, A., Tweed, D., Stangl, D., Farmer, E. M. Z., et al. (1995). DataWatch: Children's mental health service use across service sectors. *Health Affairs, 14*(3), 147–159.
- Busch-Rossnagel, N., Knauf-Jensen, D., & DesRosiers, F. (1995). Mothers and others: The role of the socializing environment in the development of mastery motivation. In R. MacTurk & G. Morgan (Eds.), *Mastery Motivation: Origins, Conceptualizations, and Applications: Advances in Applied Developmental Psychology, 12*:117–146. Norwood, NJ: Ablex Publishing Corporation.
- Cassidy, J., & Asher, S. R. (1992). Loneliness and peer relationships in young children. *Child Development, 63*, 350–365.
- Child Welfare Information Gateway (2005). Concurrent planning: What the evidence shows. Issue Brief. Retrieved January 3, 2007, from [http://www.childwelfare.gov/pubs/issue\\_briefs/concurrent\\_evidence/concurrent\\_evidence.pdf](http://www.childwelfare.gov/pubs/issue_briefs/concurrent_evidence/concurrent_evidence.pdf)
- Christ, S., & Biemer, P. (2005). *National Survey of Child and Adolescent Well-Being (NSCAW) Statistical Users' Manual*. Washington, DC: Administration for Children and Families.
- Cicchetti, D., & Lynch, M. (1995). Failures in the expectable environment and their impact on individual development: The case of child maltreatment. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation, 2*, 32–71. New York: Wiley.
- Coie, J. D., & Kupersmidt, J. B. (1983). A Behavioral Analysis of Emerging Social Status in Boy's Groups. *Child Development, 54*, 1400–1416.
- Coie, J. D., Dodge, K. A., & Kupersmidt, J. B. (1990). Peer group behavior and social status. In S. R. Asher & J. D. Coie (Eds.), *Peer Rejection in Childhood* (pp. 17–59). Cambridge: Cambridge University Press.

- Cooper, D. H., & Speece, D. L. (1988). A novel methodology for the study of children at risk for school failure. *The Journal of Special Education*, 22(2), 186–198.
- Culp, R. E., Watkins, R. V., Lawrence, H., Letts, D., Kelly, D. J., & Rice, M. L. (1991). Maltreated children's language and speech development: Abused, neglected, and abused and neglected. *First Language*, 11(33), 377–389.
- Denham, S. A., & Grout, L. (1992). Mothers' emotional expressiveness and coping: Relations with preschoolers' social-emotional competence. *Genetic, Social, and General Psychology Monographs*, 118, 3–101.
- Dishion, T. J. (1990). The family ecology of boys' peer relations in middle childhood. *Child Development*, 61:874–892.
- Dodge, K. A. (1983). Behavioral antecedents of peer social status. *Child Development*, 54(6), 1386–1399.
- Dodge, K. A., & Coie, J. D. (1987). Social-information-processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology*, 53(6), 1146–1158.
- Dodge, K. A., Coie, J. D., & Brakke, N. P. (1982). Behavior patterns of socially rejected and neglected preadolescents: The roles of social approach and aggression. *Journal of Abnormal Child Psychology*, 10, 389–410.
- Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Petit, G. S., Fontaine, R., & Price, J. M. (2003). Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. *Child Development*, 74, 374–393.
- Eckenrode, J., Laird, M., & Doris, J. (1993). Academic performance and disciplinary problems among abused and neglected children. *Development Psychology*, 29, 53–62.
- Eigsti, I. M., & Cicchetti, D. (2004). The impact of child maltreatment on expressive syntax at 60 months. *Developmental Science*, 7, 88–102.
- Erickson, M. F., Egeland, B., & Pianta, R. (1989). The effects of maltreatment on the development of young children. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 647–684). New York: Cambridge University Press.
- Evans, L. D. (2001). Interactional models of learning disabilities: Evidence from students entering foster care. *Psychology in the Schools*, 38, 381–390.
- Evans, L. D., Scott, S. S., & Schulz, E. G. (2004). The need for educational assessment of children entering foster care. *Child Welfare*, 83, 565–580.

- Farmer, E. M. Z., Angold, A., Burns, B. J., & Costello, E. J. (1994). Reliability of self-reported service use: test-retest consistency of children's responses to the Child and Adolescent Services Assessment (CASA): description and psychometrics. *Child Family Studies, 3*, 307–325.
- Furstenberg, F. F., Brooks-Gunn, J., & Morgan, P. (1987). Adolescent mothers and their children in later life. *Family Planning Perspectives, 19*(4), 142–151.
- Gershoff, E.T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological bulletin, 128*, 539–579.
- Gottfried, A. E., Fleming, J. S., & Gottfried, A. W. (1998). Role of cognitively stimulating home environment in children's academic intrinsic motivation: A longitudinal study *Child Development, 69*(5), 1448–1460.
- Governor's Office of Regulatory Reform (May 21, 2003). Governor Pataki, Chief Judge Kaye, Mayor Bloomberg announce joint effort to streamline New York's adoption system: Includes the adoption of 5,000 children by year's end. Press release. Albany, NY: Governor's Office of Regulatory Reform.
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating Scale*. Circle Pines, MN: American Guidance Service.
- Halfon, N., Mendonca, A., & Berkowitz, G. (1995). Health status of children in foster care. The experience of the Center for the Vulnerable Child. *Archives of Pediatrics & Adolescent Medicine, 149*(4), 386–392.
- Halfon, N., Berkowitz, G., & Klee, L. (1992). Children in foster care in California: An examination of Medicaid reimbursed health services utilization. *Pediatrics, 89*(6 Pt 2), 1230–1237.
- Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: Developmental issues and outcomes. *Child Abuse and Neglect, 26*, 679–695.
- Hodapp, R. M., & Fidler, D. J. (1999). Special education and genetics: Connections for the 21st century. *Journal of Special Education, 33*(3), 130–137.
- Hosp, J. L., & Reschly, D. J. (2003). Referral rates for intervention or assessment: A meta-analysis of racial differences. *Journal of Special Education, 37*(2), 67–80.
- Hurlburt, M. S., Leslie, L. K., Landsverk, J., Barth, R. P., Burns, B. J., Gibbons, R. D., Slymen, D. J., & Zhang, J. (2004). Contextual predictors of mental health service use among children open to child welfare. *Archives of General Psychiatry, 61*(12), 1217–1224.
- Jee, S. H., Barth, R. P., Szilagyi, M. A., Szilagyi, P. G., Aida, M., & Davis, M. M. (2006). Factors associated with chronic conditions among children in foster care. *Journal of Health Care for the Poor & Underserved, 17*(2), 328–341.

- Jonson-Reid, M., Drake, B., Kim, J., Porterfield, S., & Han, L. (2004). A prospective analysis of the relationship between reported child maltreatment and special education eligibility among poor children. *Child Maltreatment, 9*(4), 382–394.
- Kataoka, S. H., Zhang, L., & Wells, K. B. (2002). Unmet need for mental health care among U.S. children: Variation by ethnicity and insurance status. *American Journal of Psychiatry, 159*(9), 1548–1555.
- Kaufman, J., & Cicchetti, D. (1989). Effects of maltreatment on school-age children's socioemotional development: Assessments in a day-care setting. *Developmental Psychology, 25*, 516–524.
- Kaufman, A., & Kaufman, N. (1990). Kaufman Brief Intelligence Test (K-BIT): American Guidance Service, Inc.
- Kelleher, K., Chaffin, M., Hollenberg, J., & Fischer, E. (1994). Alcohol and drug abuse disorders among physically abusive and neglectful parents in a community-based sample. *American Journal of Public Health, 84*, 1586–1590.
- Kemp, C., & Carter, M. (2005). Identifying skills for promoting successful inclusion in kindergarten. *Journal of Intellectual & Developmental Disability, 30*(1), 31–44.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin, 113*(1), 164–180.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of *DSM-IV* disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593–602.
- Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month *DSM-IV* disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 617–627.
- Kim, J., & Cicchetti, D. (2003). Social self-efficacy and behavior problems in maltreated children. *Journal of clinical child and adolescent psychology, 32*, 106–117.
- Kochenderfer, B. J., & Ladd, G. W. (1996). Peer victimization: Manifestations and relations to school adjustment in kindergarten. *Journal of School Psychology, 34*(3), 267–283.
- Ladd, G. W. (1990). Having Friends, Keeping Friends, Making Friends, and Being Liked by Peers in the Classroom: Predictors of Children's Early School Adjustment? *Child Development, 61*(4), 1081–1100.

- Ladd, G. W., & Hart, C. H. (1992). Creating informal play opportunities: Are parents' and preschoolers' initiations related to children's competence with peers? *Developmental Psychology*, 28, 1179–1187.
- Leslie, L. K., Gordon, J. N., Meneken, L., Premji, K., Michelmore, K. L., & Ganger, W. (2005). The physical, developmental, and mental health needs of young children in child welfare by initial placement type. *Developmental and Behavioral Pediatrics*, 26(3), 177–185.
- Leslie, L. K., Hurlburt, M. S., James, S., Landverk, J., Slymen, D. J., & Zhang, J. (2005). Relationship between entry into child welfare and mental health service use. *Psychiatric Services*, 56(8), 981–987.
- Libby, A. M., Orton, H. D., Barth, R. P., Webb, M. B., Burns, B. J., Wood, P., et al. (2006). Alcohol, drug, and mental health specialty treatment services and race/ethnicity: a national study of children and families involved with child welfare. *American Journal of Public Health*, 96(4), 628–631.
- Lindsey, D. (1994). *The welfare of children*. New York: Oxford University Press.
- McCall, R. B. (1995). On definitions and measures of mastery motivation. In R. H. MacTurk & G. A. Morgan (Eds.), *Mastery motivation: Origins, conceptualization, and applications* (pp. 273–292). Norwood, NJ: Ablex Publishing Co.
- McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly*, 18(2), 206–224.
- McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), 307–329.
- National Center for Injury Prevention and Control (n.d.). *WISQARS Nonfatal Injury Report*. Retrieved January 25, 2007 from <http://webappa.cdc.gov/sasweb/ncipc/nfirates2001.html>
- National Research Council & Institute of Medicine. (2000). Early childhood intervention: Views from the field. Report of a Workshop. Committee on Integrating the Science of Early Childhood Development. Shonkoff, J. P., Phillips, D.A., Keilty, B. (Eds.). Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Nelson, C.B., Kessler, R.C., & Mroczek, D. (2001). Scoring the World Health Organization's Composite International Diagnostic Interview Short-Form (CIDI-SF; v1.0 NOV98).
- NSCAW Research Group (2002). Methodological lessons from the National Survey of Child and Adolescent Well-Being: The first three years of the USA's first national probability study of children and families investigated for abuse and neglect. *Child and Youth Services Review*, 24(6/7), 513–541.

- Pecora, P. J., Whittaker, J. K., Maluccio, A. N., Barth, R. P., & Plotnick, R. D. (2000). *The child welfare challenge* (2nd ed.). New York: Aldine de Gruyter.
- Perry, M. A., Doran, L. D., & Wells, E. A. (1983). Developmental and behavioral characteristics of the physically abused child. *Journal of Clinical Child Psychology, 12*, 320–324.
- Pinderhughes, E. E., Harden, B. J., & Guyer, A. E. (2007). Children in foster care. In J. L. Aber, S. J. Bishop-Josef, S. M. Jones, K. T. McLearn & D. A. Phillips (Eds.), *Child development and social policy: Knowledge for action* (pp. 201–216). Washington, DC: American Psychological Association.
- Raver, C. C., & Zigler, E. E. (1997). Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly, 12*, 363–385.
- Rogosch, F. A., Cicchetti, D., & Aber, J. L. (1995). The role of child maltreatment in early deviations in cognitive and affective processing abilities and later peer relationship problems. *Development and Psychopathology, 7*, 591–609.
- Sawyer, R. J., & Dubowitz, H. (1994). School performance of children in kinship care. *Child Abuse & Neglect, 18*, 587–597.
- Shahinfar, A., Fox, N., & Leavitt, L. (2000). Preschool children's exposure to violence: Relation of behavior problems to parent and child reports. *American Journal of Orthopsychiatry, 70*(1), 115–125.
- Shonk, S. M., & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academic and behavioral maladjustment *Developmental Psychology, 37*(1), 3–17.
- Sparrow, S. S., Balla, D. A., & Cicchetti, D. V. (1984). *Vineland Adaptive Behavior Scales: Interview Edition, Survey Form Manual*. Circle Pines, MN: American Guidance Service.
- Sparrow, S. S., Carter, A. S., & Cicchetti, D. V. (1993). *Vineland Screener: Overview, reliability, validity, administration, and scoring*. New Haven, CT: Yale University Child Study Center.
- Stien, P.T., & Kendall, J.C. (2003). Psychological trauma and the developing brain: Neurologically based interventions for troubled children. Binghamton, NY: Haworth.
- Stevenson, J., Richman, N., & Graham, P. (1985). Behaviour problems and language abilities at three years and behavioural deviance at eight years *Journal of Child Psychology and Psychiatry and Allied Disciplines, 26*, 215–230.
- Straus, M. A. (1996). Spanking and the making of a violent society. *Pediatrics, 98*(4 suppl.), 837–842.

- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the parent-child conflict tactics scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22(4), 249–270.
- Taussig, H. N., & Culhane, S. E. (2005). *Foster care as an intervention for abused and neglected children*. Kingston, NJ: Civic Research Institute.
- Toth, S. L., Manly, J. T., & Cicchetti, D. (1992). Child maltreatment and vulnerability to depression. *Development and Psychopathology*, 4, 97–112.
- U.S. Department of Education (2005). 25th Annual (2003) Report to Congress on the Implementation of the Individuals with Disabilities Act (Vol. 1): U.S. Department of Education.
- U.S. Department of Health and Human Services (2000). *HHS issues final child welfare regulations to improve services and outcomes for children*. Retrieved November 30, 2006, from <http://www.acf.hhs.gov/news/press/2000/cwelfare.htm>
- U.S. Department of Health and Human Services, Administration for Children and Families (2001). *Background paper: Child and Family Services reviews national standards*. Retrieved December 28, 2006, from <http://www.acf.hhs.gov/programs/cb/cwmonitoring/legislation/background.htm>
- U.S. Department of Health and Human Services, Administration for Children and Families (2005a). *The adoption and foster care analysis and reporting system (FACARS) report: Preliminary FY 2003 estimates as of April, 2005*. Washington, DC: Children's Bureau.
- U.S. Department of Health and Human Services, Administration for Children and Families (2005b). *National Survey of Child and Adolescent Well-Being (NSCAW): CPS sample component, Wave 1 data analysis report*. Washington, DC: Author.
- U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2006a). *Child maltreatment 2004*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Administration for Children and Families (2006b). *National Survey of Child and Adolescent Well-Being: Combined Waves 1–5 Data File Users Manual, Restricted Release Version*. Washington, DC: Administration for Children and Families.
- U.S. Department of Health and Human Services, Administration for Children and Families. (2008a). *How do caseworker judgments predict substantiation of child maltreatment?* Research Brief. Washington, DC: Author.

- U.S. Department of Health and Human Services, Administration for Children and Families. (2008b). The well-being of children 18 months following a child maltreatment investigation: An 18-month follow-up report from the National Survey of Child and Adolescent Well-Being. Washington, DC: Author.
- U.S. Department of Health and Human Services, Children's Bureau (2003a). *Child welfare outcomes 2003: Annual report*. Washington, DC: Children's Bureau.
- U.S. Department of Health and Human Services, Children's Bureau, & Administration for Children and Families (2003b). Results of the 2001 & 2002 child and family service reviews. Retrieved January 3, 2007, from <http://www.acf.hhs.gov/programs/cb/cwmonitoring/results/results/results.ppt>
- Wallace, I., Nahm, E., Luba, A. & Cross, T.P. (2006). *List of NSCAW-related publications*. Research Triangle Park, NC: RTI International.
- Walsh, C., MacMillan, H., & Jamieson, E. (2002). The relationship between parental psychiatric disorder and child physical and sexual abuse: Findings from the Ontario Health Supplement. *Child Abuse & Neglect*, 26(1):, 1–22.
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 629–640.
- Ware, J., Jr., Kosinski, M., & Keller, S. D. (1996). A 12-item short-form health survey: Construction of scales and preliminary tests of reliability and validity. *Medical Care*, 34(3), 220–233.
- Webster-Stratton, C., & Reid, J. (2004). Strengthening social and emotional competence in young children—The foundation for early school readiness and success. *Infants and Young Children*, 17, 96–113.
- World Health Organization. (2002). *World Report on Violence and Health*. Geneva: Author.
- Wodarski, J. S., Kurtz, P. D., Gaudin, J. M., & Howing, P. T. (1990). Maltreatment and the school-age child: Major academic, socioemotional, and adaptive outcomes. *Social Work*, 35, 506–513.
- Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Examiner's manual. Woodcock-Johnson III Tests of Cognitive Abilities*. Itasca, IL: Riverside Publishing.
- Wulczyn, F., Hislop, K. B., & Harden, B. J. (2002). The placement of infants in foster care. *Infant Mental Health Journal*, 23, 454–475.
- Zaslow, M. J., Gallagher, M., Hair, E. C., Egeland, B., Weinfield, N. S., Ogawa, J. R., et al. (2006). Longitudinal prediction of child outcomes from differing measures of parenting in a low income sample. *Developmental Psychology*, 42(1), 27–37.

Zimmerman, I. L., Steiner, V. G., & Pond, R. E. (1992). *PLS-3: Preschool Language Scale-3*. San Antonio, TX: The Psychological Corporation.

## APPENDIX A TECHNICAL INFORMATION

### Scales

***Child and Adolescent Services Assessment.*** Data on the use of mental health services are based on an adapted version of the Child and Adolescent Services Assessment (CASA; Ascher et al., 1996; Burns et al., 1995; Farmer et al., 1994). This instrument gathers information from caregivers and children about an array of child-focused services for emotional or behavioral problems including outpatient and residential care. Outpatient services include: (1) clinic-based specialty mental health services; (2) private practice professionals including psychiatrists, psychologists, social workers, and psychiatric nurses and drug or alcohol clinics; (3) in-home mental health services (e.g., family preservation); and (4) therapeutic nursery/day treatment. Residential services include: (1) hospitalization in a psychiatric hospital or psychiatric unit of a general hospital, (2) hospitalization in a medical inpatient unit for emotional or behavioral problems, and (3) inpatient drug or alcohol detoxification.

***Child Behavior Checklist.*** (Achenbach, 1991). The CBCL was designed to assess children's social competencies and problem behaviors on the basis of "standardized descriptions of behavior rather than diagnostic inferences" (Achenbach, 1991, p. iii). Two versions of the checklist have been developed; one for children aged 1½ to 5 and another for those aged 6 to 18. In this wave of data collection, the version for children aged 6 to 18 was used. The checklist consists of 118 items related to behavior problems. For each item, the child's caregiver indicates how well the behavior describes the child, either now or within the past 6 months, on a 3-point scale: 0, "not true" of the child; 1, "somewhat/sometimes true"; or 2, "very/often true." The caregiver also reports on 20 social competency items such as the amount and quality of the child's participation in sports, hobbies, jobs and chores, and organizations; friendships; and school functioning. For this report, the CBCL *Total Problem* behavior standardized (T) score was used to measure the behavioral well-being of children. In keeping with recommended procedures for classifying the Total T score (Achenbach, 1991; 1992), behavior was classified as Normal (< 60), Borderline (60 to 63), or Clinical (> 63).

***Composite International Diagnostic Interview Short Form—Mental Health.*** The CIDI-SF is a highly standardized interview that screens for mental health and substance use disorders using the criteria established in the Diagnostic and Statistical Manual 3<sup>rd</sup> Edition, Revised (*DSM-III-R*). The full instrument evaluates the presence of eight disorders: major depression, generalized anxiety, specific phobia, social phobia, agoraphobia, panic attack, alcohol dependence, and drug dependence. For this study, only the sections on major depression, alcohol dependence, and drug dependence were administered. Questions are scripted to ask about the previous 12-month period (Nelson, Kessler, & Mroczek, 2001); the section on depression was administered by in-person interview, while the sections on alcohol and drug dependence were administered by means of audio computer-assisted self-interviewing. The CIDI-SF version used in NSCAW does not indicate comorbidity with other disorders, nor does it differentiate between depression occurring as a primary diagnosis or in the context of other disorders, such as bipolar disorder or schizoaffective disorder.

For alcohol, respondents scored in the dependence range if (1) they indicated that they had consumed four or more drinks in a single day at least once during the past year, and (2) they reported at least three of the seven *DSM-III-R* symptoms of dependence. For drugs, respondents scored in the dependence range if (1) they indicated that they had used any of a variety of substances “on their own” (without a doctor’s prescription, in larger amounts than prescribed, or for a longer period than prescribed) during the past year, and (2) they reported at least three of the seven *DSM-III-R* symptoms of dependence.

***Kaufman Brief Intelligence Test.*** (Kaufman & Kaufman, 1990). The Kaufman Brief Intelligence Test is a brief, individually administered screener of verbal and nonverbal intelligence designed for individuals 4 years and older. It includes two subtests: Vocabulary (expressive vocabulary & definitions) and Matrices (ability to perceive relationships and complete analogies). We used the standard score for vocabulary, matrices and total IQ composite. Each is normed to have a mean of 100 and standard deviation of 15.

***Loneliness and Social Dissatisfaction Scale.*** (Cassidy & Asher, 1992). The Loneliness and Social Dissatisfaction Scale assesses children’s feelings of loneliness and dissatisfaction with peer support at school using a self-report questionnaire. This is a modification of the version used for older elementary school children. The children rate 16 items such as “Can you find a friend at school when you need one?” on a 3-point scale. We used the total score. Higher scores indicate greater loneliness. Cassidy and Asher (1992) indicated that their administration inadvertently omitted one item; in order to compare means, we prorated our mean by eliminating one item.

***Parent-Child Conflict Tactics Scales.*** (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The CTS-PC was developed to measure psychological and physical maltreatment and neglect by parents, as well as nonviolent modes of discipline. CTSPC scales include nonviolent discipline (e.g., putting a child in “time out”), psychological aggression (e.g., shouting, yelling, or screaming at a child), physical assault, and neglect. Because items in the physical assault scale range widely in severity, from spanking to burning a child on purpose, the scale may be divided into subscales for minor, severe, and very severe physical assault. In NSCAW, parental report on the CTS-PC measures were obtained from permanent caregivers, including biological parents, adoptive parents, and other in-home caregivers, but excluding foster parents and other out-of-home caregivers. In this report, we present findings from the nonviolent discipline, psychological aggression, and neglect scales, as well as the physical assault subscales. Measures shown are annual and lifetime prevalence and year chronicity for each scale and each item in each scale. Annual prevalence for each item is the percentage of caregivers who report that they have used the tactic in the past year; lifetime prevalence is the percentage of caregivers who report that they have ever used the tactic. Prevalence for each scale is the percentage of caregivers who report having used any of the tactics in the scale. Among the subset of caregivers who reported having used a tactic at least once in the past year, year chronicity is a measure of how often they used it.

***Preschool Language Scale-3.*** (Zimmerman, Steiner, & Pond, 1992). The PLS-3 measures language development of infants and young children (ages 2 weeks to 6 years, 11 months). The *Auditory Comprehension* subscale measures receptive communication skills, while the *Expressive Communication* subscale measures expressive communication skills with tasks that focus on social communication and vocal development. A *Total Language* score combines

these two subscales. PLS-3 scores are standardized with a mean of 100 and standard deviation of 15.

***School Engagement.*** (Safe and Drug Free Schools). This measure assesses children's "connection" to the school experience by means of a self-rating scale. It is designed for children in elementary and middle school. In the current study it was used for all children aged 6 or older. The scale includes 11 items that measure both the behavioral component (participation) and psychological component (identification) of school engagement. Items are measured on a 4-point scale from 1 *never* to 4 *almost always*. We used the total scores. The range in scores is 11 to 44, with higher scores indicating greater connection.

***Social Skills Rating System.*** (SSRS: Gresham & Elliott, 1990). The Social Skills Rating System (SSRS) measures caregiver and teacher perception of the social skills of children between the ages of 3 and 18. Separate versions have been developed for preschool, elementary school, and secondary school. The scores used in this report are based on the caregiver and teacher reports. The SSRS assesses social skills in four domains—cooperation, assertion, responsibility, and self-control—and provides standard scores and competence categories for the total as well as competence categories for the individual domains. The SSRS standardized scores are based on a mean of 100 with a standard deviation of 15. Total scores were categorized as suggested in the SSRS manual (Gresham & Elliott, 1990): Fewer Social Skills (< 85), Average Social Skills (85 to 115), or More Social Skills (> 115). We also included subscale scores and competence categories for the domains of assertion, self-control, and cooperation obtained from both parent and teacher forms.

***Short Form Health Survey.*** The SF-12 is a standardized survey instrument designed to provide an indicator of physical and mental health status. It includes 12 items selected from the Medical Outcomes Study 36-item Short-Form Health Survey (SF-36). The SF-12 is collapsed into two summary scales—a physical health component summary and a mental health component summary. Average scores for the two summary scales have been shown to closely reflect those from the original 36-item form. Furthermore, the SF-12 has demonstrated adequate reliability and validity (see Ware, Kosinski, & Keller, 1996, for more information).

***Teacher-Rating Instrument of Proactive and Reactive Aggression.*** (Dodge & Coie, 1987). The Teacher Rating Instrument of Proactive and Reactive Aggression was designed to measure how children process information regarding aggressive behavior. Reactive aggression includes aggressive behaviors in which children react to provocation, measured by statements such as "Child angry at teasing/threats." Proactive aggression includes aggressive behaviors that are initiated by the child not in response to others actions and includes items such as "Child threatens to get his way." Three statements reflecting each type of aggression are included in the instrument, each of which teachers are asked to rate on a 5-point scale from 1 (*Never*) to 5 (*Very Often*). The range is 3 to 15 for each type of aggression, with higher scores indicating more aggression.

***Teacher's Report Form.*** (Achenbach System of Empirically Based Assessment 1991). The Teacher's Report Form (TRF) uses the same constructs as the CBCL to evaluate a child's behavior problems. The TRF is different in that it is completed by the child's teacher, rather than a parent, and it includes some items specifically related to behaviors displayed in school. As with

the CBCL, two versions of the form have been developed: one for children aged 1½ to 5 and another for those aged 6 to 18. In this wave of data collection, the version for children aged 6 to 18 was used. Each item on the Problem Section of the TRF contains a statement about a child's behavior. The teacher selects the response that assesses how well each statement describes the child, either currently or within the previous two months. Response choices include: "Not True" (0), "Somewhat or Sometimes True" (1), and "Very True or Often True" (2). For this report, we present Internalizing, Externalizing, and Total Problems T scores as well as the Attention Problems syndrome score, which has a normative mean of 50 and standard deviation of 10.

***Vineland Screener.*** (Sparrow, Carter, & Cicchetti, 1993). We used the daily-living skills domain of the Vineland Screener, a shortened version of the Vineland Adaptive Behavior Scale. The scale is administered via a structured interview with the child's caregiver in order to determine the frequency with which the child typically performs a given behavior. For children aged 5 to 6, skills assessed include basic eating and drinking, dressing, toileting, hygiene, housekeeping, time and money concepts, telephone use, and basic safety. Scores were categorized using the classifications suggested in the VABS manual (Sparrow, Balla, & Cicchetti, 1984): Low (< 70), Moderately Low (70 to 84), or Adequate to High (> 84).

***Woodcock-Johnson III Tests of Cognitive Abilities.*** (Woodcock, McGrew, & Mather, 2001). Four subtests were used from the Woodcock Johnson III Tests of Cognitive Abilities. *Letter-Word Identification* is a basic reading skill involving naming letters and reading words aloud from a list. *Calculation* is a test of math achievement measuring the ability to perform arithmetic computation with paper and pencil. *Passage Comprehension* is a measure of reading comprehension in which the individual has to orally supply the missing word removed from each sentence or very brief paragraph. *Applied Problems* is a test of math reasoning requiring the individual to solve oral word-problems. Standardized scores are based on a mean of 100 with a standard deviation of 15.

## **Derived Variables**

***Risk for Physical Disability.*** Risk for physical disability was determined based upon either the caregiver or teacher report. A child was considered at risk for a physical impairment if the caregiver reported having been told that his or her child had a hearing impairment, visual impairment (including blindness), orthopedic impairment, or multiple disabilities at any point over the course of the study. A child was also considered to be at risk for a physical disability if the teacher reported an Individualized Education Plan (IEP) classification due to visual, hearing, orthopedic, or other physical disability.

***Risk for Cognitive Disability.*** Risk for a cognitive disability was determined to include any child with a score at the five year follow-ups of 2 standard deviations below the mean on the Preschool Language Scales (Zimmerman, Steiner, & Pond, 1992) or the Kaufman Brief Intelligence Test or K-BIT (Kaufman & Kaufman, 1990).

***Risk for Emotional/Behavioral Problem.*** Risk for an emotional or behavioral problem was determined to include any child with a score greater than 63 according to either caregiver or teacher report on the Total Problems, Externalizing or Externalizing Scales of the Child Behavior Checklist (Achenbach, 1991)

***Serious Chronic Health Condition.*** Children were characterized as having a serious chronic health condition if the caregiver reported that they had received any of the following diagnoses: AIDS, asthma, anemia, arthritis/joint problems, brain tumor, cerebral palsy, chronic heart condition, diabetes, eczema/other skin disease, epilepsy/fits/convulsions, fetal alcohol syndrome, hernia, high blood pressure, birth defect (e.g., cleft palate), other blood disorder, other respiratory problems, persistent bowel problems, physical deformities, repeated ear infections, severe allergies, sickle cell anemia, or Spina Bifida.

***Need for Mental Health Services (Caregivers).*** Caregivers were determined to be “in need of mental health services” when they met any one of four criteria: (1) caregiver self-reported need for “a lot” or “some” help for a mental health problem, (2) caseworker reported a caregiver’s need for mental health services, (3) self-reported scores were within the clinical range on either the Dysthymia and Anhedonia scales of the CIDI-SF, or (4) a score on the Mental Health scale of the SF-12 exceeded 1.5 standard deviations above the norm ( $t \geq 65$ ).

***Need for Mental Health Services (Children).*** Children were defined as “in need of mental health services” if either (1) a caregiver reported an elevated score ( $>1.5$  standard deviations above the mean) on the CBCL; or (2) a teacher reported an elevated score on the Total Problems, Internalizing or Externalizing subscales of the TRF.

***Need for Special Education (Children).*** Children were considered to be in need of a referral for special education services if they met any of the four following criteria: (1) Total Problem, Internalizing or Externalizing t-scores were greater than 65 on either the Child Behavior Checklist or Teacher Report Form, (2) an overall score on the Kaufman Brief Intelligence Test was more than 2 standard deviations below the mean, (3) an overall score on the Preschool Language Scale was more than 2 standard deviations below the mean, or (4) a score on the Vineland Screener was more than 2 standard deviations below the mean.

***Need for Substance Abuse Services (Caregivers).*** Caregivers were determined to be in need of substance abuse services when they met any one of 3 criteria: (1) caregiver self-reported a need for “a lot” or “some” help for an alcohol or drug problem, (2) caseworker reported caregiver had a need for alcohol or drug abuse services, or (3) caregiver scored within the clinical range on either the Alcohol Dependence or Drug Dependence scales of the CIDI-SF.

***Specialty Outpatient Mental Health Services.*** This category refers to services received from a private mental health clinician (i.e., psychiatrist, psychologist, social worker, or psychiatric nurse not working within a community health center), a community mental health center, a therapeutic nursery at a mental health or community health center (for 5-year-olds only), or in-home counseling or crisis services.

***Any Outpatient Mental Health Service.*** This category includes use of specialty outpatient services, school-based mental health services (e.g., services from a school guidance counselor, social worker, or psychologist), and mental health services performed by a family doctor.



**APPENDIX B**  
**EXHIBITS OF RESULTS OF 5- TO 6-YEAR FOLLOW-UP**  
**FOR CHILDREN AGED 1 TO 4 AT BASELINE**

This appendix contains tables that provide preliminary results of the Wave 5 follow-up for a different age group of NSCAW children: young children who were aged 1 to 4 years old when they were involved in an investigation of child maltreatment by child welfare system (CWS) services. The Wave 5 young child follow-up was conducted March–December 2006, or 5 to 6 years after the index investigation. It included the 1,120 children in the child protective services sample component who met the age criteria from 92 child welfare agencies nationwide; 902 children or their caregiver participated at this 6-year follow-up and their data are included in the following exhibits. The data collection methods were identical to those that were reported for the infant sample, with the exception of a few measures that differed on the basis of appropriateness for the age group studied. Complete information about the NSCAW sampling, instrumentation, data collection, weighting and variance estimation, and data availability can be found in other documents (U.S. Department of Health and Human Services, 2005b; U.S. Department of Health and Human Services, 2006b).

**Scope of These Exhibits**

The research questions addressed by the young child exhibits were essentially identical to those of the infant sample:

- Who are children who have had contact with the CWS during young childhood? What types of maltreatment did they experience? What risks did they face? What environments are these children living in 5 years later.
- How well are these children doing in terms of their physical, psychosocial, cognitive, peer, and academic development? How does this development compare to other children?
- How stable are the children’s living situations? Are they now living in permanent homes?
- What services do these children, caregivers and families need? What have they received?

For the most part, these exhibits parallel the exhibits presented in the preceding report on the infant sample, with exhibits with the same number generally including parallel analyses. Exhibit B.1-1 presents basic information on the difference between the Wave 5 infant and young child tables. The first set (Exhibits 1-1 through 1-4) present information on the background characteristics of the child, caregiver and maltreatment characteristics of the young child population. The second set (Exhibits 2-1 through 2-14) present information on young children’s well-being and development. The third set (Exhibits 3-1 through 3-8) concerns the permanency of children’s living situation: information on out-of-home placements, termination of parental rights and adoption. The final set (Exhibits 4-1 through 4-7) details the health, mental health, education, child welfare and family support services provided.

As with the infant sample, many of the results in these exhibits are presented by a standard set of covariates: child sex, child race/ethnicity group, child placement setting at Wave 5, and the presence or absence of each of three different types of disability (physical, cognitive and emotional/behavioral). In addition, analyses also broke down results by a range of different maltreatment and maltreatment severity variables, but these were only presented in exhibits when they were statistically significant, to save space. Standard statistical tests (Pearson's  $\chi^2$ ,  $t$ ,  $F$ ) adapted for complex samples were performed to identify statistically significant differences by group.

Although children who were between 1 and 4 years old at baseline look similar in many areas to children that were infants at baseline, there were some important differences between the groups. For example, at the time of the index report many of the sociodemographics characteristics of both groups were similar, but the description of the case provided by the caseworker showed more risk factors (e.g., primary caregiver alcohol and drug abuse, mental health problems, arrest history, poor parenting skills) among the infants than the young children. Consistently, infants (38.7%) were more likely to be substantiated than young children (21.8%). In terms of type of index maltreatment, young children were more likely to have been reported for physical abuse (27.8%), while infants were more likely to be reported for failure to provide (34.9%).

By Wave 5, the majority of children who were infants at baseline were 5 and 6 years old, 72.9% were in kindergarten and some were in first grade. Among those who were young children at baseline, the majority were between 7 and 9 years old, in 2<sup>nd</sup> to 4<sup>th</sup> grade.

In terms of physical health, children who were infants and young children at the time of the index investigation appear to be in general in good health and similar proportions (about a fifth) have a chronic health problem.

Children who were 1 to 4 years old (3.2%) at baseline had lower rates of cognitive disability at Wave 5 than those who were infants (13.0%). Consistently, those who were young children at baseline had a higher standing relative to their age group on a cognitive functioning test than those who were infants at baseline. Both groups looked similar on social skills, with around a fifth having fewer social skills than expected for their age. Those who were young children at baseline, however, were slightly more likely to have emotional/behavioral problems (36.8% vs. 28.9%). According to caregivers' reports, young children (12.5%) were more likely to be in the borderline/clinical range for internalizing problems than those who were infants (5.5%). According to teachers' reports, those who were young children appeared to have more behavioral problems in all areas than those who were infants at baseline (Total: 13.7% vs. 7.9%; Internalizing: 22.0% vs. 7.6%; Externalizing: 13.7% vs. 8.8%, respectively).

A clear area of differences between these groups was placement and adoption. Infants (37.4%) were more likely to be placed out of home than young children (25.0%). As expected, more of those who were infants at baseline experienced termination of parental rights and adoption (19.6% with TPR and 17.0% adopted) than those who were young children (13.1% with TPR and only 6.0% adopted). Those who were older at baseline were not only less likely to be adopted, but also the mean time from first placement to adoption finalization took almost 6 months longer than for those who were infants at baseline (mean number of days: 848 vs. 681).

In terms of preventive services, both groups were likely to receive services and almost all of them were up to date with immunizations, a finding consistent with the majority of them being in the school system which requires immunizations. The use of emergency services was also similar for both groups (about a quarter used the emergency room or urgent care for an injury or illness since the last interview). Both groups had somewhat similar rates of use of outpatient mental health services (less than a fifth for each group), but children who were young children at baseline were more likely to be receiving school-based services than those who were infants (19.8% vs. 10.8%), which is expectable given that they had spent more time in the school system and had more time to be identified as in need. Consistently, those who were young children were more likely to be using psychotropic medication (16.0%) and to have an Individualized Educational Plan (IEP, 37.2%) than those who were infants (psychotropic medication: 6.4%, IEP: 22.6%).

Child welfare and other family services were less likely to be received by those who were young children compared to those who were infants. Thus, among the small percentage that still had contact with CWS at Wave 5 (114 young children and 129 infants), only 7.6% of young children had any CWS service compared to 68.4% of infants. Caregivers of those who were infants at baseline received more family based services (55.9%) and parenting support services (55.6%) than caregivers of those who were young children at baseline (family based services: 5.3%; parenting support services: 5.4%). Importantly, although caseworkers at baseline identified more mental health and substance abuse problems among caregivers of infants than young children, both groups of caregivers had somewhat similar rate of mental health needs at Wave 5 (28.1% among caregivers of those who were young children at baseline, and 26.5% among those who were infants). Nevertheless only a small percentage at each group had received mental health services at Wave 5 (15.4% among caregivers of those who were young children at baseline, and 11.6% among those who were infants).

**Exhibit B.1-1**  
**Comparison of Wave 5 Infant and Young Child Samples**

	<b>Infant Sample</b>	<b>Young Child Sample</b>
<i>N</i>	962	921
Child age range at baseline (in years)	0 to 1 year	1 to 4 years
Period of data collection	09/2005 to 02/2006	03/2006 to 12/2006
Mean time to follow-up	5.5 years	5.9 years
Child age range at follow-up (in years)	4 to 7 years	6 to 10 years

**Exhibit B.1-2**  
**Child Characteristics**  
**Young Child Population at Wave 5**

<u>Child Characteristic</u>	Total % (SE) ( <i>N</i> <sub>min</sub> = 895)	In Home: Biological Parent ( <i>N</i> <sub>min</sub> = 600)	In Home: Adoptive Parent ( <i>N</i> <sub>min</sub> = 105)	In Home: Kin and Other ( <i>N</i> <sub>min</sub> = 144)	Out of Home ( <i>N</i> <sub>min</sub> = 46)
<b>Total</b>	100	75.11 (2.7)	5.3 (1.2)	15.8 (2.1)	3.8 (1.1)
<b>Child's sex</b>					
Male	51.4 (3.3)	53.9 (3.8)	58.5 (9.5)	35.3 (7.7)	60.0 (13.2)
Female	48.6 (3.3)	46.1 (3.8)	41.5 (9.5)	64.7 (7.7)	40.0 (13.2)
<b>Child's age*</b>					
6	12.9 (2.0)	13.7 (2.4)	19.3 (5.8)	7.3 (2.6)	9.9 (4.0)
7	34.2 (2.6)	31.5 (3.2)	57.2 (7.9)	38.9 (7.1)	36.2 (13.2)
8	31.1 (3.0)	31.8 (3.2)	17.6 (6.6)	29.3 (7.6)	44.7 (15.2)
9	21.6 (2.8)	22.7 (3.2)	5.8 (2.4)	24.5 (8.2)	9.2 (4.5)
10	0.2 (0.2)	0.3 (0.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
<b>Child's race/ethnicity</b>					
Black Non-Hispanic	29.6 (3.4)	27.8 (4.1)	37.5 (8.5)	37.2 (7.3)	21.4 (9.1)
White Non-Hispanic	45.1 (4.5)	47.5 (5.4)	42.0 (7.5)	32.9 (6.7)	52.5 (14.1)
Hispanic	18.5 (2.9)	18.5 (3.5)	16.2 (8.4)	20.4 (8.7)	14.0 (8.7)
Other	6.8 (1.8)	6.2 (2.1)	4.3 (2.2)	9.5 (4.8)	12.2 (10.9)
<b>Urban at baseline*</b>					
Yes	71.7 (6.3)	68.1 (6.9)	93.5 (3.3)	78.4 (7.8)	84.0 (9.3)
<b>Grade in school</b>					
Not in school	0.0 (0.0)	0.1 (0.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Preschool/other ungraded setting	0.4 (0.4)	0.0 (0.0)	6.8 (6.6)	0.0 (0.0)	0.0 (0.0)
Kindergarten	6.3 (1.3)	5.3 (1.0)	11.0 (5.7)	10.3 (4.9)	3.9 (2.3)
First grade	28.6 (2.9)	28.7 (3.2)	50.3 (10.9)	21.6 (5.4)	26.3 (12.7)
Second grade	28.0 (2.6)	27.6 (3.2)	18.8 (5.8)	36.0 (7.4)	15.7 (5.0)
Third grade	31.4 (3.4)	34.0 (4.1)	11.0 (4.3)	20.8 (6.7)	51.1 (14.6)
Fourth grade	5.2 (1.8)	4.3 (1.8)	2.1 (1.4)	11.4 (7.7)	3.0 (2.7)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Asterisks denote statistical significance of differences across setting types for each covariate (\**p* < .05).

**Exhibit B.1-3**  
**Caregiver and Household Characteristics**  
**Young Child Population at Wave 5**

<b>Caregiver Characteristic</b>	<b>Total % (<i>N</i><sub>min</sub> = 853)</b>	<b>In Home: Biological Parent (<i>N</i><sub>min</sub> = 577)</b>	<b>In Home: Adoptive Parent (<i>N</i><sub>min</sub> = 100)</b>	<b>In Home: Other (<i>N</i><sub>min</sub> = 134)</b>	<b>Out of Home (<i>N</i><sub>min</sub> = 42)</b>
<b>Caregiver's sex*</b>					
Male	14.1 (2.9)	17.5 (3.6)	3.3 (2.0)	4.3 (2.0)	1.3 (1.1)
Female	86.0 (2.9)	82.6 (3.6)	96.7 (2.0)	95.7 (2.0)	98.7 (1.1)
<b>Caregiver's age***</b>					
< 25	5.5 (1.6)	7.3 (2.2)	0.2 (0.2)	0.1 (0.1)	0.0 (0.0)
25–34	51.9 (3.9)	65.9 (4.1)	12.9 (4.4)	9.5 (3.4)	3.2 (2.0)
35–44	21.2 (2.8)	21.9 (3.2)	26.1 (7.5)	14.3 (5.2)	30.1 (13.4)
45–54	16.0 (2.4)	4.6 (1.3)	37.7 (8.5)	56.3 (7.0)	45.3 (15.1)
> 54	5.4 (1.0)	0.4 (0.3)	23.2 (9.1)	19.8 (5.4)	21.3 (9.0)
<b>Caregiver's race/ethnicity</b>					
Black	23.6 (3.8)	22.1 (4.0)	19.9 (7.5)	30.8 (8.0)	30.9 (13.4)
White	51.4 (4.2)	54.7 (4.9)	59.4 (9.9)	30.5 (5.7)	60.1 (13.8)
Hispanic	16.8 (2.8)	16.5 (3.2)	13.8 (7.9)	22.0 (8.9)	4.6 (2.7)
Other	8.2 (2.1)	6.7 (2.1)	6.9 (3.4)	16.8 (6.6)	4.4 (2.7)
<b>Caregiver's education**</b>					
Less than high school	20.6 (2.6)	21.9 (3.2)	2.7 (1.8)	22.5 (7.2)	12.5 (7.9)
High school	50.0 (3.1)	50.6 (4.2)	42.2 (8.3)	47.8 (8.4)	57.8 (13.8)
More than high school	29.3(3.6)	27.4 (4.6)	55.1 (8.5)	29.7 (7.7)	29.7 (11.8)
<b>% of federal poverty level***</b>					
< 50%	13.5 (2.2)	17.0 (2.8)	0.2 (0.2)	3.0 (1.4)	0.7 (0.8)
50–< 100%	26.6 (2.5)	29.6 (3.3)	5.3 (3.1)	20.0 (5.9)	22.2 (13.6)
100–200%	28.8 (3.0)	28.1 (3.1)	34.1 (11.4)	28.1 (5.7)	37.3 (17.8)
> 200%	31.1 (3.0)	25.3 (3.2)	60.4 (10.7)	48.8 (8.2)	39.7 (15.7)
<b>Caregiver's employment status*</b>					
Work full time	42.4 (3.4)	43.7 (4.0)	47.3 (8.4)	37.0 (8.8)	32.2 (14.5)
Work part time	17.0 (2.5)	19.0 (3.0)	10.9 (4.2)	11.9 (5.6)	6.2 (2.4)
Unemployed, looking for work	8.5 (1.5)	9.9 (1.9)	1.1 (0.7)	5.3 (3.5)	3.6 (2.3)
Doesn't work	31.1 (3.3)	26.3 (3.2)	40.4 (8.2)	45.0 (9.4)	55.4 (14.5)
Other	1.0 (0.4)	1.1 (0.4)	0.4 (0.4)	0.8 (0.5)	2.6 (2.2)
<b>Caregiver's marital status***</b>					
Married	43.9 (3.1)	36.5 (3.9)	77.5 (7.9)	66.2 (6.9)	50.9 (14.6)
Separated/divorced/widowed	26.5 (2.7)	26.4 (3.3)	19.2 (7.6)	24.7 (6.6)	45.6 (15.0)
Never married	29.7 (3.9)	37.1 (4.8)	3.4 (1.5)	9.1 (4.0)	3.6 (2.0)
<b>Number of children in home***</b>					
1	17.2 (2.6)	17.5 (3.0)	28.4 (9.2)	10.5 (3.5)	24.1 (9.7)
2	36.9 (3.1)	40.4 (3.3)	19.0 (5.2)	33.7 (9.7)	5.4 (2.7)
3	25.2 (3.0)	25.1 (3.2)	8.4 (3.5)	32.8 (9.0)	19.9 (9.2)
4	12.0 (2.5)	11.5 (2.3)	26.9 (8.7)	10.9 (5.0)	5.5 (3.0)
5 or more	8.7 (1.3)	5.5 (0.9)	17.4 (6.6)	12.2 (5.5)	45.1 (13.5)
<b>Number of adults in home*</b>					
1	32.5 (3.0)	37.7 (3.9)	19.5 (7.2)	15.2 (4.0)	20.1 (7.1)
2	46.9 (3.5)	45.9 (4.2)	62.1 (7.6)	46.8 (9.3)	46.2 (15.1)
3	14.0 (2.3)	11.0 (2.4)	15.2 (6.6)	23.1 (8.7)	33.3 (17.7)
4 or more	6.6 (2.1)	5.4 (2.1)	3.3 (1.4)	14.8 (7.1)	0.3 (0.4)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Asterisks denote statistical significance of differences across setting types for each covariate (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ).

**Exhibit B.1-4**  
**Caseworker Report on Maltreatment and Risk at Baseline**  
**Young Child Population at Wave 5**

	<i>N</i>	<i>% (SE)</i>
<b>Most serious maltreatment type</b>	827	
Physical abuse		27.8 (3.3)
Sexual abuse		6.1 (1.3)
Failure to provide		20.0 (2.6)
Failure to supervise/abandonment		37.7 (3.5)
Emotional, moral/legal, educational maltreatment		4.3 (2.1)
Other		4.1 (1.5)
<b>CWS outcome</b>	835	
Substantiated		21.8 (2.6)
Indicated		9.3 (2.2)
Unsubstantiated		52.7 (4.8)
High risk		3.1 (1.8)
Medium risk		3.2 (1.4)
Low risk		9.9 (3.2)
<b>Level of harm</b>	838	
None		44.3 (4.2)
Mild		28.2 (3.4)
Moderate		19.2 (2.1)
Severe		8.4 (1.6)
<b>Level of risk</b>	733	
None		31.8 (4.2)
Mild		32.0 (3.7)
Moderate		24.6 (2.8)
Severe		11.6 (1.9)
<b>Risk factors</b>		
Prior reports of child maltreatment	828	38.2 (3.3)
Prior investigation of child maltreatment	366	94.5 (1.7)
Prior incident of substantiated child maltreatment	314	50.9 (5.5)
Prior child welfare service history	791	26.4 (3.6)
Child has major special needs or behavioral problems	825	9.5 (1.2)
Active alcohol abuse by primary caregiver	787	8.2 (1.6)
Active alcohol abuse by secondary caregiver	583	11.1 (2.0)
Active drug abuse by primary caregiver	785	9.2 (1.7)
Active drug abuse by secondary caregiver	571	7.0 (1.1)
Primary caregiver has serious mental health problem	794	14.2 (2.0)
Primary caregiver has recent history of arrests	768	13.4 (2.7)
Primary caregiver has intellectual or cognitive impairments	813	5.4 (1.2)
Primary caregiver has physical impairments	821	2.5 (0.8)
Primary caregiver has poor parenting skills	817	31.8 (3.4)
Parent has unreal expectations of child	806	17.5 (3.0)
History of domestic violence against caregiver	775	29.3 (3.1)
Active domestic violence against caregiver	807	15.2 (2.2)
Primary caregiver uses inappropriate or excessive discipline	821	7.3 (2.2)
Secondary caregiver uses inappropriate or excessive discipline	598	6.9 (1.5)
History of abuse or neglect of primary caregiver	698	22.2 (3.5)

*Note:* Only cases with 5- to 6-year follow-up data analyzed. Percentages and standard errors are based on an analysis of weighted data. *N*s are unweighted.

**Exhibit B.2-1**  
**Caregiver Aggression and Neglect Prevalence by Case Characteristics**  
**Young Child Population at Wave 5**

Case Characteristic	<i>N</i> (Min)	Nonviolent Discipline % (SE)	Psychological Aggression % (SE)	Minor Assault/ Corporal Punishment % (SE)	Severe Physical Assault % (SE)	Very Severe Assault % (SE)	Neglect % (SE)
<b>Total</b>	837	98.0 (0.8)	84.5 (2.3)	64.1 (3.5)	5.4 (1.6)	0.7 (0.3)	19.7 (2.6)
<b>Sex</b>							
Male	445	98.7 (0.8)	87.1 (3.1)	65.3 (5.2)	3.4 (1.1)	1.0 (0.4)	16.2 (2.9)
Female	392	97.4 (1.4)	81.7 (4.0)	62.7 (4.9)	7.5 (3.0)	0.6 (0.4)	23.4 (4.3)
<b>Race/ethnicity</b>					*		
Black	277	98.7 (1.3)	84.5 (5.4)	69.9 (5.7)	9.4 (3.4)	1.1 (0.8)	21.2 (5.2)
White	368	97.9 (1.5)	85.1 (2.4)	66.6 (3.7)	3.3 (1.5)	0.5 (0.3)	22.0 (3.4)
Hispanic	136	97.2 (1.7)	83.4 (7.6)	51.5 (9.7)	3.3 (1.8)	0.5 (0.4)	12.1 (3.6)
Other	54	98.7 (1.3)	81.6 (8.9)	53.2 (13.6)	8.4 (5.8)	1.4 (1.4)	20.5 (10.8)
<b>Ever in out-of-home placement</b>							*
Yes	278	97.8 (1.7)	85.6 (3.8)	60.8 (7.0)	4.9 (2.3)	0.9 (0.7)	11.7 (3.4)
No	525	98.0 (1.0)	84.2 (2.6)	64.5 (3.8)	5.7 (1.8)	0.7 (0.4)	22.3 (2.9)
<b>Child setting</b>							*
In home, biological parent							
Ever out of home	108	98.8 (1.2)	85.4 (2.4)	67.6 (10.4)	2.8 (1.5)	2.5 (1.9)	13.8 (4.7)
Never out of home	456	97.8 (1.1)	83.9 (3.0)	64.0 (3.9)	4.9 (1.5)	0.7 (0.4)	22.7 <sup>a</sup> (2.8)
In home, adoptive parent	102	93.2 (6.6)	78.3 (8.7)	58.2 (8.9)	2.1 (1.6)	0.1 (0.1)	5.9 <sup>b</sup> (3.2)
In home, kin, or other caregiver	142	99.7 (0.2)	87.5 (4.0)	62.4 (8.7)	10.7 (7.9)	0.5 (0.5)	15.7 (7.7)
<b>Physical abuse at baseline</b>			*				
Yes	233	99.1 (0.7)	90.1 (3.3)	72.0 (7.0)	4.5 (2.0)	0.8 (0.6)	21.0 (5.6)
No	557	97.3 (1.3)	81.1 (2.9)	58.6 (3.8)	5.9 (2.1)	0.5 (0.2)	19.1 (3.1)
<b>Failure to provide at baseline</b>				**			
Yes	276	96.2 (2.4)	72.8 (7.1)	46.3 (6.6)	2.5 (1.0)	1.0 (0.8)	11.6 (3.0)
No	514	97.6 (0.7)	89.0 (2.7)	69.9 (4.1)	6.5 (2.3)	0.5 (0.3)	12.0 (3.8)
<b>Failure to supervise at baseline</b>							
Yes	395	98.4 (1.4)	85.8 (4.0)	64.1 (5.7)	4.4 (1.5)	0.5 (0.3)	17.5 (3.3)
No	395	98.0 (1.0)	83.1 (2.5)	62.7 (4.9)	6.2 (2.8)	0.7 (0.5)	22.0 (3.9)

*Note:* Based on caregiver self-report using Conflict Tactics Scale–Parent-Child version. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). The percentages with different superscripts are significantly different from each other ( $\alpha = .05$ ).

**Exhibit B.2-2**  
**Health of Children**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	In Good Health <sup>1</sup> % (SE)	Caregiver Reports Serious Chronic Health Problem <sup>2</sup> % (SE)
<b>Total</b>	896	96.9 (.85)	23.1 (2.7)
<b>Sex</b>			
Male	476	97.8 (1.2)	22.9 (4.3)
Female	422	96.3 (1.4)	23.3 (3.0)
<b>Race/ethnicity</b>			
Black	301	96.6 (1.5)	19.3 (3.9)
White	387	96.7 (1.1)	31.5 (3.8)
Hispanic	149	96.4 (3.0)	16.0 (5.2)
Other	59	100.0 (0.0)	5.3 (2.6)
<b>Child setting</b>			
In home, biological parents	601	96.6 (1.0)	15.9 (2.4)
In home, adoptive parents	105	92.0 (6.6)	30.0 (9.5)
In home, kin, or other caregiver	144	100.0 (0.3)	20.1 (6.6)
Out of home	48	97.8 (1.6)	11.0 (5.3)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests.

<sup>1</sup>“Good health” was defined as those children whose caregivers reported that there were in “good, very good, or excellent” health.

<sup>2</sup>“Serious chronic health condition” was defined here as one of a number of caregiver-reported diagnoses, as detailed in Appendix A.

**Exhibit B.2-3**  
**Most Common Chronic Health Conditions and Injuries or Accidents**  
**Young Child Population at Wave 5**

Health Condition	% (SE)
<b>Chronic health problem</b>	
Asthma	9.8 (1.7)
Severe allergies	3.8 (1.0)
Other respiratory condition	1.2 (0.5)
Eczema/other skin disorder	1.9 (0.7)
Repeated ear infections	1.2 (0.5)
<b>Serious injury, accident, or poisoning<sup>1</sup></b>	
Cuts, scrapes, puncture	3.1 (0.9)
Broken bone, dislocated joint	0.3 (0.1)
Other	3.6 (1.3)

*Note:*  $N = 897$ . All analyses are on weighted data;  $N$ s are unweighted.

<sup>1</sup>Caregivers were asked to report upon serious accidents and injuries only since the last interview.

**Exhibit B.2-4**  
**Child Risk for Cognitive, Emotional/Behavioral, and Physical Disabilities**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	Risk for Cognitive Disability % (SE)	Risk for Emotional/ Behavioral Problem % (SE)	Risk for Physical Disability % (SE)
<b>Total</b>	865	3.2 (0.9)	36.8 (3.6)	4.9 (1.4)
<b>Sex</b>				
Male	456	1.3 (0.5)	37.8 (5.0)	3.7 (1.2)
Female	411	5.1 (1.9)	35.7 (3.8)	6.2 (2.7)
<b>Race/ethnicity</b>				
Black	288	5.8 (2.6)	32.0 (5.8)	2.1 (1.3)
White	379	2.6 (1.2)	41.2 (4.6)	5.2 (1.2)
Hispanic	139	1.6 (0.9)	34.1 (9.7)	9.2 (7.0)
Other	59	0.1 (0.1)	34.7 (15.1)	4.0 (5.2)
<b>Child setting</b>				
In home, biological parents	587	2.8 (1.0)	36.3 (4.6)	3.9 (1.8)
In home, adoptive parents	98	2.3 (1.4)	51.6 (8.1)	11.3 (6.7)
In home, kin, or other caregiver	136	5.7 (3.7)	34.8 (7.4)	8.6 (3.6)
Out of home	46	1.1 (0.8)	32.2 (12.4)	1.6 (1.5)
<b>Physical maltreatment at baseline</b>				
Yes	246	3.0 (1.8)	44.2 (6.5)	5.2 (2.0)
No	591	3.4 (1.2)	33.3 (3.8)	5.2 (2.2)
<b>Clinically significant Vineland score</b>			*	
Yes	20	48.1 (15.8)	18.5 (4.7)	30.5 (13.5)
No	81	51.9 (15.8)	81.5 (4.7)	69.5 (13.5)

*Note:* See Appendix A for definitions of risk of cognitive disability, emotional/behavioral problem, and physical disability. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ ).

**Exhibit B.2-5**  
**Caregiver Report of Children's Behavior Problems**  
**Young Child Population at Wave 5**

Child Characteristic	N	In Clinical Range		
		Total Score % (SE)	Internalizing Score % (SE)	Externalizing Score % (SE)
<b>Total</b>	897	20.3 (2.7)	12.5 (2.0)	15.4 (1.9)
<b>Sex</b>				
Male	476	22.7 (3.6)	15.4 (3.6)	14.2 (2.4)
Female	421	17.8 (2.8)	9.4 (1.8)	16.7 (2.6)
<b>Race/ethnicity</b>		*		
Black	301	15.5 (3.4)	8.1 (2.4)	15.2 (3.5)
White	387	27.5 (4.2)	15.6 (3.3)	19.9 (3.3)
Hispanic	148	14.3 (4.7)	13.4 (7.5)	8.4 (3.5)
Other	59	12.2 (5.9)	9.3 (5.9)	6.8 (3.5)
<b>Child setting</b>				
In home, biological parents	600	17.7 (2.9)	11.8 (2.7)	12.9 (2.0)
In home, adoptive parents	105	35.1 (9.9)	21.3 (8.6)	35.0 (9.9)
In home, kin, or other caregiver	144	26.7 (5.6)	15.5 (5.0)	17.7 (4.8)
Out of home	48	25.9 (10.8)	1.9 (1.5)	29.2 (12.0)
<b>Chronic health condition</b>		***		*
Yes	177	44.0 (6.4)	22.4 (5.9)	28.1 (6.5)
No	719	15.6 (2.3)	10.5 (2.5)	12.9 (1.8)
<b>Physical disability</b>				
Yes	62	34.6 (13.9)	23.1 (11.5)	27.8 (12.2)
No	835	19.5 (2.8)	11.8 (2.2)	14.7 (1.8)
<b>Cognitive disability</b>				
Yes	38	38.5 (15.6)	16.3 (14.2)	30.9 (14.2)
No	826	19.7 (2.8)	12.5 (2.1)	14.8 (2.0)
<b>Failure to provide at baseline</b>			**	*
Yes	293	15.6 (4.7)	6.6 (1.6)	8.8 (2.3)
No	546	23.0 (3.5)	15.5 (3.3)	18.7 (2.6)

*Note:* Instrument used is the Child Behavior Checklist. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ).

**Exhibit B.2-6**  
**Teacher Report of Children's Behavior Problems**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	In Clinical Range		
		Total Score % (SE)	Internalizing Score % (SE)	Externalizing Score % (SE)
<b>Total</b>	558	13.7 (2.8)	22.0 (3.4)	13.7 (2.9)
<b>Sex</b>				
Male	289	11.4 (3.5)	23.7 (4.9)	11.5 (3.4)
Female	269	16.2 (4.2)	20.0 (4.7)	16.0 (4.1)
<b>Race/ethnicity</b>		*		
Black	172	21.2 (6.6)	20.4 (7.4)	24.5 (6.9)
White	259	9.0 (2.3)	22.2 (4.8)	7.9 (2.0)
Hispanic	88	20.3 (10.6)	29.0 (11.4)	6.8 (4.2)
Other	38	0.7 (0.6)	2.3 (1.3)	31.6 (19.3)
<b>Child setting</b>				
In home, biological parents	386	14.1 (3.3)	24.5 (4.6)	13.9 (3.7)
In home, adoptive parents	59	19.4 (11.9)	11.2 (5.3)	23.5 (11.7)
In home, kin, or other caregiver	86	11.9 (4.9)	16.0 (8.1)	11.4 (5.0)
Out of home	27	6.3 (3.6)	6.0 (3.7)	6.9 (3.2)
<b>Chronic health condition</b>			*	
Yes	115	11.2 (4.3)	40.1 (8.8)	10.1 (2.9)
No	442	14.5 (3.4)	18.4 (3.4)	14.7 (3.5)
<b>Physical disability</b>				
Yes	33	34.5 (20.6)	41.6 (22.6)	6.6 (4.0)
No	525	12.3 (2.4)	20.8 (3.6)	14.2 (3.1)
<b>Cognitive disability</b>				
Yes	20	15.0 (9.5)	20.3 (11.8)	7.8 (5.4)
No	525	13.8 (2.9)	22.2 (3.5)	13.8 (3.0)
<b>Neglectful supervision at baseline*</b>				
Yes	258	15.6 (5.4)	27.8 (4.7)	18.0 (5.5)
No	264	12.9 (3.1)	15.7 (3.6)	10.5 (2.7)

*Note:* Instrument used is the Teacher Report Form (TRF). All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ ).

**Exhibit B.2-7**  
**Teacher Ratings of Attention and Aggressive Behaviors**  
**Young Child Population at Wave 5**

Child Characteristic	TRF Attention Problems		Proactive Aggression		Reactive Aggression	
	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)
<b>Total</b>	598	52.4 (0.2)***	553	4.5 (0.2)	553	6.9 (0.3)
<b>Sex</b>		*				*
Male	309	51.6 (0.3)	283	4.6 (0.3)	283	7.5 (0.4)
Female	289	52.9 (0.4)	270	4.4 (0.2)	270	6.2 (0.3)
<b>Race/ethnicity</b>				*		*
Black	188	51.8 (0.4)	176	5.3 (0.4) <sup>a</sup>	176	7.8 (0.6) <sup>a</sup>
White	274	52.2 (0.3)	254	4.4 (0.2) <sup>b</sup>	254	7.0 (0.4) <sup>a,c</sup>
Hispanic	94	52.5 (1.1)	87	4.0 (0.4) <sup>b</sup>	87	5.8 (0.5) <sup>b,d</sup>
Other	41	53.2 (0.8)	35	3.8 (0.3) <sup>b</sup>	35	5.4 (0.7) <sup>c,d</sup>
<b>Chronic health conditions</b>						
Yes	130	53.1 (0.6)	122	5.1 (0.5)	122	7.6 (0.5)
No	467	52.0 (0.3)	430	4.4 (0.2)	430	6.8 (0.3)
<b>Setting</b>						
In home, biological parents	410	52.3 (0.3)	377	4.5 (0.2)	377	7.0 (0.3)
In home, adoptive parents	65	51.4 (0.4)	58	4.1 (0.3)	58	6.4 (0.8)
In home, kin, or other caregiver	93	52.4 (0.6)	90	4.7 (0.4)	90	6.6 (0.7)
Out of home	30	51.3 (0.4)	28	4.8 (0.8)	28	7.1 (1.5)
<b>Severity of abuse</b>						
Dangerous acts	37	51.1 (0.5)	35	4.9 (0.8)	35	6.6 (1.0)
Marks	45	52.1 (0.7)	38	4.6 (0.6)	38	6.7 (0.8)
Hospital < 24 hours	16	52.1 (1.0)	16	4.3 (0.6)	16	6.4 (0.4)
Hospital >24 hours	10	51.4 (0.7)	9	4.5 (0.8)	9	6.6 (0.9)
<b>Severity of neglect</b>		**		***		*
Mild	125 <sup>1,2</sup>	52.2 (0.4) <sup>a</sup>	116 <sup>3</sup>	4.4 (0.3) <sup>a</sup>	116	6.6 (0.5) <sup>a</sup>
Moderate	79	53.4 (0.6) <sup>a</sup>	69	5.7 (0.4) <sup>b</sup>	69	8.6 (0.5) <sup>b</sup>
Serious	54	52.3 (0.4) <sup>a</sup>	53	4.2 (0.4) <sup>a,c</sup>	53	6.2 (0.6) <sup>a</sup>
Severe	38	51.6 (0.7) <sup>a</sup>	37	3.9 (0.3) <sup>a,c</sup>	37	7.0 (0.9)
Grave	17	58.9 (1.8) <sup>b</sup>	15	3.4 (0.4) <sup>c</sup>	15	8.1 (0.3) <sup>b</sup>

*Note:* Instruments used are the Teacher Report Form (TRF) and the Teacher-Rating Instrument of Proactive and Reactive Aggression. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .005$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

<sup>1</sup>The linear trend was significant ( $p < .005$ ).

<sup>2</sup>The quadratic trend was significant ( $p < .001$ ).

<sup>3</sup>The linear trend was significant ( $p < .001$ ).

**Exhibit B.2-8**  
**Cognitive Test Scores**  
**Young Child Population at Wave 5**

Child Characteristic	K-BIT Composite		K-BIT Vocabulary		K-BIT Matrices	
	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)
<b>Total</b>	867	96.3 (0.8)***	867	93.6 (0.9)***	870	99.6 (1.1)
<b>Sex</b>						
Male	456	97.3 (1.1)	456	94.6 (1.2)	456	100.6 (1.8)
Female	411	95.2 (1.3)	411	92.6 (1.4)	414	98.6 (1.2)
<b>Race/ethnicity</b>		**		***		
Black	288	92.0 (1.8) <sup>a</sup>	288	88.0 (2.4) <sup>a</sup>	288	97.2 (1.9)
White	379	99.1 (1.2) <sup>b</sup>	379	98.5 (1.4) <sup>b</sup>	379	99.9 (1.1)
Hispanic	139	96.2 (3.1)	139	90.1 (2.0) <sup>c</sup>	142	102.8 (3.7)
Other	59	97.2 (1.6) <sup>b</sup>	59	95.0 (2.0) <sup>b,c</sup>	59	100.0 (2.4)
<b>Chronic health condition</b>						*
Yes	167	93.6 (2.3)	167	93.1 (2.4)	167	95.0 (2.2)
No	697	96.9 (0.8)	697	93.7 (1.0)	700	100.6 (1.2)
<b>Current setting</b>						**
In home, biological parents	587	97.7 (0.9) <sup>a</sup>	587	94.8 (1.0) <sup>a</sup>	589	101.0 (1.3) <sup>a</sup>
In home, adoptive parents	98	93.7 (1.7) <sup>b</sup>	98	94.1 (2.0)	98	94.3 (1.9) <sup>b</sup>
In home, kin, or other caregiver	136	90.9 (2.7) <sup>b</sup>	136	88.6 (2.7) <sup>b</sup>	137	94.6 (2.6)
Out of home	46	94.3 (1.8)	46	91.5 (2.4)	46	98.4 (1.7)
<b>Severity of abuse</b>						*
Dangerous acts	45	101.9 (5.0)	45	95.5 (3.3)	46	107.7 (6.4) <sup>1</sup>
Marks	69	96.1 (3.2)	69	95.4 (4.0)	69	97.7 (3.2)
Hospital < 24 hours	27	92.5 (3.9)	27	92.9 (5.8)	27	93.7 (2.2) <sup>a</sup>
Hospital >24 hours	13	96.3 (5.2)	13	87.7 (4.8)	13	106.1 (5.2) <sup>b</sup>
<b>Severity of neglect</b>		*				*
Mild	171	97.1 (1.4) <sup>a</sup>	171	93.3 (1.7) <sup>a</sup>	171	101.6 (1.4) <sup>a</sup>
Moderate	122	89.6 (1.7) <sup>b</sup>	122	87.8 (1.9) <sup>b</sup>	122	93.5 (1.8) <sup>b</sup>
Serious	76	94.2 (1.9)	76	91.1 (2.2)	76	98.3 (1.6)
Severe	53	95.6 (1.6) <sup>a</sup>	53	93.5 (1.8) <sup>a</sup>	54	98.5 (1.6) <sup>a</sup>
Grave	27	94.7 (2.3)	27	91.7 (2.7)	27	99.3 (1.7) <sup>a</sup>

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Means that have different superscripts are significantly different from each other ( $\alpha = .05$ ). K-BIT = Kaufman Brief Intelligence Test.

<sup>1</sup> Quadratic trend was significant ( $p < .05$ ).

**Exhibit B.2-9**  
**Early Achievement Test Scores at 6 to 10 Years of Age**  
**Young Child Population at Wave 5**

Child Characteristic	WJ Letter Identification		WJ Passage Comprehension		WJ Calculation		WJ Applied Problems	
	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)	N	Mean (SE)
<b>Total</b>	862	100.4 (0.9)	852	92.7 (0.8)***	844	99.3 (1.0)	856	99.4 (1.0)
<b>Sex</b>								
Male	453	99.9 (1.3)	449	91.9 (1.3)	446	99.2 (1.5)	450	99.8 (1.5)
Female	409	100.9 (1.3)	403	93.6 (1.1)	398	99.4 (1.2)	406	98.9 (1.5)
<b>Race/ethnicity</b>								
Black	284	98.5 (2.1)	282	90.8 (1.9)	281	98.8 (1.9)	282	95.8 (1.9)
White	379	100.8 (1.6)	375	93.6 (1.2)	367	99.7 (1.2)	377	101.1 (1.7)
Hispanic	138	101.5 (2.5)	135	93.4 (2.4)	136	99.4 (2.3)	137	100.7 (3.5)
Other	59	104.3 (2.9)	58	94.1 (2.5)	58	99.0 (2.6)	58	99.8 (1.8)
<b>Chronic health condition</b>								
Yes	166	95.8 (3.2)	164	90.3 (2.4)	156	98.5 (1.9)	165	95.4 (3.0)
No	693	101.4 (0.9)	685	93.4 (0.9)	685	99.5 (1.1)	688	100.2 (1.1)
<b>Current setting</b>						*		
In home, biological parents	581	101.4 (1.0)	576	93.3 (0.9)	574	99.8 (1.2) <sup>a</sup>	578	100.6 (1.2) <sup>a</sup>
In home, adoptive parents	98	101.1 (1.0)	96	93.8 (2.2)	95	95.4 (2.1)	96	96.6 (2.0)
In home, kin, or other caregiver	137	96.2 (3.5)	136	90.7 (2.4)	133	99.2 (1.7)	137	95.2 (3.1)
Out of home	46	97.7 (4.2)	44	87.6 (4.5)	42	94.2 (2.2) <sup>b</sup>	45	96.4 (1.4) <sup>b</sup>
<b>Severity of abuse</b>		**		*				*
Dangerous acts	44	111.3 (3.4) <sup>a,1</sup>	44	101.0 (2.7) <sup>a,1</sup>	45	106.8 (2.8)	441	109.1 (4.9) <sup>a</sup>
Marks	69	97.2 (3.9) <sup>b</sup>	67	91.6 (3.1) <sup>b</sup>	67	97.4 (2.6)	68	97.7 (4.9)
Hospital < 24 hours	27	96.4 (2.5) <sup>b</sup>	27	89.9 (2.3) <sup>b</sup>	26	96.7 (4.9)	27	91.6 (3.3) <sup>b</sup>
Hospital >24 hours	13	105.5 (9.7)	12	101.1 (7.8)	12	104.8 (6.9)	12	107.1 (8.3)
<b>Severity of neglect</b>								
Mild	169	99.6 (2.2)	167	91.7 (1.6)	166	99.7 (1.9)	169	99.7 (1.8) <sup>a</sup>
Moderate	121	96.6 (1.9)	119	91.0 (1.4)	120	96.3 (2.5)	121	95.5 (2.2)
Serious	75	103.3 (5.1)	74	93.6 (2.0)	74	95.8 (3.0)	74	98.4 (1.6)
Severe	54	96.8 (2.0)	54	89.5 (1.6)	53	99.1 (6.4)	54	93.7 (2.1) <sup>b</sup>
Grave	27	99.4 (2.8)	26	93.2 (3.5)	25	95.1 (2.9)	26	98.8 (2.0)

*Note:* Instruments used are the Woodcock Johnson III Tests of Achievement (WJ). All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the Total line, means were tested against means of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup>The quadratic trend was significant ( $p < .01$ ).

**Exhibit B.2-10**  
**Number and Percentage Below Grade Level in Different Academic Domains**  
**(Teacher Report)**  
**Young Child Population at Wave 5**

Child Characteristic	Language Arts		Mathematics		Social Studies		Science	
	N	% (SE)	N	% (SE)	N	% (SE)	N	% (SE)
<b>Total</b>	520	36.1 (4.0)	517	37.2 (4.1)	375	19.9 (4.0)	377	19.4 (4.0)
<b>Sex</b>								*
Male	273	38.3 (5.5)	272	38.0 (6.5)	195	27.5 (6.8)	196	25.0 (6.8)
Female	247	33.4 (5.5)	245	36.2 (5.8)	180	11.2 (3.5)	181	12.6 (3.7)
<b>Race/ethnicity</b>								
Black	161	38.5 (7.7)	159	40.8 (8.8)	123	22.6 (7.7)	121	20.2 (8.4)
White	243	37.0 (4.9)	241	41.9 (5.7)	164	25.8 (6.6)	163	26.6 (7.0)
Hispanic	80	27.5 (7.5)	80	22.3 (7.7)	58	13.3 (6.3)	61	13.2 (6.1)
Other	35	47.0 (19.5)	36	35.6 (20.2)	29	0.5 (0.4)	31	2.1 (1.8)
<b>Chronic health conditions</b>								
Yes	110	48.8 (7.9)	107	43.2 (8.7)	67	19.9 (9.7)	65	20.3 (10.2)
No	410	33.0 (4.2)	410	35.9 (4.5)	308	19.9 (4.5)	312	19.3 (4.6)
<b>Current setting</b>								
In home, biological parents	352	34.2 (4.8)	348	39.6 (4.9)	254	20.1 (5.0)	255	20.8 (5.1)
In home, adoptive parents	56	49.2 (14.2)	56	22.8 (8.0)	40	46.3 (17.4)	43	17.4 (8.0)
In home, kin, or other caregiver	87	39.8 (9.0)	87	28.3 (9.8)	65	7.3 (3.4)	64	7.3 (3.4)
Out of home	25	43.8 (14.3)	26	43.6 (14.2)	16	44.7 (17.4)	15	42.5 (17.8)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ ).

**Exhibit B.2-11**  
**Social Competence Ratings by Teacher**  
**Young Child Population at Wave 5**

Child Characteristic	N	SSRS Total Mean (SE)	SSRS Assertion Ratings		
			Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE)
<b>Total</b>	553	94.6 (1.3)***	19.5 (3.1)	71.7 (3.7)	8.8 (2.9)*
<b>Sex</b>					
Male	283	94.5 (2.2)	21.8 (4.7)	70.0 (5.5)	8.2 (4.1)
Female	270	94.7 (1.3)	17.0 (5.0)	73.5 (6.1)	9.5 (4.6)
<b>Race/ethnicity</b>		*			
Black	176	97.0 (3.2)	13.1 (3.5)	71.7 (7.2)	15.2 (7.6)
White	254	93.8 (1.2) <sup>a</sup>	18.1 (3.4)	73.8 (5.2)	8.1 (4.7)
Hispanic	87	91.4 (4.2) <sup>a</sup>	33.9 (12.0)	64.1 (12.3)	2.0 (0.7)
Other	35	101.9 (2.2) <sup>b</sup>	6.2 (3.3)	85.4 (8.8)	8.4 (8.0)
<b>Chronic health condition</b>					
Yes	122	92.6 (1.7)	17.6 (4.6)	76.3 (5.3)	6.2 (14.1)
No	430	95.0 (1.6)	20.3 (3.9)	70.0 (4.6)	9.6 (3.6)
<b>Current setting</b>					
In home, biological parents	377	94.7 (1.7)	22.0 (4.3)	68.4 (4.9)	9.6 (3.7)
In home, adoptive parents	58	97.7 (6.5)	14.0 (5.6)	70.0 (12.5)	16.0 (12.0)
In home, kin, or other caregiver	90	92.9 (2.2)	12.8 (3.9)	82.8 (4.7)	4.4 (3.0)
Out of home	28	95.3 (3.1)	5.6 (3.3)	91.4 (4.2)	3.1 (2.8)
<b>Severity of neglect</b>		***			
Mild	116	94.9 (1.5) <sup>a 1,2</sup>	17.9 (4.9)	76.7 (5.7)	5.3 (2.5)
Moderate	69	88.5 (2.3) <sup>c</sup>	20.1 (4.9)	71.2 (6.3)	8.6 (5.6)
Serious	53	93.4 (2.9) <sup>a, c</sup>	30.4 (13.4)	65.9 (13.7)	3.7 (2.4)
Severe	37	99.2 (2.4) <sup>a</sup>	7.1 (4.4)	89.2 (5.7)	3.7 (3.4)
Grave	15	80.7 (2.7) <sup>b</sup>	86.7 (11.8)	13.3 (11.8)	0.0

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\*\* $p < .001$ ). Means that have different alphabetic superscripts are significantly different from each other ( $\alpha = .05$ ).

<sup>1</sup>Linear trend is significant ( $p < .05$ ).

<sup>2</sup>Quadratic trend is significant ( $p < .05$ ).

**Exhibit B.2-12**  
**Additional Social Competence Ratings by Teachers**  
**Young Child Population at Wave 5**

Child Characteristic	N	SSRS Self-Control Ratings			SSRS Cooperation Ratings		
		Fewer % (SE)	Average % (SE)	More % (SE)	Fewer % (SE)	Average % (SE)	More % (SE)
<b>Total</b>	553	21.8 (3.3)	68.4 (3.8)	9.9 (2.7)	30.8 (3.3)	58.4 (3.8)	10.8 (2.8)
<b>Sex</b>							
Male	283	18.2 (3.9)	69.2 (5.4)	12.6 (4.5)	32.1 (5.0)	59.5 (5.5)	8.4 (4.4)
Female	270	25.8 (5.6)	67.5 (5.7)	6.7 (2.6)	29.2 (4.7)	57.3 (5.5)	13.4 (3.4)
<b>Race/ethnicity</b>							
Black	176	23.0 (5.7)	63.4 (8.1)	13.5 (7.7)	33.4 (7.7)	51.5 (8.6)	15.1 (7.7)
White	254	17.9 (4.4)	76.8 (4.6)	5.2 (2.4)	29.6 (4.1)	63.0 (4.5)	7.3 (3.0)
Hispanic	87	31.4 (12.1)	49.7 (12.9)	37.1 (6.7)	35.4 (11.8)	55.6 (11.5)	9.0 (3.3)
Other	35	8.8 (4.8)	90.4 (5.0)	0.8 (0.6)	13.2 (5.4)	59.9 (17.6)	26.9 (13.6)
<b>Chronic health condition</b>							
Yes	122	20.4 (6.4)	71.2 (6.8)	6.7 (3.3)	33.8 (6.5)	61.6 (6.7)	4.6 (2.9)
No	430	22.0 (3.7)	67.1 (4.5)	10.8 (3.3)	30.5 (3.8)	57.0 (4.3)	12.6 (3.4)
<b>Current setting</b>							
In home, biological parents	377	18.6 (3.4)	70.6 (4.5)	10.9 (3.3)	31.5 (4.1)	56.0 (4.6)	12.4 (3.7)
In home, adoptive parents	58	24.4 (12.7)	43.3 (12.4)	32.4 (14.7)	30.0 (12.7)	55.5 (14.4)	14.6 (12.0)
In home, kin, or other caregiver	90	32.3 (10.8)	62.6 (10.6)	1.1 (0.6)	30.2 (8.1)	65.2 (8.3)	4.6 (2.1)
Out of home	28	23.7 (12.5)	76.3 (12.5)	0.0	20.1 (12.6)	79.9 (12.6)	0.0

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance.

**Exhibit B.2-13**  
**Child Social Competence Ratings by Parents**  
**Young Child Population at Wave 5**

Child Characteristic	N	SSRS Assertion Ratings			
		SSRS Total Mean (SE)	Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE)
<b>Total</b>	898	93.2 (1.0)***	12.1 (2.2)	59.0 (3.5)	28.9 (3.2)***
<b>Sex</b>			*		
Male	476	94.0 (1.6)	5.5 (2.8)	43.9 (4.4)	50.6 (4.0)
Female	422	92.3 (1.4)	19.0 (3.8)	74.9 (4.2)	6.0 (3.2)
<b>Race/ethnicity</b>					
Black	301	92.4 (1.5)	10.3 (2.8)	63.8 (4.8)	25.9 (4.7)
White	387	92.6 (1.5)	10.6 (3.0)	60.6 (4.4)	28.8 (5.1)
Hispanic	149	94.4 (3.9)	22.7 (8.4)	45.9 (10.7)	31.3 (10.1)
Other	59	96.5 (1.8)	1.7 (1.1)	67.3 (11.5)	31.0 (11.2)
<b>Chronic health conditions</b>		**	**		
Yes	177	86.9 (2.3)	16.5 (5.4)	71.6 (5.9)	11.9 (3.5)
No	720	94.5 (1.1)	11.3 (2.5)	56.9 (3.8)	31.8 (3.7)
<b>Current setting</b>					
In home, biological parents	601	94.1 (1.1) <sup>a</sup>	10.6 (2.4)	57.9 (4.0)	31.5 (3.9)
In home, adoptive parents	105	84.4 (3.9) <sup>b</sup>	28.3 (8.9)	57.9 (8.0)	13.8 (4.8)
In home, kin, or other caregiver	144	92.3 (2.6)	15.4 (6.9)	64.6 (7.2)	20.0 (6.0)
Out of home	48	90.6 (3.5)	4.6 (2.1)	58.7 (15.3)	36.6 (16.1)
<b>Severity of neglect</b>		*			
Mild	175	92.4 (1.9) <sup>1</sup>	10.4 (3.6)	57.4 (6.6)	32.3 (6.2)
Moderate	127	91.0 (2.0) <sup>a</sup>	10.6 (5.0)	72.8 (6.1)	16.7 (5.2)
Serious	80	89.2 (3.9) <sup>a</sup>	17.7 (10.2)	68.6 (10.7)	13.7 (5.0)
Severe	57	98.4 (3.1)	5.5 (2.5)	48.8 (10.2)	45.6 (10.8)
Grave	28	98.0 (2.0) <sup>b</sup>	4.7 (2.8)	89.9 (6.1)	5.4 (4.2)

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .005$ , \*\*\* $p < .001$ ).

<sup>1</sup>The linear trend was significant ( $p < .05$ ).

**Exhibit B.2-14**  
**Additional Social Competence Ratings by Parents**  
**Young Child Population at Wave 5**

Child Characteristic	SSRS Self-Control Ratings			SSRS Cooperation Ratings				
	<i>N</i>	Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE)	<i>N</i>	Fewer Behaviors % (SE)	Average Behaviors % (SE)	More Behaviors % (SE)
<b>Total</b>	898	24.2 (2.6)	68.2 (2.8)	7.6 (1.8)	898	17.0 (2.1)	66.4 (2.8)	16.7 (2.2)
<b>Sex</b>								
Male	476	20.2 (3.4)	71.4 (3.9)	8.4 (2.9)	476	18.8 (3.2)	63.0 (3.8)	18.2 (3.4)
Female	422	28.6 (3.6)	64.7 (4.0)	6.8 (1.9)	422	15.0 (2.5)	70.0 (4.4)	15.1 (3.4)
<b>Race/ethnicity</b>								
Black	301	24.6 (4.7)	69.4 (4.9)	6.0 (2.0)	301	16.2 (3.0)	67.4 (6.3)	16.4 (4.8)
White	387	23.7 (3.5)	71.0 (3.9)	5.3 (1.8)	387	17.0 (2.9)	68.9 (4.1)	14.1 (3.4)
Hispanic	149	22.9 (7.4)	60.0 (9.3)	17.1 (7.9)	149	17.4 (7.4)	60.3 (9.1)	22.4 (9.0)
Other	59	32.1 (15.2)	64.0 (14.5)	3.9 (2.9)	59	20.2 (11.2)	63.1 (12.3)	16.7 (7.8)
<b>Type of maltreatment</b>								
Physical abuse	247	23.0 (5.2)	69.1 (6.1)	7.9 (4.0)	247	16.6 (3.9)	63.3 (6.0)	20.0 (5.6)
Neglect	504	26.6 (3.5)	64.9 (3.6)	8.4 (2.3)	504	18.1 (2.8)	67.4 (3.4)	14.5 (2.8)
Other	147	18.6 (5.4)	77.5 (5.6)	3.9 (1.9)	147	13.7 (4.3)	70.0 (6.3)	16.3 (6.7)
<b>Chronic health conditions</b>								
Yes	177	31.7 (5.8)	63.2 (6.0)	5.1 (2.3)	177	26.8 (6.0)	60.4 (6.7)	12.8 (4.5)
No	720	22.9 (3.1)	68.9 (3.4)	8.2 (2.1)	720	15.1 (2.4)	67.2 (3.2)	17.6 (2.5)
<b>Setting</b>								
In home, biological parents	601	24.4 (3.2)	67.4 (3.3)	8.3 (2.3)	601	15.5 (2.4)	67.0 (3.2)	17.4 (2.7)
In home, adoptive parents	105	34.3 (10.1)	63.1 (10.1)	2.6 (1.5)	105	36.1 (10.1)	56.2 (10.2)	7.7 (3.0)
In home, kin, or other caregiver	144	18.9 (6.6)	73.9 (6.3)	7.2 (2.9)	144	17.6 (6.4)	67.7 (8.7)	14.7 (5.9)
Out of home	48	29.6 (12.1)	67.7 (12.3)	2.7 (2.2)	48	17.3 (9.4)	60.9 (14.4)	21.8 (11.7)

*Note:* Instrument used is the Social Skills Rating System (SSRS). All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample.

**Exhibit B.2-15**  
**Children's Reports of School-Related Perceptions**  
**Young Child Population at Wave 5**

	<b>Loneliness (5–7 yrs)</b>		<b>Loneliness (8+ yrs)</b>		<b>Loneliness</b>		<b>School Engagement</b>	
	<i>N</i>	Mean (SE)	<i>N</i>	Mean (SE)	<i>N</i>	% (SE)	<i>N</i>	Mean (SE)
<b>Total</b>	477	22.6 (0.6)	368	34.2 (1.3)	845	28.1 (3.6)	846	34.5 (0.3)
<b>Sex</b>								
Male	251	23.1 (0.6)	190	33.7 (1.8)	441	39.4 (4.7)	443	34.3 (0.4)
Female	226	22.1 (0.9)	178	34.8 (1.7)	404	26.7 (5.7)	403	34.7 (0.4)
<b>Race/ethnicity</b>								
Black	171	21.5 (1.0)	109	34.9 (2.8)	280	27.1 (4.2)	281	33.4 (0.8)
White	201	23.5 (0.8)	166	33.7 (1.8)	367	29.1 (5.6)	367	34.4 (0.5)
Hispanic	78	22.5 (0.9)	60	34.8 (3.4)	138	32.6 (9.3)	138	35.9 (0.8)
Other	26	22.4 (0.9)	32	34.6 (3.0)	58	15.9 (8.0)	58	35.6 (1.2)
<b>Chronic health conditions</b>								
Yes	104	22.4 (1.3)	57	36.3 (2.8)	161	34.4 (6.6)	161	33.0 (1.1)
No	372	22.7 (0.6)	309	34.0 (1.5)	681	27.2 (3.9)	682	34.8 (0.3)
<b>Current setting</b>								
In home, biological parents	313	23.2 (0.5) <sup>1</sup>	260	34.4 (1.6)	573	30.5 (3.9)	574	34.6 (0.4)
In home, adoptive parents	66	23.5 (1.4)	28	34.9 (3.4)	94	29.8 (9.8)	94	33.7 (0.5)
In home, kin, or other caregiver	74	19.9 (1.9)	63	32.9 (2.0)	137	17.5 (6.9)	136	34.1 (1.4)
Out of home	24	21.6 (0.8)	17	36.8 (5.0)	41	23.4 (9.6)	42	34.7 (1.8)
<b>Severity of neglect</b>								
Mild	98	22.9 (0.9)	68	34.9 (2.5)	166	34.5 (6.2)	166	34.6 (0.7)
Moderate	63	24.3 (2.0)	57	34.0 (3.2)	120	33.3 (10.3)	121	33.8 (0.7)
Serious	51	24.6 (1.4)	22	30.1 (2.6)	73	32.2 (9.3)	73	34.2 (0.8)
Severe	32	22.5 (1.2)	21	31.6 (3.8)	53	20.2 (8.3)	54	35.0 (1.0)
Grave	17	24.6 (0.3)	8	30.9 (3.4)	25	80.8 (11.5)	25	35.0 (0.6)

*Note:* Instruments used are the Loneliness and Social Dissatisfaction Scale and the School Engagement Scale. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. For the total, differences in means were tested against means of the standardization sample.

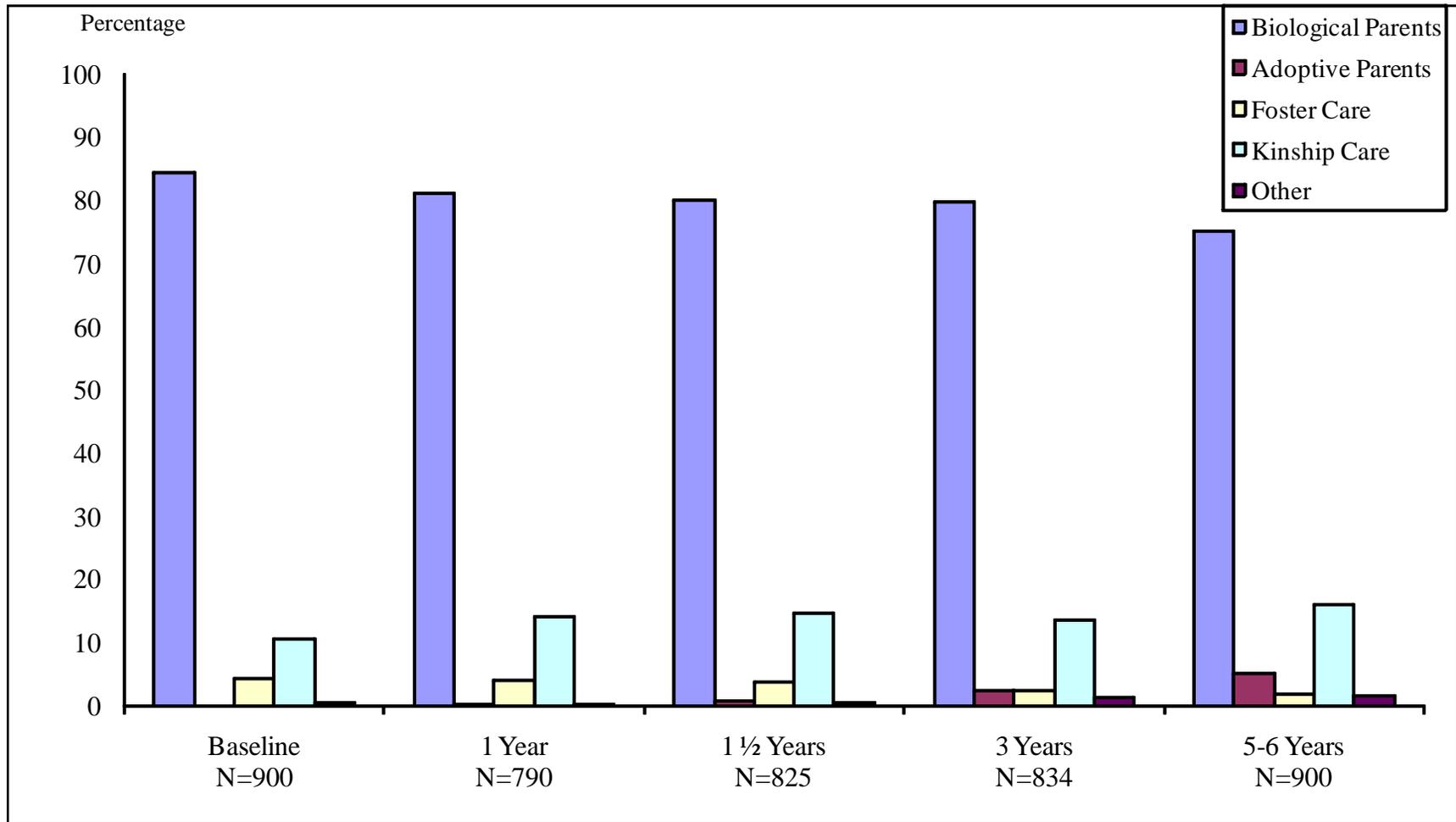
<sup>1</sup> Significant linear trend ( $p < .05$ ), although *F* test on comparison of means was not significant.

**Exhibit B.3-1**  
**Number of Out-of-Home Placements**  
**Young Child Population at Wave 5**

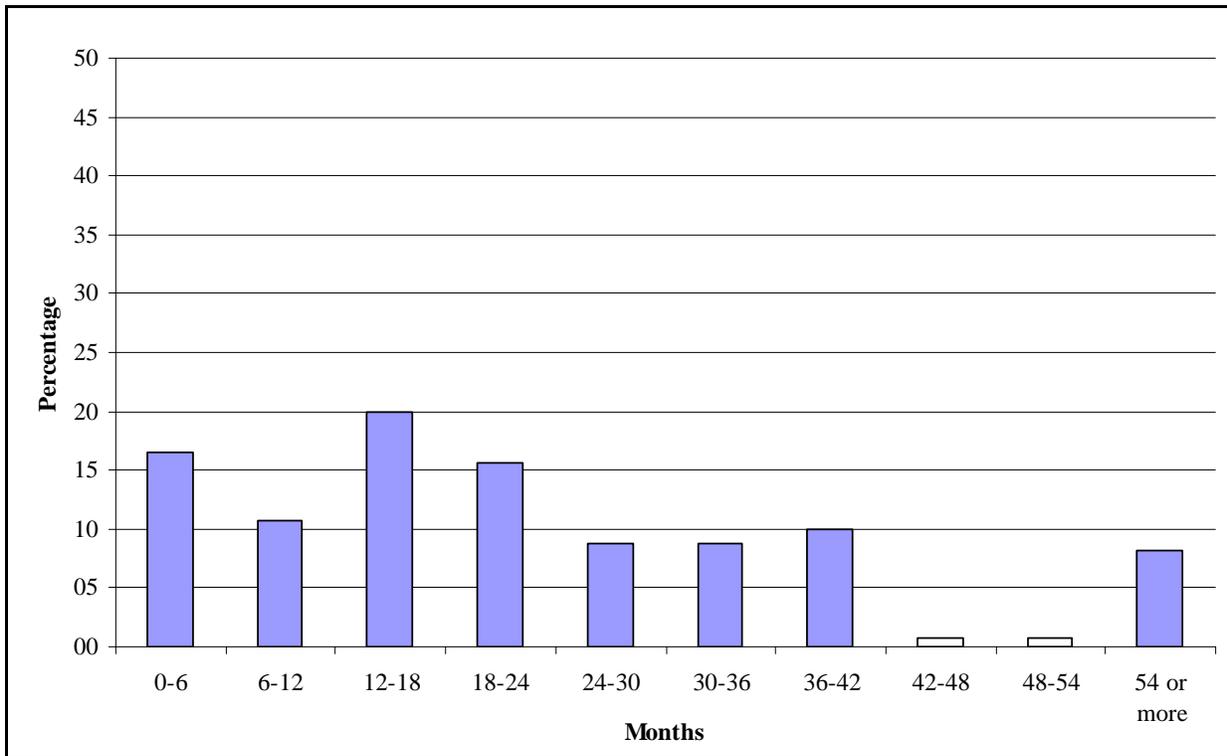
Child Characteristic	N	Percentage (SE)			
		0 Placements	1 Placement	2 Placements	3 or More Placements
<b>Total</b>	864	75.0 (2.6)	10.9 (1.9)	7.8 (1.7)	6.3 (1.4)
<b>Sex</b>					
Male	459	75.6 (3.8)	8.2 (2.3)	11.0 (3.2)	5.1 (1.5)
Female	405	74.3 (3.7)	13.7 (3.3)	4.5 (1.4)	7.5 (2.5)
<b>Race/ethnicity</b>					
Black/non-Hispanic	288	74.6 (5.4)	7.9 (2.3)	12.6 (4.6)	4.8 (1.8)
White/non-Hispanic	375	76.9 (4.0)	10.9 (2.8)	6.3 (2.2)	5.9 (1.8)
Hispanic	140	74.4 (7.2)	12.1 (6.6)	3.1 (1.8)	10.4 (5.8)
Other	59	64.0 (11.5)	21.7 (10.2)	10.2 (6.6)	4.1 (3.0)
<b>Chronic health condition*</b>					
Yes	172	78.1 (5.2)	7.7 (2.4)	11.4 (4.2)	2.7 (0.9)
No	689	75.4 (3.1)	11.5 (2.3)	6.0 (1.8)	7.1 (1.7)
<b>Physical disability</b>					
Yes	49	68.9 (14.1)	11.2 (9.0)	15.0 (10.7)	4.9 (2.7)
No	811	75.4 (2.9)	10.8 (2.2)	7.5 (1.8)	6.4 (1.5)
<b>Cognitive disability</b>					
Yes	38	61.9 (15.0)	10.7 (6.3)	10.4 (9.3)	17.1 (11.2)
No	795	76.0 (2.7)	11.0 (2.0)	7.3 (1.8)	5.6 (1.4)
<b>Emotional problems</b>					
Yes	330	73.8 (3.9)	10.1 (2.1)	8.6 (3.3)	7.5 (2.0)
No	532	76.0 (4.0)	11.1 (3.0)	7.3 (2.0)	5.6 (1.9)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance ( $*p < .05$ ).

**Exhibit B.3-2**  
**Distribution of Children by Settings at Each Time Point**  
**Young Child Population at Wave 5**



**Exhibit B.3-3**  
**Time in Placement**  
**Young Child Population at Wave 5**



Note: N = 318.

**Exhibit B.3-4**  
**Time in Placement (in Days)**  
**Young Child Population at Wave 5**

Child Characteristic	N	Mean (SE)
<b>Total</b>	324	675 (061)
<b>Sex</b>		*
Male	171	670 (097)
Female	153	681 (075)
<b>Race/ethnicity</b>		
Black	125	641 (134)
White	119	608 (065)
Hispanic	55	888 (161)
Other	25	658 (116)
<b>Chronic health condition</b>		
Yes	68	614 (081)
No	253	706 (074)
<b>Physical disability</b>		
Yes	31	680 (162)
No	293	675 (063)
<b>Cognitive disability</b>		
Yes	15	491 (141)
No	293	681 (064)
<b>Emotional problems</b>		
Yes	136	696 (127)
No	186	673 (064)
<b>Physical maltreatment</b>		**
Yes	84	430 (070)
No	218	769 (072)
<b>Severity of neglect</b>		*
Mild	40	497 (113) <sup>a</sup>
Moderate	53	940 (110) <sup>b</sup>
Serious	59	658 (108)
Severe	29	499 (124) <sup>a</sup>
Grave	18	940 (186) <sup>b</sup>

*Note:* Only children who have had at least one out-of-home placement are included in these analyses. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ), except that the  $p$  for the difference between severe and grave neglect equals .056.

**Exhibit B.3-5**  
**Termination of Parental Rights and Adoption**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	TPR % (SE)	Adopted % (SE)
<b>Total</b>	651	13.1 (2.4)	6.0 (1.2)
<b>Sex</b>			
Male	348	10.9 (2.3)	7.0 (2.1)
Female	303	15.8 (4.0)	5.0 (1.2)
<b>Race/ethnicity</b>			
Black	207	7.7 (2.9)	8.8 (2.5)
White	292	18.2 (3.9)	5.3 (1.5)
Hispanic	103	11.3 (4.1)	4.6 (2.7)
Other	47	8.5 (4.4)	3.3 (1.3)
<b>Chronic health condition</b>			
Yes	127	8.5 (3.0)	9.8 (3.5)
No	522	14.0 (2.8)	5.3 (1.2)
<b>Physical disability</b>			
Yes	44	18.8 (8.6)	17.5 (8.2)
No	607	12.8 (2.6)	5.3 (1.2)
<b>Cognitive disability</b>		*	
Yes	30	2.0 (1.6)	3.4 (2.3)
No	602	13.5 (2.5)	5.5 (1.2)
<b>Emotional/behavioral problems</b>		*	
Yes	255	7.2 (2.7)	8.0 (2.1)
No	393	16.9 (3.4)	4.9 (1.2)
<b>No. of types of maltreatment</b>			*
One	404	15.2 (3.2)	3.2 (0.9)
Two or more	206	9.3 (2.7)	13.0 (3.6)

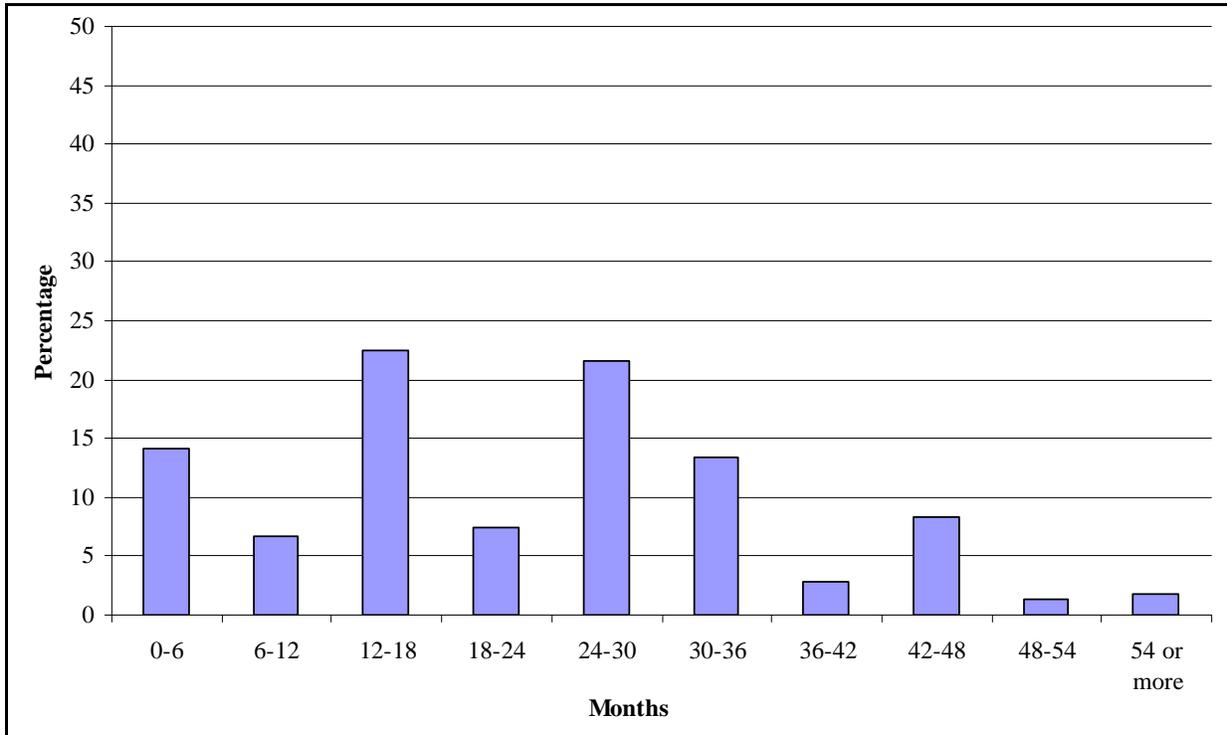
*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). TPR = termination of parental rights.

**Exhibit B.3-6**  
**Time from First Placement to Adoption Finalization (in Days)**  
**Young Child Population at Wave 5**

Child Characteristic	<i>N</i>	Mean (SE)
<b>Total</b>	88	681 (061)
<b>Sex</b>		
Male	46	758 (060)
Female	42	597 (101)
<b>Race/ethnicity</b>		
Black	28	758 (100)
White	34	631 (096)
Hispanic	17	678 (124)
Other	9	689 (219)
<b>Chronic health condition</b>		
Yes	12	797 (091)
No	75	676 (064)
<b>Emotional problems</b>		
Yes	27	644 (110)
No	60	698 (071)

*Note:* Time was counted from the first placement that was not followed by a reunification. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Cell sizes were too small to test cognitive and physical disabilities.

**Exhibit B.3-7**  
**Time from First Placement to Adoption Finalization**  
**Young Child Population at Wave 5**



Note:  $N = 88$ .

**Exhibit B.3-8**  
**Time from Termination of Parental Rights to Adoption (in Days)**  
**Young Child Population at Wave 5**

Child Characteristic	<i>N</i>	Mean (SE)
<b>Total</b>	64	648 (50)
<b>Sex</b>		***
Male	30	872 (65)
Female	34	371 (73)
<b>Race/ethnicity<sup>a</sup></b>		***
Black	21	844 (114) <sup>b</sup>
White	23	298 (040) <sup>a</sup>
Hispanic	14	749 (169) <sup>b</sup>
Other	8	—
<b>Chronic health condition</b>		
Yes	17	583 (173)
No	47	676 (120)
<b>Emotional problems</b>		
Yes	30	720 (127)
No	34	544 (139)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

**Exhibit B.4-1**  
**Preventive and Routine Child Health Services**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	All Preventive Services <sup>1</sup> % (SE)	Reported To Have a Pediatric Home % (SE)	Dental Care Since Last Interview % (SE)	Vision Testing Since Last Interview % (SE)	Hearing Testing Since Last Interview % (SE)	Well-Child Checkup Since Last Interview % (SE)	Up-to-Date Immunizations % (SE)
<b>Total</b>	889	46.4 (3.9)	95.9 (1.2)	74.9 (4.1)	79.8 (3.0)	78.5 (3.0)	77.3 (2.7)	99.7 (0.3)
<b>Sex</b>								
Male	453	46.7 (4.8)	97.7 (0.8)	73.9 (4.8)	76.2 (4.6)	75.8 (4.7)	78.4 (4.4)	99.5 (0.4)
Female	397	46.0 (4.7)	94.1 (2.4)	75.9 (4.9)	83.7 (3.6)	81.4 (3.3)	76.3 (3.3)	99.9 (0.1)
<b>Race/ethnicity</b>								
Black	139	50.3 (5.4)	92.0 (3.4)	75.6 (5.6)	80.3 (5.2)	83.5 (4.7)	75.2 (5.5)	99.1 (0.6)
White	187	44.6 (6.1)	97.4 (1.2)	75.3 (6.9)	80.5 (3.9)	75.8 (4.5)	74.7 (4.1)	100.0 (0.0)
Hispanic	77	45.2 (9.7)	97.3 (1.3)	70.9 (10.1)	81.6 (6.2)	83.3 (6.0)	87.6 (5.2)	99.9 (0.1)
Other	28	47.9 (14.2)	100.0 (0.0)	78.5 (10.7)	69.1 (13.1)	61.0 (14.1)	82.1 (10.9)	100.0 (0.0)
<b>Child setting</b>				*			*	
In home, biological parents	597	43.8 (4.7) <sup>a</sup>	96.3 (1.1)	71.0 (4.9) <sup>a</sup>	80.4 (3.3)	75.7 (3.7) <sup>a</sup>	75.5 (3.4) <sup>a</sup>	99.7 (0.2)
In home, adoptive parents	105	70.1 (6.3) <sup>b</sup>	99.6 (0.4)	94.6 (3.0) <sup>b</sup>	88.0 (5.7)	85.8 (6.5)	93.2 (2.8) <sup>b</sup>	100.0 (0.0)
In home, kin, or other caregiver	143	50.5 (7.3) <sup>a</sup>	92.3 (5.4)	83.8 (5.5)	75.5 (7.8)	86.0 (4.0) <sup>b</sup>	80.5 (5.7)	99.5 (0.5)
Out of home	44 <sup>*</sup>	47.2 (15.3)	99.2 (0.6)	88.7 (7.7)	73.1 (17.6)	92.8 (4.8) <sup>b</sup>	78.2 (11.0)	99.9 (0.1)
<b>Chronic health condition</b>		*						
Yes	175	59.3 (6.3)	98.8 (0.8)	82.7 (5.0)	84.8 (5.7)	80.4 (5.8)	80.1 (5.8)	99.9 (0.1)
No	714	44.2 (4.4)	95.3 (1.5)	73.0 (4.5)	79.6 (3.2)	77.8 (2.5)	76.8 (3.1)	99.7 (0.2)

*Note:* All preventive and routine health care is caregiver-reported since last interview. All analyses are on weighted data; Ns are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

<sup>1</sup>Includes having had up-to-date immunizations and recent dental, vision, hearing, and well-child checkups.

**Exhibit B.4-2**  
**Child Urgent Medical Care**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	Emergency Room or Urgent Care for Illness or Injury Since Last Interview % (SE)	Hospital Admission for Illness or Injury Since Last Interview % (SE)	Care from Doctor or Nurse for Serious Injury, Accident, or Poisoning Since Last Interview % (SE)
<b>Total</b>	892	23.3 (2.5)	5.5 (1.8)	7.1 (1.5)
<b>Sex</b>				
Male	474	23.1 (3.8)	2.9 (1.2)	7.5 (2.2)
Female	418	23.7 (3.2)	7.8 (3.2)	6.2 (2.0)
<b>Race/ethnicity</b>		*		
Black	299	23.9 (4.9) <sup>a</sup>	6.9 (3.3)	7.1 (3.9)
White	387	28.1 (4.4) <sup>a</sup>	4.4 (1.5)	9.1 (2.1)
Hispanic	149	10.2 (3.3) <sup>b</sup>	7.1 (6.8)	3.2 (2.7)
Other	59	24.7 (15.2)	0.2 (0.2)	2.0 (1.4)
<b>Child setting</b>				
In home, biological parents	600	25.6 (3.4)	5.2 (2.1)	6.9 (1.7)
In home, adoptive parents	104	18.5 (5.4)	3.0 (1.6)	5.9 (2.9)
In home, kin, or other caregiver	144	17.5 (4.7)	7.7 (5.5)	8.7 (4.9)
Out of home	44	11.1 (8.0)	1.6 (1.1)	1.0 (0.7)
<b>Chronic health condition</b>		*		
Yes	168	38.2 (6.1)	4.3 (2.0)	10.8 (4.4)
No	680	20.9 (3.1)	5.7 (2.1)	6.3 (1.7)

*Note:* All urgent medical care is caregiver-reported since the time of last interview. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

**Exhibit B.4-3**  
**Caregiver Report of Utilization of Child Mental Health Services**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	Outpatient Mental Health Services <sup>1</sup> % (SE)	Specialty Outpatient Services % (SE)	Family Doctor % (SE)	School-Based Services <sup>2</sup> % (SE)	Current Use of Psychotropic Medication % (SE)
<b>Total</b>	895	29.7 (3.0)	16.4 (2.6)	11.1 (1.8)	19.8 (2.7)	16.0 (2.3)
<b>Sex</b>						*
Male	475	34.0 (4.4)	18.0 (3.6)	13.3 (2.3)	22.8 (4.0)	21.2 (3.5)
Female	420	25.0 (3.4)	14.7 (3.0)	8.8 (2.2)	16.6 (3.3)	10.6 (2.6)
<b>Race/ethnicity</b>					**	
Black	300	26.5 (5.5)	12.7 (4.2)	7.0 (2.0)	18.5 (5.3)	4.9 (4.5)
White	38	38.0 (3.8) <sup>a</sup>	21.4 (4.2)	15.4 (3.2)	26.0 (3.5) <sup>a</sup>	18.0 (3.8)
Hispanic	149	18.6 (5.3) <sup>b</sup>	13.6 (4.6)	8.2 (3.7)	7.8 (2.7) <sup>b</sup>	18.0 (5.4)
Other	59 <sup>**</sup>	16.9 (6.8) <sup>b</sup>	8.0 (5.6)	9.5 (5.8)	15.3 (6.7)	3.6 (1.8)
<b>Child setting</b>			*	*		*
In home, biological parents	600	25.6 (3.4) <sup>a</sup>	11.8 (2.8) <sup>a</sup>	8.3 (1.6) <sup>a</sup>	19.0 (3.2)	13.5 (2.3) <sup>a</sup>
In home, adoptive parents	105	49.6 (10.1) <sup>b</sup>	26.5 (8.8)	32.8 (10.3) <sup>b</sup>	19.2 (5.4)	45.6 (8.4) <sup>b</sup>
In home, kin, or other caregiver	144	32.5 (6.7) <sup>a</sup>	27.5 (6.6) <sup>b</sup>	13.8 (4.7)	20.1 (6.9)	15.7 (6.2) <sup>b</sup>
Out of home	45 <sup>*</sup>	71.5 (12.8) <sup>b</sup>	49.4 (14.6) <sup>b</sup>	29.3 (9.7) <sup>b</sup>	38.5 (12.6)	27.2 (12.1)
<b>Child in need of mental health services<sup>3</sup></b>		***	***	***	***	***
Yes	350	52.2 (5.8)	32.1 (5.5)	22.3 (4.3)	38.6 (5.9)	29.3 (3.9)
No	545	16.5 (2.8)	7.2 (1.8)	4.5 (1.1)	8.7 (2.0)	8.3 (2.3)

*Note:* Mental health services were reported by caregivers and measured through an adapted version of the Child and Adolescent Services Assessment. All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ). Caregiver report of mental health service utilization represents services received since last interview.

<sup>1</sup> Any outpatient mental health service included use of specialty outpatient (e.g., professional help from a psychologist or social worker, in-home counseling, community-based mental health center), school-based mental health services (e.g., services from a school guidance counselor, social worker, or psychologist), or mental health services performed by a family doctor.

<sup>2</sup> Only children 6 years or older were asked about school-based services; consequently, the sample size for these items are smaller ( $N = 261$ ).

<sup>3</sup> Children were defined as “in need of mental health services” if either a caregiver or teacher reported an elevated score ( $> 1.5$  standard deviations above the mean) on the caregiver-completed Child Behavior Checklist or teacher-completed Teacher Report Form Total Problems, Internalizing, or Externalizing subscales.

**Exhibit B.4-4**  
**Special Education Services**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	Child Has an Active IEP <sup>1</sup> % (SE)
<b>Total</b>	645	25.7 (2.8)
<b>Sex</b>		**
Male	340	33.8 (4.9)
Female	305	16.6 (3.3)
<b>Race/ethnicity</b>		
Black	197	36.0 (8.1)
White	299	25.9 (3.9)
Hispanic	104	16.5 (5.8)
Other	44	17.1 (8.2)
<b>Child setting</b>		
In home, biological parents	435	22.8 (3.8)
In home, adoptive parents	75	49.3 (11.5)
In home, kin, or other caregiver	102	32.0 (8.2)
Out of home	33	24.4 (13.4)
<b>Child in need of special education services<sup>2</sup></b>		***
Yes	333	37.2 (4.7)
No	312	14.0 (3.0)

*Note:* All analyses are on weighted data; *Ns* are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ).

<sup>1</sup> Active Individualized Education Plan (IEP) was determined according to either teacher or caregiver report.

<sup>2</sup> “Need for special education services” was determined by a child’s risk of behavior problems, cognitive/learning delays, or functional impairment, as described in Appendix A.

**Exhibit B.4-5**  
**Child Welfare and Other Family Services**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	Any CWS Service <sup>1</sup> % (SE)	Family-Based Services <sup>2</sup> % (SE)	Parenting Support Services <sup>3</sup> % (SE)	Parents/Guardians Counseled Individually % (SE)
<b>Total</b>	138 <sup>4</sup>	65.5 (7.3)	44.3 (6.9)	47.0 (9.1)	36.7 (6.6)
<b>Caregiver race/ethnicity</b>			**	*	
Black	42	31.1 (11.9)	16.1 (6.9) <sup>a</sup>	15.5 (7.0) <sup>a</sup>	26.9 (12.2)
White	65	76.5 (8.5)	56.7 (7.8) <sup>b</sup>	67.9 (9.8) <sup>b</sup>	37.3 (7.7)
Hispanic	22	53.0 (20.1)	9.7 (4.5)	11.8 (5.8)	43.0 (21.3)
Other	9	80.8 (12.4)	74.3 (11.6)	37.5 (26.2)	40.2 (22.8)
<b>Child setting</b>					
In home, biological parent	72	60.1 (9.6)	33.5 (9.3)	39.3 (10.6)	34.0 (10.1)
In home, adoptive parent	19	36.6 (14.1)	36.0 (13.9)	30.4 (12.8)	12.7 (7.9)
In home, kin, or other caregiver	14	83.1 (12.1)	52.4 (19.0)	68.5 (16.7)	66.4 (17.2)
Out of home	32	84.3 (6.8)	72.8 (12.6)	64.7 (14.4)	37.7 (19.6)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent statistically significant differences ( $\alpha = .05$ ).

<sup>1</sup>Indicates having received any one of the following types of service: family-based services, parenting support services, or individual counseling.

<sup>2</sup>Indicates having received any home-based service including more or less intensive family preservation or reunification services.

<sup>3</sup>Indicates having received parent training, parent aide services, respite care, or family counseling.

<sup>4</sup>All data based upon caseworker interviews ( $N = 150$ ); this represents 76.0% of all cases reported by caregivers to have received some child welfare system service since last interview.

**Exhibit B.4-6**  
**Services to Address Basic Needs**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	Assistance for Family's Basic Living Needs <sup>1</sup> % (SE)	Child Care <sup>2</sup> % (SE)	Services to Directly Assist Caregiver <sup>3</sup> % (SE)	Home Assistance <sup>4</sup> % (SE)
<b>Total</b>	844	25.4 (2.9)	22.7 (3.0)	15.5 (1.8)	9.2 (1.8)
<b>Caregiver race/ethnicity</b>					
Black	233	23.2 (6.2)	20.6 (4.9)	14.5 (3.6)	6.8 (2.5)
White	447	27.4 (3.6)	20.2 (3.4)	18.4 (3.6)	8.7 (2.3)
Hispanic	26	16.5 (5.1)	25.5 (7.9)	11.9 (4.3)	13.7 (7.9)
Other	14	21.1 (9.9)	47.4 (14.3)	21.1 (8.7)	9.4 (5.8)
<b>Poverty status<sup>5</sup></b>		**			**
At/below poverty level	357	38.3 (5.4)	19.0 (3.9)	17.4 (3.8)	4.3 (1.3)
Above poverty level	454	18.6 (2.6)	26.7 (4.8)	16.1 (2.7)	13.2 (3.0)
<b>Child setting</b>				*	*
In home, biological parent	600	27.5 (3.3)	25.7 (3.8)	16.9 (2.4) <sup>b</sup>	8.7 (2.1) <sup>b</sup>
In home, adoptive parent	105	15.4 (7.0)	12.8 (4.4)	29.8 (7.7) <sup>a</sup>	30.6 (9.5) <sup>a</sup>
In home, kin, or other caregiver	143	18.6 (5.6)	11.6 (4.8)	7.7 (2.9) <sup>b</sup>	4.3 (2.6) <sup>b</sup>

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used for initial significance tests. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ).

<sup>1</sup>Includes having received any financial assistance, food from a community source, transportation help, or emergency shelter or housing.

<sup>2</sup>Indicates having received child care assistance on a regular basis. \*

<sup>3</sup>Indicates that the caregiver has received job-related services, legal aid, or has attended any organized support group.

<sup>4</sup>Indicates having received help with specific home management training or cleaning or help with home repairs.

<sup>5</sup>Using the federal poverty status guidelines, this variable is based upon family income for the child's current home setting at Wave 5.

**Exhibit B.4-7**  
**Caregiver Need for Mental Health and Substance Abuse Services and Service Receipt**  
**Young Child Population at Wave 5**

Child Characteristic	N (Min)	In Need of Mental Health Service <sup>1</sup> % (SE)	In Need of Substance Abuse Service <sup>2</sup> % (SE)	Received Mental Health Service % (SE)
<b>Total</b>	846	28.1 (3.0)	20.8 (2.4)	15.4 (2.8)
<b>Caregiver race/ethnicity</b>			*	**
Black	225	25.7 (5.4)	14.3 (4.3) <sup>a</sup>	9.7 (5.4)
White	447	29.4 (4.1)	27.4 (3.5) <sup>b</sup>	23.6 (4.6) <sup>a</sup>
Hispanic	124	17.4 (5.2)	9.4 (3.9) <sup>a</sup>	2.3 (1.2) <sup>b</sup>
Other	50	48.8 (12.7)	21.8 (7.8)	8.7 (4.4) <sup>b</sup>
<b>Child setting</b>				**
In home biological parent	600	29.5 (3.5)	21.6 (2.8)	17.6 (3.6) <sup>a</sup>
In home adoptive parent	105	23.6 (8.9)	15.5 (7.0)	20.2 (8.8)
In home, kin, or other caregiver	143	23.7 (8.6)	13.0 (4.2)	3.4 (1.3) <sup>b</sup>
<b>Need for mental health or substance abuse service</b>				
In need of mental health services	233	NA	31.7 (4.3)	36.3 (6.4)
In need of substance abuse services	191	42.4 (6.8)	NA	24.4 (6.7)

*Note:* All analyses are on weighted data; *N*s are unweighted. Pearson  $\chi^2$  tests for cluster samples were used to test statistical significance. Statistical significance is noted by asterisks in the column above the statistically significant result (\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ). Alphabetic superscripts that are different from one another represent significant differences ( $\alpha = .05$ ). NA = not applicable.

<sup>1</sup> Caregiver was determined to be “in need of mental health services” when she or he met any one of four criteria: (1) caregiver self-reported need for “a lot” or “some” help for a mental health problem, (2) caseworker report of a caregiver’s need for a mental health services, (3) self-reported scores within the clinical range on either the Dysthymia and Anhedonia scales of the CIDI-SF, or (4) a score exceeding 1.5 standard deviations above the norm ( $t \leq$ ) on the Mental Health component of the SF-12. <sup>b</sup>A caregiver was determined to be in need of substance abuse services when he or she met any one of three criteria: (1) caregiver self-reported need for “a lot” or “some” help for an alcohol or drug problem, (2) caseworker report of caregiver’s need for alcohol or drug abuse services, or (3) or scores within the clinical range on either the Alcohol Dependence or Drug Dependence scales of the CIDI-SF.

<sup>2</sup> A caregiver was determined to be in need of substance abuse services when they met any one of three criteria: (1) caregiver self-reported need for “a lot” or “some” help for an alcohol or drug problem, (2) caseworker report of caregiver’s need for alcohol or drug abuse services, or (3) or scores within the clinical range on either the Alcohol Dependence or Drug Dependence scales of the CIDI-SF. <sup>b</sup>Black < White ( $p < .05$ ); <sup>c</sup>White > Hispanic ( $p < .05$ ); <sup>d</sup>White > Hispanic ( $p < .05$ ).