More than 134,000 youth are incarcerated in public and private juvenile correctional facilities in the United States (Sickmund, 2002). Many of these youth enter juvenile correctional facilities with intense educational, mental health, medical, and social needs. Large numbers of incarcerated juveniles are marginally literate or illiterate and have experienced school failure and retention (Center on Crime, Communities, and Culture, 1997). These youth are also disproportionately male, poor, Black, Native American, or Latino and many have significant learning or behavioral problems that entitle them to special education and related services under the Individuals with Disabilities Education Act (IDEA). Professionals have been aware of high rates of learning and behavioral disorders among incarcerated youth for some time (Moffitt, 1990). The prevalence of such disorders among the juvenile justice population (Orto, Greenstein, Johnson, & Friedman, 1992; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002), has led some professionals to characterize juvenile justice as a “default system” for youth who can’t read or write well, who have
mental health problems, and who drop out or are forced out of school (Nelson, 2000). The extent of this overrepresentation and the mechanisms associated with it are not well understood. The estimated prevalence of children and adolescents with disabilities in juvenile corrections ranges from 30% to 70% (Casey & Keilitz, 1990; Murphy, 1986; Rutherford, Nelson, & Wolford, 1985). However, most of the existing research in this area has been limited geographically and has been compromised by methodological problems (Casey & Keilitz).

Several theories have emerged to explain the overrepresentation of youth with disabilities in correctional and detention facilities (Fink, 1990; Leone & Meisel, 1997). These include school failure, susceptibility, differential treatment, and metacognitive deficits. The school failure theory (Osher, Woodruff, & Sims, 2002; Post, 1981) asserts that learning, emotional/behavioral, and intellectual disabilities lead either directly to school failure or transactionally to school problems and failure causing negative self-image, which in turn leads to school dropout, suspension, and delinquency. The susceptibility theory holds that individuals with disabilities have personality and cognitive deficits that predispose them to criminal or delinquent behavior. These characteristics include (a) poorly developed impulse control, (b) irritability, (c) suggestibility, (d) an inability to anticipate consequences, and (e) inadequate perception of social cues (Keilitz & Dunivant, 1987). The differential treatment explanation asserts that although disabled and nondisabled delinquents engage in comparable behaviors, the police, courts, and juvenile corrections respond very differently to delinquent youth with disabilities (Keilitz & Dunivant). The metacognitive deficits hypothesis (Larson, 1988) suggests that delinquent youths’ problem-solving strategies are less well developed than those of socially competent adolescents. Thus, inadequate social-cognitive development, common among youth with disabilities, increases the risk of delinquent and criminal behavior.

In a national survey, Rutherford and his colleagues (1985) found a wide range among states on estimates of students with disabilities in the juvenile and adult justice systems (i.e., 0% to 100%). These large differences appear to be associated with several factors. There is great variability among and within states in the ways in which education programs are funded and organized (Wolford, 2000). This variability, along with the difficulties correctional education programs have in obtaining prior school records for students, contribute to variability in the number of children served and, correspondingly, the number reported to researchers conducting surveys. At the same time, the settlement of class action litigation in juvenile corrections in some states has most likely increased the number of students identified and served in special education (Leone & Meisel, 1997).

**The Present Study**

In March 1997, the Office of Juvenile Justice and Delinquency Prevention, the Office of Special Education Programs, and several other agencies and organizations convened an expert panel to examine the relationship between disabilities and juvenile justice outcomes and to make recommendations (Coordinating Council on Juvenile Justice and Delinquency Prevention, 1997). The panel proposed a national survey to more definitively identify the number of students receiving special education services in the juvenile justice system. Subsequently, the Center for Effective Collaboration and Practice and the National Center on Education, Disability, and Juvenile Justice developed a survey of departments of juvenile corrections and local and state juvenile detention agencies. The focus of that research, reported here, was both to determine the percentage of students identified as having disabilities in the juvenile justice system as well as to identify the percentage of students served by disability category. The original study surveyed both detention (short-term) and...
commitment (long-term) facilities. However, in order to avoid the potential of duplicate counts from state agencies and detention centers, the survey results reported here include only data reported by state correctional systems. We do so because detention centers in several states are operated by state agencies, and there is a potential duplication of local and state counts.

METHODS

PARTICIPANTS

Participants were the 51 heads of state departments of juvenile corrections or combined juvenile and adult corrections systems (or the equivalent departments or agencies). (At the time of this study there were 42 heads of juvenile systems and 9 heads of combined juvenile and adult corrections systems.) Thus, all state correctional systems and the District of Columbia were surveyed to include every juvenile under age 22 incarcerated and committed to the juvenile justice system. Each agency surveyed was asked to use the data that were reported on their December 1, 2000, census that was submitted to the Office of Special Education Programs at the United States Department of Education to complete the survey questions. This provided a nonoverlapping snapshot of the prevalence rate of youth with disabilities in the juvenile justice system on one given day.

SURVEY DEVELOPMENT

The survey asked respondents to provide information about the number of youth incarcerated in state and private facilities under contract with the state as well as questions about number of youth served in special education programs. Draft surveys were distributed to an expert panel for feedback. A modified survey was piloted in four states. Pilot testing in states with different organizational structures enabled the researchers to anticipate and resolve particular difficulties prior to conducting the survey.

SURVEY PROCEDURES

Participants were mailed the surveys in the fall of 2000 along with a cover letter explaining the purpose of the study. Participants were provided a self-addressed, stamped envelope in which to return the survey and a cover sheet to return the survey via facsimile if they so chose. They were also given a toll-free number and an e-mail contact if they had any questions or concerns. Reminder postcards were mailed to all nonrespondents approximately 3 months after the surveys were sent. Replacement surveys were then mailed as requested. Reminder cards were mailed again to nonrespondents 2 months later. Between 6 and 8 months after the initial survey mailing, all nonrespondents were contacted by telephone to follow-up on the status of their surveys. All respondents were assured that the information they provided was confidential and that data would be used solely for analysis and reporting of aggregated information.

DATA ANALYSIS

Descriptive analyses were conducted. Because of the wide variability in the size of facilities, medians and ranges are reported.

RESULTS

RESPONSE RATES

All combined juvenile and adult correctional agencies returned the survey \((n = 9)\) and 29 of 42 juvenile justice state agencies returned the survey for a response rate of 76%. All respondents were asked to answer survey questions using December 1, 2000, figures for juveniles and youthful offenders. This date was selected because similar data would already have been collected for the mandatory annual census report to the Office of Special Education Programs at the U.S. Department of Education. Respondents reported that there were a total of 33,831 juveniles incarcerated in secure correctional facilities, with 81% enrolled in an education program. The number of incarcerated youth by state ranged from 30 to 7,827, with a median of 509. For the 27 respondents providing

Several theories have emerged to explain the overrepresentation of youth with disabilities in correctional and detention facilities.
breakdowns by gender for these youth, 11.2% were female and 88.8% were male. A total of 8,613 youth were eligible for special education and related services as mandated by IDEA. Responses by state departments of juvenile corrections ranged from 23 to 1,605 with a median of 160 incarcerated youth with disabilities. The average prevalence rate of youth with disabling conditions in these state juvenile corrections systems was 33.4%. Prevalence rates by state ranged from 9.1% to 77.5%, with a median of 33%.

Respondents were also asked to identify the primary disability of students eligible for special education and related services from among the 13 categories of disability described in IDEA. As shown in Table 1, specific learning disabilities and emotional disturbance were the two largest categories of primary disability identified, followed by mental retardation, multiple disabilities, and other health impairments.

**DISCUSSION**

Previous studies of youth with disabilities in juvenile corrections typically relied on estimates that were provided by survey respondents, were limited geographically, and often failed to clearly describe criteria for defining youth with disabilities (e.g., Casey & Keilitz, 1990; Murphy, 1986; Rutherford et al., 1985). In contrast, the present study surveyed agencies in all 50 states and the District of Columbia responsible for housing and educating youth in long-term juvenile correctional facilities. In the present study, youth identified as disabled were those reported by the state agencies as eligible and receiving special education services on December 1, 2000. The 76% response rate suggests that the numbers reported by respondents are a reliable indicator of the number and percentage of youth identified and served in special education programs in juvenile corrections.

During the 2000–2001 school year, 8.8% of students ages 6 to 21 in the United States were served under IDEA (U.S. Department of Education, 2001). Our data indicate that the number of youth identified and receiving special education services in juvenile corrections is almost four times higher (33.4%) than in public school programs during the same time period. However, because the number of students served under IDEA in juvenile corrections is a subset of the overall number reported by state agencies, OSEP cautions interpretation of these data:

> Counts of students served in correctional facilities...should be used with caution. These counts should be duplicated counts. These students should be counted in one of the environment categories (i.e., regular class, resource room, etc.) as well as under the total count of students in correctional facilities....However, the extent to which these are truly duplicated counts is not known. (ED, 2004, p. 3)

Although the present investigation is a marked improvement over earlier studies, in all likelihood the number of students with disabilities in juvenile corrections compared to the number of youth incarcerated in juvenile corrections who are actually eligible for special education services is underestimated. The numbers reported by the states are a function of the ability and desire of those agencies and their facilities to obtain prior records for youth after they are transferred into juvenile corrections. The current data also reflect the inadequacy of Child Find mechanisms to refer, assess, and identify students eligible for special education services. Like previous studies that attempted to determine the prevalence of students with disabilities in the juvenile justice system, this study also found a wide variability among states in the percentage of students identified as receiving special education services.

Five of the states responding to this survey reported that 50% or more of their students were

<table>
<thead>
<tr>
<th>All Disabling Conditions</th>
<th>33.4% (n = 8,613)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability Classifications as a Percentage of all Youth Identified With a Disability</td>
<td></td>
</tr>
<tr>
<td>Emotional Disturbance</td>
<td>47.7</td>
</tr>
<tr>
<td>Specific Learning Disabilities</td>
<td>38.6</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>9.7</td>
</tr>
<tr>
<td>Other Health Impairments</td>
<td>2.9</td>
</tr>
<tr>
<td>Multiple Disabilities</td>
<td>0.8</td>
</tr>
</tbody>
</table>
identified as having a disabling condition and were receiving special education services. A closer look at those states reveals that during the past 15 years, three of the five states have settled class action litigation that pertain to the adequacy of special education services in juvenile corrections. Of the two remaining states reporting high rates of identification, one is a relatively small state with a low rate of juvenile incarceration; the other state has accredited education programs in its juvenile correctional facilities that meet standards associated with the operation of public school programs. We believe that practices in other states and the lack of external pressure to do a better job of identifying and serving youth with disabilities are associated with lower rates of identification and service delivery.

Variability in rates of identification and service delivery reported by the states may also reflect the fact that many youth with psychiatric needs have not been identified as being eligible for special education services. For example, when Teplin and her associates (Teplin et al., 2002) employed a structured interview to assess a random, stratified sample of 1,829 youth (1,172 males and 657 females ages 10–18) who were arrested and detained in Cook County, Illinois, they found that nearly two thirds of the males and three quarters of the females met diagnostic criteria for a mental disorder. Similarly, when Shelton (2001) administered a validated, structured diagnostic interview to a random, representative sample from all 15 of Maryland’s juvenile facilities ($n = 312$), she identified 53% of the youth (ages 12–20) as exhibiting diagnostic criteria for a psychiatric disorder. Notably, many of these children had not been previously identified as having a psychiatric disability. Similarly, when Orange County, California, initiated its “8% Solution” to prevent serious repeat juvenile crime, psychiatric assessment determined that 35 of the 49 original youth had significant mental health problems, but that only 1 of them was receiving psychiatric treatment (Schumacher & Kurz, 2000).

Although this underidentification of children with psychiatric disorders may reflect differences between mental health and special education criteria (ED, 1998; Kendziora & Osher, in press), other factors are likely to be involved. Schools may under-identify students when they lack the financial resources or institutional capacity to serve them. They also may fail to identify students with antisocial behavior whom they would prefer to remove through expulsion and who would receive special education due process rights (Osher et al., 2002). Further, this underidentification may reflect the implications of the social maladjustment clause, which has led some states to exclude youth with conduct disorders from special education services (Gonzalez, 1991). Although the clause only excludes youth who do not meet the other IDEA eligibility requirements (ED, 1998) from eligibility under the emotional disturbance classification, an alternative interpretation has led many schools to exclude youth with conduct disorders from special education services. This exclusion is important because conduct disorder (CD) is the modal diagnostic category in children’s mental health (Forness, 1992; Forness, Kavale, King, & Kasari, 1994; Sinclair & Alexson, 1992). The diagnosis for CD overlaps considerably with characteristics of juvenile delinquency—“a persistent pattern of anti-social rule breaking, or aggressive behavior, including defiance, fighting, bullying, disruptiveness, explosiveness, and disturbed relations with peers and adults” (ED, 1998, pp. II–48).

LIMITATIONS AND FURTHER RESEARCH

This national survey provides data that can be used for program development and additional research. The primary limitation of this study was the lack of independent verification of the number and status of students reported as special education eligible. The survey was also limited by the lack of demographic data concerning the age, race, and/or ethnicity of students receiving services. Another limitation was that the survey provided no information about the adequacy of services and their implementation. Although this issue was beyond the scope of the survey, the identification of students eligible for special education and the existence of services should not be interpreted as an indication that states and/or in-
stitutions provide quality services. In fact, there is ample evidence that many jurisdictions have struggled to provide mandated special education services in juvenile corrections during the past 25 years (Leone & Meisel, 1997; ED, 1994).

Finally, the findings have several implications for future research in prevention, education services in juvenile corrections, and transition and aftercare. Presently there is very little prevention research that examines the vulnerability and needs of youth with disabilities. The high rates of incarceration among this population should serve as a wake-up call to public schools and community-based programs that a disproportionate number of youth with educational disabilities are in juvenile corrections. Similarly, there is a dearth of empirical research on effective education practices and outcomes for adjudicated youth (Nelson, Leone, & Rutherford, 2004). Without an adequate knowledge base, developing and sustaining practices that promote higher levels of academic and behavioral competence will be extremely difficult. Finally, with high rates of rearrest and recidivism, studies of transition and aftercare of youth with disabilities should be a primary research focus (Bullis, Yovanoff, Mueller, & Havel, 2002).

REFERENCES


Individuals with Disabilities Education Act Amendments of 1997, P. L. No.105-17, 105th Congress., 1st session.


tion research. In R. B. Rutherford, M. M. Quinn, & S. R. Mathur (Eds.), Handbook of research in emotional and behavioral disorders (pp. 282-301). New York: Guilford.


ABOUT THE AUTHORS

MARY MAGEE QUINN, Principal Research Analyst, American Institutes for Research, Washington, DC, and Associate Director, National Center on Education, Disability, and Juvenile Justice.

ROBERT B. RUTHERFORD, Professor of Special Education and Director of Research and Graduate Education in Curriculum and Instruction, Arizona State University, Tempe, and Associate Director, the National Center on Education, Disability, and Juvenile Justice. PETER E. LEONE, Professor, Department of Special Education, University of Maryland, College Park, and Director, the National Center on Education, Disability, and Juvenile Justice. DAVID M. OSHER, Managing Research Scientist; and JEFFREY M. POIRIER, Research Analyst, American Institutes for Research, Washington, DC.

Correspondence concerning this article should be addressed to Mary Magee Quinn, American Institutes for Research, 1000 Thomas Jefferson St. NW, Washington, DC 20007. (e-mail: mquinn@air.org)

This research was supported by Grants H237T60005 and H324J990003 from the U.S. Department of Education, Office of Special Education Programs. The statements in this article do not necessarily represent the views of the U.S. Department of Education.

Special thanks to Renee Bradley.

Manuscript received August 2003; accepted May 2004.