No. 3  Children’s cognitive and socioemotional development and their receipt of special educational and mental health services

This research brief describes the developmental risks present in a cohort of children coming into contact with the child welfare system between 1999 and 2000, as well as the services the children receive to address these risks. The findings are drawn from the National Survey of Child and Adolescent Well-being (NSCAW), a unique study that provides detailed information about the well-being and experiences of children and families in the child welfare system. Whereas existing research on this population comes primarily from administrative data or smaller studies, the NSCAW is the first comprehensive, nationally representative, longitudinal study to examine the well-being of these children and families.

This research brief juxtaposes data on the developmental risks present in children who have been investigated by child protective services (CPS) with their levels of service receipt approximately 7 months after investigation (on average). The brief concentrates on the cognitive and socioemotional development of children and answers the following questions:

- What are the cognitive and socioemotional needs of children who come into contact with the CPS system? In other words, what proportion of children in this study show significant developmental delays in the areas of cognitive and socioemotional development?
- Given the level of need, what percentage of children in the NSCAW is receiving mental health and special educational services?
- How do these levels of need and service receipt compare for preschool age and school age children?
- Are there differences in the needs and service receipt of children in in-home and out-of-home care?

Research Methodology

The National Survey of Child and Adolescent Well-Being (NSCAW) is a national longitudinal study of the well-being of more than 6,200 children who had contact with the child welfare system within a 15-month period starting in October 1999. These children—ages 14 and younger—were selected from two groups: 5,501 from among those entering the child protective system in that period, and 727 from among children who had been in out-of-home placement for about 12 months. Children who entered the child welfare system included those receiving ongoing services and those who did not receive services, either because their cases were not substantiated or because it was determined that services were not required.

In order to collect NSCAW data, three rounds of face-to-face interviews or assessments were conducted with children, their caregivers, teachers, and child welfare workers. Both children who continued to receive child welfare services and those who left the system were tracked for the full study period of 36 months after case investigation.

The sample for this research brief includes the 5,501 children who entered the child welfare system through investigation. The data presented are drawn from baseline interviews and assessments with the children, their caregivers, and their caseworkers, which occurred an average of 4 months after the close of the investigation.

Sample Characteristics

Descriptive information on the sample was presented in an earlier brief; thus, only a brief summary of these data is presented here. At baseline, these children range in age from less than 1 year to 14 years of age. Nearly 40% of the children are younger than age 5, and over 60% are 6 years of age or older. The sample includes equal numbers of boys and girls. Just under half of the children in the sample are White, Non-Hispanic (47%). Just over a quarter (28%) are Black, Non-Hispanic; 18% are Hispanic; and 7% are identified as being from another racial or ethnic group.

The alleged maltreatment was substantiated for about a third of the children. Still, the vast majority (89%) of the children remain at home as of the baseline survey. In fact, nearly two-thirds of the children in the sample live at home and receive no services from child welfare. Approximately another quarter remain at home and receive services from child welfare. Four percent of children are placed in non-kin foster care, another 5% are placed in kinship care, and 1% is placed in group care.

Children’s Needs and Service Receipt

In order to best provide children in the child welfare system with individualized services, it is critical to understand the developmental needs of these children. Yet few studies available assess the well-being of children in the child welfare system using validated measures that indicate how well these children are faring compared to children their age in normative samples.

The NSCAW study offers such measures, which can be used to determine the levels of developmental risk present among these children. This brief presents indicators of risk in the socioemotional and cognitive development of children, including problem behaviors, poor social and life skills, low academic achievement, and delayed cognitive and neurological functioning.
One of two methods is used to determine levels of developmental risk in this population: already existing clinical indicators (where available) or indicators developed by the NSCAW noting scores that fall far (two standard deviations) below the normative average.

The levels of risk for the NSCAW sample are presented as follows and are compared to the levels of risk for children in the normative population. Following a presentation of the children's developmental risks, the brief compares these findings with the levels of service receipt at the time of the baseline wave of data collection. This comparison of need to services is imperfect, however, since the measures of risk mentioned above are not clinical assessments capable of identifying the need for specific services. Still, this comparison is informative, as the measures of risk are conservative, capturing only children who demonstrate the highest levels of risk. The question of whether children with these high levels of risk receive services is important and will provide an indication of how service needs and receipt compare in the child welfare population.

The following section begins with a discussion of the needs and service receipt of preschool age children, followed by a discussion of school age children.

**Preschool Age Children's Developmental Risks**

Figure 1 presents the levels of developmental risk for preschool age children in the areas of neurological development, cognitive development, early language skills, and behavior. It also shows the comparable levels of risk found in normative samples of children of comparable age.

As Figure 1 indicates, NSCAW preschoolers show much greater levels of risk than children in normative samples. The NSCAW assessed the risk of neurological delay or impairment in children ages 3 to 24 months. Over half (53%) of these children show risk on this measure, compared to 14% in the normative sample. The NSCAW also assessed the cognitive skills of children up to age 3 and the preschool age language capabilities of children under age 5. In the normative samples, 2.5% of children show developmental risk on these measures. In contrast, nearly a third (31%) of the NSCAW children up to age 3 show developmental delay in the cognitive area, and 14% of children show delay in terms of their language development. Finally, over a quarter (26%) of 2- to 3-year-olds in the NSCAW have high levels of problem behaviors, compared to a norm of 17%.

**Preschool Age Children's Service Receipt**

Current caregivers, including foster parents for children who have been removed from their homes ("out-of-home" care) and primarily birth parents for children who remain at home ("in-home" care), reported on the services received by the children.

The findings from these reports suggest that preschool age children in the NSCAW are receiving far fewer mental health services than needed. Over a quarter of preschool age children are reported to have high levels of behavioral problems, much higher than the level for children in normative samples. Yet despite these very high levels of need, less than 3% of children in this age range are receiving mental health services, according to their caregivers. For most children this age, mental health services are provided by a clinician supplying specialty outpatient care or through in-home counseling.

Receipt of special educational services is also remarkably low among this NSCAW population. Over half of the children show risk for neurological impairment or developmental delay; nearly a third are cognitively delayed, and over 1 in 10 has poor language development. Furthermore, these high levels of behavioral problems in this age group also speak to a great need for special educational services. Yet the data on special educational services show that:

- Only 13% of all children in this age range have been tested for learning problems since the start of the CPS investigation.
- Only 7% of these children are currently classified as needing special educational services, as indicated by having an Individualized Education Program (IEP) or an Individualized Family Service Plan (IFSP).
- Only about 6% of these children are currently receiving special educational services.

These figures strongly imply that the many preschool age children in the NSCAW who need special educational services are not receiving them. However, the figures combine information on children who show developmental risks with those who do not and therefore may not need these services. Looking specifically at those who do show developmental risks, the figures show that the vast majority of children in need of services are not receiving them:

- Among those children who show developmental risk on at least one measure of cognitive or language development, only 12% are currently receiving special educational services.
- Among those children who show developmental risk in their socioemotional functioning, only 13% are currently receiving special educational services.

Thus, these findings indicate that preschool age children in the NSCAW are receiving mental health or special educational services at rates far below their need for these services. Moreover, among children for whom developmental assessments and caregivers' reports indicate clear socioemotional and cognitive delays or difficulties, only about 1 in 10 is receiving special educational services.

**School Age Children's Developmental Risk**

School age children in the NSCAW also show very high levels of developmental risk. As discussed in more detail below, children of
this age demonstrate high levels of risk in their cognitive development; academic achievement; and social, behavioral, and emotional development compared to children in normative samples.

Figure 2 presents the risk levels in the areas of cognitive development and academic achievement. For each of these measures, NSCAW children are at least twice as likely to show developmental risks as children in the normative sample. Five percent of NSCAW children ages 4 and older have very low scores on a test of verbal and non-verbal intelligence, compared to 2% in the normative sample. Similarly, 5% of NSCAW children ages 6 and older have low levels of reading achievement, and 12% have low levels of math achievement, as compared to 2.5% each for reading and math in a normative sample of children.

Figure 2. Cognitive and achievement risk levels in school age children.

School age children in the NSCAW also exhibit much higher levels of behavior problems and depression and lower levels of social and life skills than children their age in normative samples (Figure 3). Depending upon the reporter (the youths themselves, their caregivers, or their teachers), between 36% and 45% of children are said to exhibit clinical or borderline clinical levels of behavior problems. In comparison, 17% of children in the normative sample demonstrate this high level of problem behavior.

In addition to their high levels of behavior problems, school age children in the NSCAW also show low levels of social skills and adaptive behavior. On a measure of daily living skills, 10% of the NSCAW children showed levels indicating risk, compared to 2.5% in the normative population. Moreover, 38% of the NSCAW children ages 3 and older are classified as having “fewer” social skills, based on a standard measure, compared to 16% of children in the normative sample. Finally, these high levels of social and behavioral risk are also accompanied by greater psychological risk. Fifteen percent of NSCAW school age children 7 and older report a degree of symptoms indicative of depression, compared with 9% in a normative sample.

School Age Children’s Service Receipt

The figures described above suggest that, most likely, far more than half of children in this age range are in need of mental health services. Despite this need, while mental health services are more prevalent among this population than among preschool age children, they are still remarkably rare. Only 18% of school age children in the NSCAW are receiving outpatient mental health services. The most common services include seeing an outpatient mental health clinician or a school guidance counselor, psychologist, or social worker.

Receipt of special educational services is more common among this population, although it is still rare given their high levels of cognitive, academic, and socioemotional delay.

- 21% of school age children in the NSCAW have been tested for learning problems since the start of their CPS investigation.
- 27% of children have a documented learning problem, as indicated by the presence of an IEP or IFSP.
- 21% of the children are currently receiving special educational services.

Even among the smaller percentage of children who clearly show developmental risk, many children are not receiving services:

- Only slightly more than half (54%) of children who show developmental risk on at least one of the cognitive or academic measures are receiving special educational services.
- Only a quarter of the children who show developmental risk on at least one of the socioemotional measures are receiving special educational services.

Thus, the rates of mental health and special educational services receipt among school age children in the NSCAW are lower than the level of need indicated through NSCAW assessments.

Comparing Needs and Services Across Ages and Settings

Differences by Age

Because children’s development must be assessed with different measures as children get older, it is not possible to directly compare the levels of developmental risk found among preschool age and school age children in the NSCAW. These different measures even make it difficult to compare the proportion of children in high-risk categories within a given age group. For instance, within the different measures of cognitive risk for preschoolers, the rates range from 14% (language) to 53% (neurological).
Still, there is some evidence that the levels of risk for preschool age children are highest for cognitive and neurological risk, while the risks for school age children are primarily found in socio-emotional development. Thirty-one percent of preschoolers in NSCAW show substantial developmental delay in their cognitive skills, while only 5% to 12% of school age children in NSCAW show this level of risk in their academic achievement or intelligence. On the other hand, 27% of preschoolers have high levels of behavioral problems, as reported by their caregivers, compared to 45% of the school age children.

In terms of service receipt, preschoolers are consistently less likely than their older peers to receive mental health services or special educational services. Yet both age groups show high levels of developmental risk, and preschoolers may have higher levels of cognitive and neurological risk than older children. Moreover, the differences in mental health service receipt are not the result of lower need: even after holding constant the prevalence of behavior problems in these two groups, preschool age children are still less likely to receive mental health services.

In summary, while there may be some difference in the types of services most needed by preschool age children and school age children, both age groups have high levels of developmental need. Preschoolers’ needs are more likely to go unmet than those of school age children.

**Differences by service setting**

Although differences in risk levels across children in various settings have not been computed, differences in the average well-being of children in different service settings were examined. These averages are compared for children who remain at home and are not receiving child welfare services, in-home children who are receiving services, children in kinship foster care, children in non-kinship foster care, and—where numbers are sufficient—children in group care.

The average well-being of preschool age children did not vary across service setting for any of the measures examined. For older children, however, differences by service setting are found for multiple measures of behavior, suggesting that:

- Children in non-kinship foster care show poorer daily living skills and poorer social skills than in-home children who are not receiving services, presumably the group facing the least risk in the NSCAW sample.
- Children in group care show higher levels of depression than those at home and not receiving services.
- Caregivers of children who have been removed from their homes report higher levels of behavior problems than caregivers of children remaining at home.

Thus, there is evidence that children in out-of-home care show greater behavioral risks than children who remain at home.

Children in out-of-home care are also more likely to receive mental health services. These differences, though, are primarily driven by those children in group care, who are more likely to receive mental health services than those in kinship or non-kinship foster care. These differences hold up even after controlling for the greater behavioral problems presented by children in group care.

Among those children showing cognitive risk, children in group care are also more likely than children living at home to receive special educational services, while children in kinship care are least likely to receive special educational services. Children who are living at home are less likely, however, to have been assessed for special educational needs since the start of the CPS investigation.

**Conclusion**

The NSCAW data indicate that both preschoolers and school age children in contact with the child welfare system show a variety of developmental risks. These children show higher levels of behavior problems and depression and also poorer social and life skills, cognitive and neurological development, and academic achievement than children their age in normative samples. Preschoolers appear to be particularly at risk cognitively and neurologically, while school age children show greater difficulties in their social skills and behavior.

Despite these high levels of risk, the vast majority of these children are not receiving mental health or special educational services. At most, half of the children showing developmental risk are receiving any given service; typically, the figures are far lower. Preschoolers are particularly unlikely to receive services; only about 1 in 10 children from birth to age 5 who are developmentally at-risk receives special educational services.

These findings imply that many children involved with the child welfare system are not receiving needed services that will enhance their future development. Moreover, the findings suggest that child welfare agency staff need better tools for assessing children’s developmental needs. Once needs are identified, it is critical that agency staff have access to relevant services. The high level of need found among children in the NSCAW sample highlights the importance of efforts to improve assessments, to establish strong linkages with other child service systems, and to provide timely access to needed services.

1The initial NSCAW sample, and the sample used for this report, included 5,504 children. However, in later analyses, 3 of these children were determined to be ineligible for the sample due to their age and were dropped from the study, leaving a sample of 5,501.