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Robert L. Listenbee, Administrator

Beyond Detention

Even though research indicates that the majority of youth in the juvenile justice system have been diagnosed with psychiatric disorders, reports issued by the Surgeon General and the President's New Freedom Commission on Mental Health show that juvenile detainees often do not receive the treatment and services they need.

This bulletin series presents the results of the Northwestern Juvenile Project, the first large-scale, prospective longitudinal study of drug, alcohol, and psychiatric disorders in a diverse sample of juvenile detainees. Individual bulletins examine topics such as suicidal behaviors in youth in detention, posttraumatic stress disorder and trauma among this population, functional impairment in youth after detention, and barriers for youth who need to receive mental health services.

Nearly all detained youth eventually return to their communities and the findings presented in this series provide empirical evidence that can be used to better understand how to meet youth's mental health needs and provide appropriate services while in detention and after their release. The Office of Juvenile Justice and Delinquency Prevention hopes this knowledge will help guide innovative juvenile justice policy and create a better future for youth with psychiatric disorders in the justice system.

Functional Impairment in Delinquent Youth

Karen M. Abram, Jeanne Y. Choe, Jason J. Washburn, Erin G. Romero, Linda A. Teplin, and Elena D. Bassett

Highlights

This bulletin is one in a series that presents the results of the Northwestern Juvenile Project—a longitudinal study of youth detained at the Cook County Juvenile Temporary Detention Center in Chicago, IL. The authors present the results of their examination of youth's functional impairment as assessed 3 years after their release from detention. Key findings include the following:

- Only 7.5 percent of youth had no notable impairment in functioning.
- Approximately one of every five youth had markedly impaired functioning.
- Markedly impaired functioning was much more common in males than in females; however, females were more likely to be severely impaired in the moods/emotions and self-harm domains than males.
- Among males living in the community, African Americans and Hispanics were more likely to be severely impaired in school and work than non-Hispanic whites.

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Functional Impairment in Delinquent Youth

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Most youth in the juvenile justice system have psychiatric, social, and academic difficulties (McCabe et al., 2002; Teplin et al., 2002). Studies suggest that these youth continue to be substantially impaired in their day-to-day functioning as they age. In an often-cited classic longitudinal study of 500 incarcerated juvenile males sampled in the 1940s, Glueck and Glueck (1968) found that by young adulthood, few delinquent males had graduated from high school and they were far more likely to be unemployed or poorly employed than nondelinquent controls. Nearly two-thirds of the delinquent males had at least one arrest when they were ages 25 to 31, and many reported poor marital relationships and residential transiency. Lewis and colleagues, in another longitudinal study, followed 97 incarcerated boys (Lewis et al., 1994) and 21 girls (Lewis et al., 1991) for as long as 12 years from study intake. At followup, most had criminal records (94 percent of males and 71 percent of females) and had not graduated from high school (59 percent of males and 71 percent of females). Poor relationships, poor parenting skills, unstable jobs, drug addictions, suicidal behavior, and mortality were also common (Lewis et al., 1991, 1994). More recently, Giordano and colleagues (Giordano, Cernkovich, and Lowery, 2004; Giordano, Cernkovich, and Rudolph, 2002) followed 254 serious juvenile offenders for 13 years. As young adults, most of these offenders were still engaged in criminal activities and were earning annual incomes at less than the poverty level (Giordano, Cernkovich, and Lowery, 2004; Giordano, Cernkovich, and Rudolph, 2002). Furthermore, roughly half of females

ABOUT THIS SERIES

Studies in this series describe the results of statistical analyses of the Northwestern Juvenile Project, a longitudinal study of youth detained at the Cook County Juvenile Temporary Detention Center in Chicago, IL, between 1995 and 1998. The sample included 1,829 male and female detainees between ages 10 and 18. The data come from structured interviews with the youth.

Topics covered in the series include the prevalence of suicidal thoughts and behaviors among juvenile detainees, posttraumatic stress disorder and trauma within this population, functional impairment after detention (at work, at school, at home, or in the community), psychiatric disorders in youth processed in juvenile or adult court, barriers to mental health services, violent death among delinquent youth, and the prevalence of psychiatric disorders in youth after detention. The bulletins can be accessed from the Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Web site, ojjdp.gov.

In addition to the funding that OJJDP provided, the research also was supported by the National Institute on Drug Abuse, the National Institute of Mental Health, the National Institute on Alcohol Abuse and Alcoholism, the Substance Abuse and Mental Health Services Administration (Center for Mental Health Services, Center for Substance Abuse Prevention, and Center for Substance Abuse Treatment), the Centers for Disease Control and Prevention (National Center for Injury Prevention and Control and National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention), the National Institutes of Health Office of Research on Women's Health, the National Institute on Minority Health and Health Disparities, the Office of Rare Diseases, the Office of Behavioral and Social Sciences Research, the U.S. Departments of Labor and Housing and Urban Development, the William T. Grant Foundation, and the Robert Wood Johnson Foundation. The John D. and Catherine T. MacArthur Foundation, the Open Society Foundations, and the Chicago Community Trust provided additional funds.

and three-quarters of males had lost or never had custody of at least one biological child (Giordano, Cernkovich, and Lowery, 2004).

Although existing studies have found substantial impairment in functioning among juvenile offenders as they age, the literature has two significant limitations. First, most studies examined only one or two types of functioning, which primarily included criminal recidivism (Benda, Flynn Corwyn, and Toombs, 2001; Bullis, Yovanoff, and Havel, 2004; Heilbrun et al., 2000; Wilson et al., 2001), employment and school enrollment (Bullis, Yovanoff, and Havel, 2004), or level of substance use (Dembo et al., 1993, 2000; Wilson et al., 2001). Second, the few studies that examined multiple areas of functioning either had small samples (Lewis et al., 1991, 1994) or used samples that do not reflect the social and demographic characteristics of youth currently involved in the juvenile justice system (Giordano, Cernkovich, and Lowery, 2004; Giordano, Cernkovich, and Rudolph, 2002; Glueck and Glueck, 1968). Specifically, the study by Glueck and Glueck (1968) did not include racial/ethnic minorities or females, whereas Giordano and colleagues (2002, 2004) did not include Hispanic individuals and focused exclusively on serious offenders. These omissions are problematic because racial/ethnic minorities now comprise nearly two-thirds of youth in the juvenile justice system, and the proportion of incarcerated females continues to rise (Puzzanchera and Kang, 2011).

This bulletin examines youth's functional impairment as assessed 3 years after they were initially detained. Functional impairment refers to a youth's day-to-day social, psychiatric, and academic difficulties. Interviewers assessed participants' functioning in the past 3 months at home, at school, at work, and in the community; their moods and emotions; patterns of substance use; self-harmful behavior or intent; and rational thinking. The research represents the first large-scale, prospective study to examine global and specific types of functional impairment (see page 4) using a diverse and representative sample of juvenile detainees.

Methods

This section provides a brief overview of the authors' methods. Additional, detailed information about the authors' methods and statistical analysis can be found in Teplin et al. (2002, 2005). To assess the effect of attrition, the authors compared the gender, race/ethnicity, and age of participants who were reinterviewed with those who were not reinterviewed. There were no significant differences except that (1) males were more likely than females to have died and (2) both non-Hispanic white and Hispanic individuals were more likely than African Americans to have been lost to followup. The researchers weighted the statistical analyses by sampling strata to adjust the potential bias from demographic differences in attrition.

Participants and Sampling Procedures

Participants were part of the Northwestern Juvenile Project (NJP), a longitudinal study of 1,829 youth (ages 10–18) arrested and detained between November 20, 1995, and June 14, 1998, at the Cook County Juvenile Temporary Detention Center (CCJTDC) in Chicago, IL. The random sample was stratified by gender, race/ethnicity (African American, non-Hispanic white, Hispanic, or other), age (10–13 years or 14 years and older), and legal status (processed in juvenile or adult court) to obtain enough participants to examine key subgroups (e.g., females, Hispanics, younger children).

Like juvenile detainees nationwide, the majority of CCJTDC detainees are male and most belong to racial/ethnic minority groups (77.9 percent African American, 5.6 percent non-Hispanic white, 16 percent Hispanic, and 0.5 percent other racial/ethnic groups). The age and offense distributions of the CCJTDC detainees are also similar to detained juveniles nationwide (Snyder and Sickmund, 2006).

The authors chose the detention center in Cook County, which includes Chicago and surrounding suburbs, for three reasons:

- Nationwide, most juvenile detainees live in and are detained in urban areas (Pastore and Maguire, 2000).
- Cook County is ethnically diverse and has the third-largest Hispanic population in the United States (U.S. Census Bureau, 2001). Studying this population is important because Hispanics are the largest minority group in the United States (U.S. Census Bureau, 2000).
- The detention center's size (daily census of approximately 650 youth and intake of 20 youth per day) ensured a large enough pool of participants would be available.

CCJTDC is used for pretrial detention and for offenders sentenced to less than 30 days. It houses detainees younger than age 17 (and as old as 21 if they are being prosecuted for an arrest that occurred when they were younger than 17). Participants were initially interviewed within 2 days of intake and reinterviewed 3 years later, whether they were living in the community or incarcerated. Of the original 1,829 participants, 1,751 (95.7 percent) were interviewed at followup. Participants who were interviewed more than 4.5 years after their baseline interview ($n = 94$) were excluded from the final sample. Four other participants did not receive the functional impairment assessment due to interviewer error and were also excluded from the final sample.

Because this sample is high risk and highly mobile, a cutoff earlier than 4.5 years would restrict its generalizability. To ensure that the cutoff did not bias the findings, the researchers compared the gender, race/ethnicity, and age of participants who were interviewed between 3.5 and 4.5 years (n = 214) after baseline with those interviewed within 3.5 years after baseline and found that there were no significant differences. In addition, the researchers examined whether the inclusion of these participants affected the findings. The researchers repeated all analyses using only those participants who were interviewed within 3.5 years; again, the findings were substantially similar.

The final sample size was 1,653 participants, composed of 1,051 males (63.6 percent) and 602 females (36.4 percent); 922 (55.8 percent) were African American, 267 (16.2 percent) were non-Hispanic white, 460 (27.8 percent) were Hispanic, and 4 (0.2 percent) were from other racial/ethnic groups. Participants ranged in age from 10 to 18 years at the initial interview. At followup, participants ranged in age from 13 to 22 years. Time to followup was between 2.8 and 4.5 years.

Measures

Master's level clinical research interviewers completed the Child and Adolescent Functional Assessment Scale (CAFAS) (Hodges, 1994) following a comprehensive 3- to 4-hour interview with the participant. Interviewer ratings were based on participants' behaviors in the past 3 months.

The CAFAS assesses eight domains of functioning (Hodges, 2005):

- **School/work.** Measures youth's ability to perform satisfactorily in a group educational or work environment.
- **Home.** Measures how well youth observe reasonable rules and perform age-appropriate tasks wherever they are living.
- **Community.** Assesses the extent to which youth respect the rights of others, respect others' property, and conform to laws.
- **Behavior toward others.** Assesses appropriateness of youth's interpersonal behavior (e.g., ability to resolve conflicts constructively, ability to create interpersonal relationships that are not exploitive to the youth or others).
- **Moods/emotions.** Determines youth's moods and psychiatric problems, including depression, anxiety, and trauma-related reactions.
- **Self-harm.** Assesses the severity of self-harmful thoughts or behaviors.
- **Substance use.** Determines the severity of youth's substance use problems.
- **Thinking.** Examines youth's ability to use rational thought processes.

Each domain is scored as 0 (minimal impairment), 10 (mild impairment), 20 (moderate impairment), or 30 (severe impairment). A total score of 0–10 that sums all eight domains indicates no noteworthy impairment; 20–40, the need for treatment on an outpatient basis; 50–90, the need for additional services beyond traditional outpatient care; 100–130, the need for more intensive care than outpatient and/or multiple sources of supportive care; and 140 or more, the need for more intensive treatment (Hodges, 1994). For this study, the authors defined "marked global impairment" as a total score of 100 or more on the CAFAS. To examine impairment in specific domains of functioning, the authors identified ratings of "severe impairment" on CAFAS subscales (i.e., scores of 30).

Findings

More than one-fifth (21.6 percent) of the 1,653 youth in the final sample had marked global impairment (a total score of 100 or more; see table 1, pages 6–7). Seven percent of youth had severe global impairment (a total score

"Three years after detention, African American and Hispanic males were more likely to be impaired than non-Hispanic whites in school/work and in the community."

of 140 or more). Only 7.5 percent of the sample demonstrated "no noteworthy impairment" (a total score of 10 or less).

Among youth with total scores of 100 or more, 94.2 percent had severe impairment (a score of 30) on two or more of the eight domains, 65.2 percent had severe impairment on three or more of the eight domains, and 21.8 percent had severe impairment on four or more of the eight domains.

Significantly more males than females had marked global impairment. Data showed no significant racial/ethnic differences in marked global impairment for males or females.

Impairment Within Domains

The authors analyzed results in each of the eight domains (see table 1 for more details).

School/work. More than one-third (34.1 percent) of youth were severely impaired in the school/work domain. Significantly more African American and Hispanic males than non-Hispanic white males had severe impairment in this domain. The authors did not observe gender differences.

Home. Seven percent of youth were severely impaired in this domain. The authors did not find racial/ethnic or gender differences.

Community. More than half (51.4 percent) of youth were severely impaired in the community domain. Significantly more males than females were impaired in this domain and significantly more African American and Hispanic males than non-Hispanic white males were impaired.

Behavior toward others. Nearly 1 in 10 (9.1 percent) of youth were severely impaired in this domain. Significantly more males than females were impaired in this domain. The authors did not observe racial/ethnic differences.

Moods/emotions. Approximately 2 percent (2.2 percent) of youth were severely impaired in this domain. Significantly more females than males were impaired in this domain. The authors did not observe racial/ethnic differences.

Self-harm. Less than 1 percent (0.4 percent) of youth were severely impaired in this domain. Significantly more females than males, and significantly more Hispanic than African American males were impaired in this domain.

Substance use. More than one-quarter (25.7 percent) of youth were severely impaired in this domain. Significantly more white males were impaired in this domain than African American or Hispanic males. The authors found no differences between genders.

Thinking. Less than 1 percent (0.4 percent) of youth were severely impaired in this domain. The authors observed no racial/ethnic or gender differences.

Differences by Age

After adjusting for racial/ethnic differences, the authors found no significant age differences in global impairment for males and few differences across domains for males and females. Among females, significantly more girls between 10 and 13 years than girls between 14 and 15 years and girls 16 and older[1] had marked global impairment at baseline (26.7 percent versus 12.6 percent and 12.4 percent). This pattern was similar for their impairment in the home domain at baseline (15.6 percent versus 6.4 percent and 3.7 percent).

Among males, a greater number of boys between 14 and 15 years or 16 years and older than boys between 10 and 13 years at baseline were severely impaired in the school/work domain (37.5 percent and 35.2 percent versus 14.1 percent) and in the substance use domain (25.7 percent and 28.2 percent versus 13.9 percent). Significantly more males between 10 and 13 years than males between 14 and 15 years or 16 years and older at baseline were severely impaired in the home domain (14.0 percent versus 5.4 percent and 7.2 percent).

Table 1. Prevalence of Functional Impairment at Followup by Gender and Race/Ethnicity

Functional Impairment	Total (males and females) (*n* = 1,653) Percent	Females				
		Total (*n* = 602) Percent	African American (*n* = 398) Percent	Non-Hispanic White (*n* = 38) Percent	Hispanic (*n* = 120) Percent	Racial/Ethnic Differences[1]
Marked global impairment[3]	21.6	13.7	13.1	15.4	16.7	NS
Severe impairment in specific domains[4]						
School/work	34.1	31.9	32.6	20.2	28.4	NS
Home	7.0	6.2	5.7	9.0	7.2	NS
Community	51.4	13.4	11.6	13.1	12.0	NS
Behavior toward others	9.1	4.2	3.5	7.1	5.7	NS
Moods/emotions	2.2	4.4	4.3	3.6	5.9	NS
Self-harm	0.4	1.5	1.5	1.2	1.6	NS
Substance use	25.7	24.2	24.1	28.9	24.5	NS
Thinking	0.4	0.5	0.5	1.2	0.0	*

AA = African American, H = Hispanic, W = non-Hispanic white, NS = not significant.

[1] For all tests of significance, the group with the higher prevalence rate is more likely to have functional impairment than the comparison group. Three males of "other" race/ethnicity were excluded from analyses of racial/ethnic differences but were included in the totals.

[2] Gender differences are adjusted for race/ethnicity.

[3] Marked global impairment is defined as receiving a Child and Adolescent Functional Assessment Scale (CAFAS) total score of 100 or greater.

[4] Severe impairment in specific domains is defined as a domain scale score of 30 on the CAFAS.

* Because no Hispanics were impaired on the "thinking" domain scale, the authors could not make racial/ethnic comparisons.

Functional Impairment in Males and Their Incarceration Status

Because incarceration was common among males, the authors examined differences in impairment across the specific domains by incarceration status (whether or not they were predominantly incarcerated during the past 3 months). Participants incarcerated within the 3 months before the followup interview received an automatic scale score of 30 (severe impairment) in the community domain. As a result, the authors excluded the community domain from these analyses because those who were predominantly incarcerated in the past 3 months could not be rated. Not enough females were reincarcerated (n = 48) for further analyses. Table 2 (pages 8–9) presents race/ethnicity information on functional impairment for incarcerated males and those in the community.

Among males living in the community in the past 3 months, significantly more African Americans and Hispanics were impaired than non-Hispanic whites in the school/work domain. After adjusting for racial/ethnic differences, significantly more incarcerated males were impaired in the home domain (for incarcerated youth, "home" is the corrections facility)[2] and had more severely impaired thinking than males living in the community. In contrast, significantly more males living in the community were severely impaired in the substance use domain than incarcerated males.

Discussion of Findings

Three years after detention, approximately one of every five youth had markedly impaired functioning, indicating a need for improved interventions and care after release. Youth who have been detained struggle to occupy age-appropriate social, occupational, and/or interpersonal roles. Among youth with marked global impairment (CAFAS scores of 100 and more), nearly two-thirds were severely impaired in three or more areas of functioning. For example, these youth may have been expelled from school, engaged in serious violations of the law, and been addicted to drugs. These findings underscore the fact that failure to provide effective rehabilitation services during detention and after release creates ongoing costs for society and for the youth themselves.

Functional impairment at followup varied by youth's social and demographic characteristics. Consistent with patterns of mental health needs among detained youth (Cauffman, 2004; McCabe et al., 2002; Teplin et al., 2002) and youth in the general population (Grunbaum

Table 1 (continued)

Males						Gender Differences[1, 2]	
Total (n = 1,051) Percent	African American (n = 524) Percent	Non-Hispanic White (n = 184) Percent	Hispanic (n = 340) Percent	Racial/Ethnic Differences[1]	Specific Racial/Ethnic Differences		
22.2	22.0	19.0	25.1	NS		$p < .001$	M > F
34.2	35.5	20.0	33.6	$p < .01$	AA > W; H > W	NS	
7.1	7.0	4.6	8.3	NS		NS	
54.5	56.1	35.6	53.0	$p < .001$	AA > W; H > W	$p < .001$	M > F
9.5	9.4	9.4	9.5	NS		$p < .01$	M > F
2.1	1.6	3.3	4.0	NS		$p < .05$	F > M
0.4	0.1	0.8	1.7	$p < .01$	H > AA	$p < .05$	F > M
25.9	25.2	37.1	25.5	$p < .05$	W > AA; W > H	NS	
0.4	0.5	0.6	0.0	*		NS	

et al., 2004), non-Hispanic white youth and females had greater impairment in the moods/emotions, self-harm, and substance use domains. Hispanic males had a greater likelihood of self-harm than African American males. Yet, 3 years after detention, African American and Hispanic males were more likely to be impaired than non-Hispanic whites in school/work and in the community, and males were more likely than females to have marked global impairment and impaired functioning in the community and in their behavior toward others.

Compared with non-Hispanic whites, minority males may experience a continuity of disadvantage (Sampson and Laub, 1997), including disproportionate rates of poverty, incarceration, reduced access to education and health care, and limited community resources (Elliott et al., 1996; James et al., 2007). Mental health services may improve these youth's emotional problems and associated functioning over time (Dembo, Schmeidler, and Wothke, 2003; Lyons et al., 2003); however, minority males may be the least likely to receive these services during or after detention (Teplin et al., 2005).

Studies of other high-risk youth have also found that females fare better than males in education and employment and have less criminal involvement as they get older (Bullis and Yovanoff, 2002; Bullis, Yovanoff, and Havel, 2004; Werner, 1992). This may have to do with the fact that females receive services more frequently than males (Dembo et al., 1998; Shapiro et al., 1984; Teplin et al., 2005). Active parenting also may mitigate some problems (Chilcoat and Breslau, 1996) and, when they return to their communities, females are more likely to be active parents than males (Kalenkoski, Ribar, and Stratton, 2005). Nonetheless, research has not determined what role parenting may play in long-term functioning for female detainees.

These findings highlight the extensive unmet needs of young minority males. The arrest rate for racial/ethnic minority youth is 50 percent greater and the detention rate is 30 percent greater than for non-Hispanic whites (Snyder, Puzzanchera, and Adams, 2007).

Age differences may also be a consideration in how youth fare after release. At home, the youngest participants may have more difficulties than older participants. They are more likely to live with caretakers who try to manage their behavior, which may lead to more conflicts. In contrast, older males may have more difficulty than the youngest males in the school/work domain because they are more likely facing a workforce in which they are ill-prepared to compete. Finally, older males may be more likely to have substance abuse problems than younger males because they tend to have greater freedom and can obtain substances more easily (Chilcoat and Breslau, 1996).

Incarceration status was also associated with functional impairment among males. Compared with males living in the community, incarcerated males were significantly more likely to have impaired thinking and impaired functioning in the home domain. The characteristics of prison life, such as being separated from loved ones (Pogrebin, 1985), crowding (Parent et al., 1994), and solitary confinement (Parent et al., 1994), may increase the risk for this form of impairment. These findings, however, may simply reflect the characteristics of individuals who go to prison.

Table 2. Prevalence of Functional Impairment in Specific Domains Among Males (Incarcerated and Living in the Community) at Followup

Severe Impairment in Specific Domains[1]	Incarcerated[2]				
	Total (*n* = 375) Percent	African American (*n* = 221) Percent	Non-Hispanic White (*n* = 36) Percent	Hispanic (*n* = 117) Percent	Racial/Ethnic Differences[3]
School/work	28.3	27.2	26.1	34.8	NS
Home	11.5	10.3	9.8	17.6	NS
Behavior toward others	11.1	10.5	0.0	16.8	*
Moods/emotions	2.0	1.6	0.0	4.7	*
Self-harm	0.3	0.1	0.0	1.3	*
Substance use	9.0	7.7	12.9	15.4	NS
Thinking	1.1	1.3	0.0	0.0	*

AA = African American, H = Hispanic, W = non-Hispanic white, NS = not significant.

[1] Severe impairment in specific domains is defined as a domain scale score of 30 on the Child and Adolescent Functional Assessment Scale.

[2] Participants who self-reported they had been "mostly in correctional facilities in the past 3 months" were considered incarcerated. Incarceration status was missing for five males.

[3] For all tests of significance, the group with the higher prevalence rate is more likely to have functional impairment than the comparison group. Three males of "other" race/ethnicity were excluded from analyses of racial/ethnic differences but were included in the totals.

[4] Incarceration differences are adjusted for race/ethnicity.

[5] Because no Hispanic males were impaired on the "thinking" domain scale, the authors could not make racial/ethnic comparisons.

* Because one or more racial/ethnic group(s) had no persons with severe impairment on the scale, the authors could not make racial/ethnic comparisons.

Incarcerated males were substantially less likely to have substance use problems than males living in the community. Substance use problems may be less common in prison due to decreased access to substances and random testing for substance use (Prendergast et al., 2004). Although the findings suggest that males have a lower risk for substance abuse while incarcerated, drug use may escalate for these youth after release (Keene, 1997).

Study Limitations

The study described in this bulletin had some limitations:

- The CAFAS ratings that determined youth's level of functional impairment were based on the interviewers' assessments following one structured interview. Although these interviews were extensive and allowed the interviewer to establish good rapport with the participant, the reliability of data is subject to the limitations of self-reporting.
- The interviewers did not administer the CAFAS at baseline; therefore, the authors could not compare ratings at followup with ratings at detention.
- The study interviewed youth from a large juvenile detention center in Chicago, so findings may only be generalized to detained youth in urban detention centers with a similar demographic composition.
- The authors' analyses only show types of functional impairment in different races/ethnicities and genders and cannot comment on the causes of this impairment.

Directions for Future Research

The authors suggest that future studies should do the following:

- **Identify changes in functional impairment as youth age.** Future studies should examine how youth's impairment changes as they become young adults. Studies should determine which areas of functioning remain stable, which improve, and which decline. This information will guide the development of long-term prevention and intervention programs.
- **Investigate which factors are associated with positive outcomes.** Studies should identify which factors (e.g., a positive role model, regular mental health treatment) are associated with positive outcomes in youth's lives as they age. Understanding what helps is the first step to improving care.

Table 2 (continued)

Community						Incarceration Status Differences[3, 4]	
Total (n = 671) Percent	African American (n = 302) Percent	Non-Hispanic White (n = 146) Percent	Hispanic (n = 221) Percent	Racial/Ethnic Differences[3]	Specific Racial/Ethnic Differences		
37.5	40.3	18.7	32.6	$p < .001$	AA > W; H > W	NS	
4.6	5.1	3.4	3.0	NS		$p < .05$	Incarcerated > community
8.6	8.7	11.7	5.6	NS		NS	
2.0	1.6	4.0	3.0	NS		NS	
0.4	0.0	1.0	2.0	*		NS	
35.2	35.4	43.0	30.7	NS		$p < .001$	Community > incarcerated
0.0	0.0	0.7	0.0	*		$p < .05$	Incarcerated > community[5]

Implications for Public Policy

The authors suggest the following public policy initiatives:

- **Connect more youth with community services after detention.** Youth held in detention must be connected to effective mental health, substance abuse, and educational or vocational support services in the community after release. Receiving such interventions during adolescence can improve a youth's health and functioning over the course of his or her development (Odgers et al., 2007; Petras et al., 2008). Severe impairments that go untreated can lead to increasing disadvantage throughout youth's lives (Sampson and Laub, 1997). For example, if a youth fails a grade in school, success in subsequent years becomes even more difficult. Recurrent experiences of school failure may increase youth's risk for dropping out, substance abuse, criminal behavior, and emotional problems. If youth receive interventions such as mental health care and tutoring services, they may have a better chance of achieving school success.
- **Target services to youth with the greatest need.** Males and minorities have the greatest risk for impaired school and work performance and for continued delinquency. Detention provides an opportunity to engage these high-risk youth in services that will improve their social adjustment.
- **Provide long-term interventions.** Most juvenile detainees have long-term functional impairment in several areas (e.g., substance use and moods/emotions). Such problems likely will not respond to short-term or narrowly focused interventions. These youth likely require comprehensive services delivered over an extended period of time. Unfortunately, mental health services are not typically designed or funded to meet these needs.

Conclusion

Research suggests that incarcerated youth have difficulty functioning in society as they age. This study reveals that 3 years after detention, most youth struggle in one or more life domains, and one in five youth is severely impaired. Other studies have shown that fewer than 50 percent of youth find employment or return to school within 6 months of release from detention, and as many as two-thirds of youth are rearrested within 4.5 years of release (Benda, Flynn Corwyn, and Toombs, 2001; Bullis, Yovanoff, and Havel, 2004; Heilbrun et al., 2000; Wilson et al., 2001).

Juvenile justice organizations, community groups, law enforcement, and corrections agencies must invest in targeted, comprehensive strategies to give these youth a chance to experience productive and healthy lives.

For More Information

This bulletin was adapted from Abram, K.M., Choe, J.Y., Washburn, J.J., Romero, E.G., and Teplin, L.A. 2009. Functional impairment in youth three years after detention. *Journal of Adolescent Health* 44(6):528–535.

Endnotes

1. Youth ranged from 10–18 years at baseline. For these analyses, the authors adopted the following age groups: 10–13 years, 14–15 years, and 16–18 years.

2. For the "home" domain, incarcerated males were assessed regarding their behavior in the correctional facility. For example, the authors assessed whether males received disciplinary actions in prison for rule infractions.

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