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Psychiatric Disorders Among Detained Youths: A Comparison of Youths Processed in Juvenile Court and Adult Criminal Court

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Abstract

Objective—To compare the prevalence of psychiatric disorders in youths processed in adult criminal court with youths processed in the juvenile court.

Methods—Participants were a stratified random sample of 1829 youths (10–18 years of age) arrested and detained in Chicago, IL. Data on 1715 youths (13–18 years of age) from version 2.3 of the Diagnostic Interview Schedule for Children are presented, including 1440 youths processed in juvenile court and 275 youths processed in adult criminal court.

Results—Among youths processed in the adult criminal court, 66% had at least one psychiatric disorder and 43% had two or more types of disorders. Prevalence rates and the number of comorbid types of disorders were not significantly different between youths processed in adult criminal court and those processed in the juvenile court. Among youths processed in adult criminal court, those sentenced to prison had significantly greater odds of having disruptive behavior, substance use, or comorbid affective and anxiety disorders than those receiving a less severe sentence. Males, African Americans, Hispanics, and older youths had greater odds of being processed in adult criminal court than females, non-Hispanic whites, and younger youths, even after controlling for felony-level violent crime.

Conclusions—Community and correctional systems must be prepared to provide psychiatric services to youths transferred to adult criminal court, and especially to youths sentenced to prison. Psychiatric service providers must also consider the disproportionate representation of racial/ethnic minorities in the transfer process when developing and implementing services.

Introduction

More youths are processed in adult criminal court than ever before. All 50 states and the District of Columbia have legal mechanisms to try juveniles as adults in criminal court (1–3). Historically, most states transferred juveniles to adult criminal court primarily through *judicial waiver*. That is, juvenile court judges made decisions on a case-by-case basis, considering the characteristics of the charge and of the youths (1,4,5). An increasing number of juveniles are now transferred to adult criminal court using *automatic transfers* (29 states) and *prosecutorial direct file* (15 states) (1). Automatic transfers exclude juveniles from the jurisdiction of the juvenile court based solely on the type of offense, criminal history, and age of the youths;

judges are not involved in this form of transfer. Prosecutorial direct file mechanisms allow prosecutors to determine when to file certain juvenile cases directly in criminal court.

The increased availability of legal mechanisms to process juveniles in adult criminal court is largely responsible for the 366% increase between 1983 and 1998 in juveniles held in adult jails (6). As of 2004, approximately 7% of the approximately 2 million arrests of youths eligible for processing in the juvenile justice system were transferred directly to adult criminal court (7). Given the substantial numbers of youths transferred to adult criminal court on an annual basis, accurate epidemiologic data on the prevalence of psychiatric disorders in this population are important. Youths with serious psychiatric disorders who are processed in adult criminal court have the right to receive needed treatment for severe mental disorders (6).

Recent studies indicate that a substantial proportion of juvenile detainees need mental health services (8); between one-half to two-thirds of juvenile detainees have one or more psychiatric disorders (9,10). Yet, to our knowledge, no study has examined the prevalence of psychiatric disorders specifically among youths transferred to adult criminal court. Data on the prevalence of psychiatric disorders among youths processed in adult criminal court (“transferred youths”) are needed for three reasons.

First, transferred youths are composed disproportionately of underserved sociodemographic groups. Numerous studies indicate that transferred youths are disproportionately male and racial/ethnic minorities (4,6,11–16). Although disproportionate confinement of racial/ethnic minorities is found at all levels of the juvenile justice system, it is even greater for youths transferred to adult criminal court. One study of youths in California found that racial/ethnic minorities arrested for a violent crime were 3.1 times more likely to be transferred and convicted than non-Hispanic white youths arrested for a violent crime (17). Males and racial/ethnic minorities have significantly lower odds than females and non-Hispanic whites of receiving needed mental health treatment after youths are detained (18). Thus, the concern over disproportionate minority confinement of males and racial/ethnic minorities is also a health disparities concern.

Second, youths transferred to adult criminal court typically wait substantially longer for their case to be adjudicated (i.e., a finding of guilt or innocence) than their peers in the juvenile system (19–21). They are also less likely than adults to be released prior to adjudication (22). Because transferred youths are incarcerated for longer periods of time than youths processed in juvenile court, their mental health needs are even more important than those held in detention for shorter periods of time. The conditions associated with extended detention (e.g., separation from loved ones, crowding, solitary confinement) may increase risk for suicidal behavior (23–26).

Finally, findings from an experimental study suggest jurors may be biased against a youth being tried in an adult court, leading to a greater likelihood of a finding of guilt, higher confidence in the defendant’s guilt, and a lower standard of proof for guilt (27). Indeed, youths processed in adult criminal court are more likely to be convicted and to receive more stringent sentences than those processed in juvenile court (20,22,28,29). Transferred youths are also more likely to receive more severe punishments than young adults charged with similar crimes in adult criminal court (30). Nearly 60% of all transferred youths charged with violent offenses are adjudicated to prison compared with 26% of similarly charged adults (22). Approximately 5400 convicted youths are housed in adult prison facilities (6), where they may not receive age-appropriate interventions (31). Before we can develop age-appropriate interventions and plan for their implementation in the adult correctional system, we need to know which psychiatric disorders are most prevalent.

Despite its importance, we could find only one study that examined mental health problems among youths processed in adult court (32). This study, based on one clinician's coding of 50 of his case records, investigated only posttraumatic stress disorder (PTSD) and learning disorders.

To our knowledge, our investigation is the first large-scale study of psychiatric disorders among youths transferred to adult criminal court. Using data from the Northwestern Juvenile Project (9), we compare youths processed in adult criminal court with youths processed in the juvenile court. Specifically, we examine the following questions:

1. Are there differences in the psychiatric needs of youths processed in the juvenile court and those processed in the adult criminal court?
2. Among youths processed in the adult criminal court, are there differences in the psychiatric needs among those sentenced to prison and those who received less severe sentences?

Methods

Participants

Participants include 1829 youths (aged 10–18 years of age) randomly sampled from intake into the Cook County Juvenile Temporary Detention Center (CCJTDC) (Chicago, IL) from November 1995 through June 1998. The CCJTDC receives approximately 8500 annual admissions (33) and is used solely for pretrial detention and for offenders sentenced for less than 30 days. All detainees younger than 17 years are held at the CCJTDC, including youths processed in adult criminal court. Youths up to age 21 years may be detained in the CCJTDC if they are still being prosecuted for an arrest that occurred when they were younger than 17 years. Like juvenile detainees nationwide, approximately 90% of the CCJTDC detainees are male, and most are racial/ethnic minorities (77.9% African American, 5.6% non-Hispanic white, 16.0% Hispanic, and 0.5% other racial or ethnic groups). The age and offense distributions of the CCJTDC detainees are also similar to detained juveniles nationwide (34).

Transfer to Adult Criminal Court in Illinois

In Illinois, the minimum age at which a juvenile can be transferred to adult criminal court is 13 years (705 ILCS 405/5-4). The juvenile court has jurisdiction over all youths 16 years or younger, unless they have been transferred to adult criminal court. At the time the data were collected, Illinois statute 705 ILCS 405/5-4 specified six felony offenses for which youths were automatically transferred to adult criminal court for processing. Four of these offenses (first-degree murder, aggravated criminal sexual assault, armed robbery committed with a firearm, or aggravated vehicular hijacking committed with a firearm) are violent offenses; the other two offenses (unlawful use of weapon on or within 1000 feet of school property and delivery of a controlled substance on or within 1000 feet of school property or public housing property) are not.

Sampling and Interview Procedures

Youths were eligible to participate, regardless of psychiatric morbidity, drug or alcohol intoxication, or fitness to stand trial. Project staff explained the project to participants in their units and assured them that anything they told us (except acute suicidal or homicidal risk) would be confidential. Data are protected by a Federal Certificate of Confidentiality and Title 28 Code of Federal Regulations, Part 22. Participants signed an assent form or consent form, depending on their age. The Northwestern Institutional Review Board, the Centers for Disease Control and Prevention Institutional Review Board, and the US Office of Protection from Research Risks waived parental consent, consistent with Federal Regulations. We nevertheless

tried to contact parents; however, despite repeated attempts, none could be found for 43.8% of the participants. In lieu of parental consent, youths' assent was overseen by a participant advocate who represented the interests of the participants.

Participants were interviewed for 2 to 3 hours in a private area, almost always within 2 days of intake. Female participants were always interviewed by female interviewers. Interviewers were trained for at least one month; most had a master's degree in psychology or an associated field and had experience interviewing high-risk youths. One-third of the interviewers were fluent in Spanish. We maintained consistency throughout the study by monitoring scripted interviews with mock participants. Additional information on our methods can be found in a prior publication from this study (9).

Measures

To determine the diagnoses, we used version 2.3 of the Diagnostic Interview Schedule for Children (DISC 2.3) (35), the most recent English and Spanish versions then available. The DISC 2.3 assesses *DSM-III-R* disorders in the past 6 months. We include the following disorders: affective (major depression, dysthymia, mania, and hypomania), anxiety (generalized anxiety, separation anxiety, obsessive-compulsive, and over-anxious disorders), psychosis, disruptive behavior (conduct, attention-deficit/hyperactivity [ADHD], and oppositional defiant disorders), and substance use (alcohol, marijuana, and drug other than marijuana). A prior publication details the special procedures associated with the determination of psychosis and ADHD (9).

Data collection for PTSD began 13 months after the larger study began because PTSD was not included in the DISC 2.3. PTSD was measured with the DISC 4.0, which provided 12-month rates using *DSM-IV* criteria for PTSD. Data on PTSD diagnoses were examined using a subsample of 898 participants. The subsample was composed of 532 males (59.2%) and 366 females (40.8%); 490 African Americans (54.6%), 154 non-Hispanic whites (17.1%), 252 Hispanic (28.1%), and 2 of other race/ethnicity (0.2%).

Data on arrest charges were obtained from intake records at the CCJTDC.

Sample Stratification

The sample was stratified by gender, race/ethnicity (African American, non-Hispanic white, Hispanic), age (10–13 years old or 14 years and older), and legal status (processed in juvenile or adult criminal court). Stratification by legal status was conducted only for males; not enough females were transferred to adult criminal court to make stratification feasible. Within each stratum, we used a random numbers table to select names from the CCJTDC intake log. Selected demographic strata (females, non-Hispanic whites, 10–13 year olds) were oversampled to obtain adequate numbers of participants in key subgroups. The final sampling fractions ranged from 0.018 to 0.689 (additional information on the sample is available from the authors). Because certain strata were oversampled, all statistics were weighted to reflect CCJTDC's demographic characteristics. The overall rate of refusal to participate was 4.2%; within the stratum of youths transferred to the adult criminal court, the refusal rate was 7.1%, largely because their lawyers advised they not participate.

Characteristics of the Final Sample

We restricted the final sample to participants 13 years and older ($n=1715$) because juveniles younger than 13 years are not eligible for processing in adult criminal court in Illinois. The PTSD subsample consisted of 840 participants 13 years and older. The final sample of youths processed in the adult criminal court ($n=275$) includes 21 females and 254 males, 199 African Americans, 69 Hispanics, and 7 non-Hispanic whites. The sample of youths processed in the

juvenile court (n=1440) includes 616 females and 824 males, 727 African Americans, 429 Hispanics, 280 non-Hispanic whites, and 4 participants who self-identified as an “other” race or ethnicity. The mean age was 15.7 ± 0.5 for youths processed in adult criminal court and 15.0 ± 1.2 for youths processed in juvenile court.

Among youths processed in the adult criminal court, 39% were charged with a felony-level violent crime, 78% were found guilty, and 51% were sentenced to prison. Among youths processed in the juvenile court, 15% were charged with a felony-level violent crime, 65% were “adjudicated delinquent” (the juvenile justice equivalent to being found guilty), and 1% were sentenced to prison. Significantly more youths processed in the adult criminal court were charged with a felony-level violent crime (odds ratio [OR]=3.6, 95% confidence interval [CI] = 2.5–5.1, $p < .001$), found guilty (OR=2.0, 95% CI = 1.3–2.9, $p < .001$), and sentenced to prison (OR=160.1, 95% CI = 44.0–583.0, $p < .001$) than those in juvenile court.

Table 1 presents the demographic characteristics of the sample and the weighted proportions of juveniles processed in adult criminal court vs. juvenile court by gender, racial/ethnic subgroup, and specific age groups. As shown in Table 1, males, racial/ethnic minorities, and older youths had greater odds of being transferred to the adult court than females, non-Hispanic whites, and younger youths. Furthermore, African Americans had greater odds of being transferred than Hispanic youths. We examined if the results changed when we controlled for who received a charge for a felony-level violent crime. The results did not change; males, racial/ethnic minorities, and older youths still had significantly greater odds of transfer to adult court than females, non-Hispanic whites, and younger youths.

Statistical Analyses

All descriptive statistics and model parameters were weighted using sample weights derived from CCJTDC's demographic characteristics and the sampling fractions for each stratum. Taylor series linearization was used to estimate standard errors (36,37). Logistic regression, which estimates odds ratios, was used to assess differences in prevalence rates. Poisson regression, which estimates rate ratios, was used to assess differences for count data. Because we observe significant differences in transfer status by gender, race/ethnicity, and age, and these demographic factors have been shown to be associated with psychiatric disorder (9), we adjust all analyses by gender, race/ethnicity, and age.

Results

We first compared the prevalence of specific psychiatric disorders (Table 2) and comorbid psychiatric disorders (Table 3) among youths processed in adult criminal court and those processed in juvenile court. No significant differences in the prevalence of specific psychiatric disorders were found between youths processed in juvenile court and those processed in adult criminal court; both groups had high rates of disorders. As shown in Table 3, no differences were found for any combination of comorbid psychiatric disorders. Furthermore, no differences were found in the number of specific disorders or the number of types of psychiatric disorders (affective, anxiety, disruptive behavior, and substance use) across the two groups.

We next examined only youths processed in adult criminal court (n=275) to compare prevalence rates of psychiatric disorders among those who did and did not receive a prison sentence. Table 4 shows the prevalence rates of specific psychiatric disorders. Transferred youths who received a prison sentence had significantly greater odds of any disorder, any disorder except conduct disorder, any disruptive behavior disorder, oppositional defiant disorder, conduct disorder, any substance use disorder, alcohol use disorder, marijuana use disorder, and comorbid alcohol and drug use disorders.

Table 5 shows the prevalence rates of comorbid disorders among transferred youths by prison status (sentenced to prison, yes/no). Transferred youths who received a prison sentence had significantly greater odds of nearly all combinations of comorbid disorders. In comparison to transferred youths who did not receive a prison sentence, those youths who received a prison sentence had significantly greater odds of having 2 or more, 3 or more, and all 4 types of disorders. Finally, transferred youths who received a prison sentence had significantly greater numbers of specific disorders and types of disorder than those who did not receive a prison sentence.

Discussion

Our findings indicate that the prevalence rates of specific and comorbid psychiatric disorders are as high or higher for youths processed in adult criminal court as for youths processed in juvenile court. These findings are consistent with the clinical data reported by Beyer (2006), who found no differences between youths processed in adult criminal court and juvenile court on a clinical assessment (32). To our knowledge, the current study provides the first evidence that many transferred youths, like their peers processed in the juvenile court, have substantial need for psychiatric and substance abuse services.

These findings also suggest transferred youths may have greater need for psychiatric services than detained adults. Prior research indicates that less than 35% of detained adult males have a psychiatric disorder (excluding antisocial personality disorder) (38); in contrast, 64% of transferred youths have a psychiatric disorder, even when excluding conduct disorder. The 6-month prevalence rate of major depression is three times greater for transferred youths than the *lifetime* rate among adult male detainees (15.9% for transferred youths vs. 5.1% for adult male detainees (38)).

Our study replicated prior findings that youths processed in adult criminal court are disproportionately male, African American, Hispanic, and older. Although these findings underscore the importance of addressing disproportionate minority confinement (39), the findings also have implications for psychiatric services. The sociodemographic factors associated with greater odds of youths being processed in adult criminal court are the same sociodemographic factors associated with *lower* odds of receiving psychiatric services, regardless of need (18). This finding suggests an urgent situation in which the largest numbers of transferred youths in need of psychiatric services are also the least likely to receive them.

We also found that the odds of having a psychiatric disorder were greater among transferred youths sentenced to prison than those receiving less severe sentences. The specific disorders associated with increased odds for a prison sentence were, not surprisingly, disruptive behavior and substance use disorders. Higher rates of disruptive behavior and substance use disorders may reasonably be expected among youths with greater antisocial traits, assuming that a sentence to prison is a proxy for greater antisociality. In other words, disruptive behavior and substance use disorders may reflect an underlying antisocial trait. A parallel result has been found among adult male prisoners, of whom approximately half meet criteria for antisocial personality disorder (40).

The higher prevalence of comorbid disorders found among prison-bound youths, however, is not as easily explained by underlying antisociality. On average, youths transferred to adult criminal court and sentenced to prison have more than one psychiatric disorder, and 15% have all four major types of psychiatric disorders. Furthermore, the types of comorbid disorders are not limited to behavioral or substance use disorders; receiving a prison sentence is associated with greater odds of having comorbid affective and anxiety disorders. These findings suggest that transferred youths sentenced to prison not only have greater needs for behavioral

rehabilitation to address disruptive behavior and substance use disorders than transferred youths receiving less severe sentences but they also have greater need for psychiatric treatment of major affective and anxiety disorders.

Limitations

This study has several limitations. Because our findings are drawn from a single site, they may pertain only to detention centers with a similar demographic composition and legal mechanisms for transfer to adult criminal court. For example, the generalizability of these findings may be limited to states that limit juvenile jurisdiction up to age 17 years; most states extend jurisdiction of the juvenile court up to age 18 years. Differences in prevalence of disorder by transfer status may vary if diagnoses were based on *DSM-IV* instead of *DSM-III-R*. Because it was not feasible to interview caretakers (few would have been available), our diagnostic data are also limited by the reliability and validity of youths' self-report. This may result in an under-reporting of some disorders (e.g., disruptive behavior disorders). Despite oversampling within specific strata, the sample size for specific sociodemographic groups, such as non-Hispanic white females, may be too small to conduct reliable comparisons. Finally, transfer processes may have changed since these data were collected; the findings may have less applicability to areas with different mechanisms for transfer.

Future Research

Based on the findings from this study, we suggest the following directions for future research:

1. **Studies of long-term functioning and outcome** Although several studies have examined recidivism among transferred youths (21,29,41–43), little is known about the long-term effects of being processed in adult criminal court on broader indices of functioning. Findings from this study suggest youths processed in the adult criminal court may experience worse long-term psychiatric outcomes than youths processed in the juvenile court; however, few empirical studies are available. The longer length of stay and stressors associated with processing in adult criminal court may increase risk for psychiatric disorders and other adverse developmental, social, and functional consequences (44–47). Furthermore, prior studies have found that few youths receive needed psychiatric services prior to adjudication (18), and transferred youths have a low likelihood of receiving services after adjudication (48). Data on the long-term psychiatric and overall functioning of transferred youths are especially needed for the majority of youths who are eventually released into the community.
2. **Studies of competency to stand trial** Future studies should investigate the influence of psychiatric disorders on competency to stand trial among youths transferred to adult criminal court. Some states are beginning to recognize cognitive and developmental immaturity as a basis for incompetence, similar to mental illness and mental retardation (49). Although the available research indicates that adolescents as young as 16 years have, on average, abilities for judicial competency that are similar to adults (47,49), research is needed to understand how psychiatric disorders interact with developmental stage to influence youths' ability to participate in adult legal proceedings.

Implications for Public Policy

The findings of this study have several implications for public policy:

1. **Psychiatric services within correctional systems should address the unique characteristics of transferred youths** The correctional system is not prepared to identify and treat transferred youths with psychiatric disorders (31). Assessment and treatment approaches developed for use with adults cannot be applied automatically

to transferred youths (31). Furthermore, because we know little about the effectiveness of treatments delivered to youths in correctional facilities (50), we cannot assume that assessment and treatment approaches developed for general population youths will be effective with transferred youths (31). Correctional psychiatric systems must use developmentally, culturally, and contextually appropriate assessment and treatment approaches (44). Rehabilitation of transferred youths is likely to be even more challenging if psychiatric disorders are not appropriately identified and treated.

2. **The current legal mechanisms for transfer to adult criminal court should be reconsidered** Public health and criminal justice professionals have questioned the effectiveness of the transfer process in protecting the public (44). Available evidence indicates that transferred youths re-offend more quickly and are more likely to engage in violent crimes after release than youths processed in the juvenile justice system (21,29,41–43), calling into question whether current transfer mechanisms improve public safety. The substantial need for psychiatric services for transferred youths raises additional concerns with the transfer process. Psychiatric disorders may be important mitigating factors in determining transfer to adult criminal court. Although public opinion generally supports the inclusion of mitigating factors in transfer decisions (51), automatic transfers preclude their consideration.
3. **Clinicians should help to determine when psychiatric disorders play a mitigating role in transfer decisions** Judicial processing, particularly the decision to process youths as adults or juveniles, represents a critical intervention point for youths (52). Clinicians can advise the court about which youths may benefit from alternative sentencing options, and for which youths rehabilitation is less probable (53). If alternative sentencing options are made available, prison sentences may become less common (54). Clinicians and researchers must continue to refine juvenile assessment technology to assist the court with weighing mitigating psychiatric factors in transfer decisions (44,55).
4. **The field must address the racial/ethnic disproportionality associated with the transfer process** Based on our findings and on national statistics, more than 60% of transferred youths with psychiatric problems will be racial/ethnic minorities (34), the group most likely to be underserved in detention and the community (18). The disproportionate transfer of African American youths to adult court is of particular concern. Although no national statistics are available, we found that African Americans comprised 84% of youths processed in adult criminal court but only 26% of Cook County's population. Some states have already begun to address the influence of the transfer processing on racial/ethnic disproportionality. Illinois recently repealed two laws established in 1989 that automatically transferred youths older than 14 years to adult criminal court if charged with selling drugs within 1000 feet of a designated "safe zone," typically schools and public housing. Because of the concentration of both schools and public housing in urban areas with high proportions of racial/ethnic minorities, 99% of the youths transferred to adult criminal court for a drug crime were racial/ethnic minorities (56).

Conclusions

The transfer process should be reserved for the most serious, chronic, and violent offenders (44). Clinicians can assist in this process by determining when and how mitigating psychiatric factors should be considered in transfer to adult criminal court, and which transferred youths may respond best to alternative sentencing. Correctional systems must be prepared to provide psychiatric services to youths transferred to adult criminal court, and especially to youths sentenced to prison. Community health systems must also be prepared to provide services for

these youths when they are released into the community. Psychiatric service providers need to consider the disproportionate representation of racial/ethnic minorities in the transfer process when developing and implementing services.

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Table 1
Demographic Characteristics of the Sample and Demographic Differences in the Weighted Proportions of Youths (13 Years and Older) Transferred to Adult Criminal Court (n=1715)^a

Demographic Characteristic	Proportion Transferred to Adult Court		SE	Demographic Differences	Odds Ratio (OR)	
	%				OR	95% CI
Gender				Male > Female	2.09	1.35 – 3.24
Female (n=637)	3	0.74				
Male (n=1078)	7	0.02				
Race/Ethnicity				African American > Non-Hispanic white	3.51	2.28 – 5.41
				African American > Hispanic	1.35	1.06 – 1.72
				Hispanic > Non-Hispanic white	2.61	1.53 – 4.43
African American (n=926)	7	0.14				
Hispanic (n=498)	5	0.55				
Non-Hispanic white (n=287)	2	0.47				
Other Race/Ethnicity (n=4)	0	-				
Age				Older > Younger ^b	1.52	1.33 – 1.74
13 years old (n=258)	0	-				
14 years old (n=217)	0	-				
15 years old (n=498)	<1	0.20				
16 years old (n=644)	8	0.88				
17 years old (n=89) ^c	10	0.66				
18 years old (n=9) ^c	1	0.61				
	0	-				

^aProportions are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center (CCJTDC); all n's are unweighted.

^bEach additional year in age (after age 13) corresponds to a 52% increase in the odds of being transferred to adult criminal court.

^cIn Illinois, detainees aged 17 years and older are housed in adult detention facilities. Detainees aged 17 and 18 were in CCJTDC only if they committed the index crime prior to the age of 17 years or misrepresented their age.

Table 2

Differences in Prevalence of Specific Psychiatric Disorders Between Youths (13 Years and Older) Processed in Adult Criminal Court and Juvenile Court (n=1715)^a

Disorders	Court		Odds Ratio (OR)	
	Adult	Juvenile		
	(n=275)	(n=1440)	OR	95% CI
	%	%		
Any disorder	66	68	0.92	0.64 – 1.34
Any disorder, except conduct disorder	64	62	1.11	0.78 – 1.60
Any affective disorder	22	20	1.15	0.75 – 1.76
Major depression	16	14	1.23	0.76 – 1.99
Dysthymia	12	13	0.90	0.53 – 1.51
Mania	3	2	1.64	0.55 – 4.86
Hypomania	1	2	0.39	0.08 – 1.95
Any anxiety disorder	24	22	1.14	0.76 – 1.72
Panic disorder	0	<1		
Separation anxiety disorder	16	13	1.25	0.77 – 2.03
Overanxious disorder	9	7	1.27	0.68 – 2.37
Generalized anxiety disorder	8	7	1.04	0.55 – 1.95
Obsessive-compulsive disorder	10	8	1.34	0.75 – 2.42
Posttraumatic stress disorder ^b	8	12	0.70	0.29 – 1.70
Psychotic disorders	2	1	2.75	0.68 – 11.10
Any disruptive behavior disorder	41	44	0.98	0.69 – 1.39
Attention-deficit/hyperactivity disorder	9	8	1.22	0.65 – 2.26
Oppositional defiant disorder	15	15	1.10	0.68 – 1.79
Conduct disorder	37	38	1.05	0.73 – 1.49
Any substance use disorder	55	51	1.10	0.77 – 1.56
Alcohol use disorder	29	26	1.10	0.74 – 1.62
Marijuana use disorder	49	45	1.14	0.81 – 1.62
Other substance use disorder	2	3	1.29	0.48 – 3.46
Alcohol and drug use disorders	24	21	1.16	0.77 – 1.76

^a Results are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center; all n's are unweighted.

^b Estimates for posttraumatic stress disorder were based on a subsample (n=840).

Table 3

Differences in Prevalence of Comorbid Psychiatric Disorders Between Youths (13 Years and Older) Processed in Adult Criminal Court and Juvenile Court (n=1715)^a

Comorbid Disorders ^b	Court		Odds Ratio (OR)	
	Adult (n=275)	Juvenile (n=1440)		
	%	%	OR	95% CI
Affective disorders comorbid with:				
Anxiety disorders	15	12	1.30	0.78 – 2.15
Disruptive behavior disorders	17	15	1.25	0.78 – 2.00
Substance use disorders	19	13	1.43	0.89 – 2.29
Anxiety and disruptive behavior disorders	11	10	1.24	0.71 – 2.19
Anxiety and substance use disorders	13	8	1.61	0.91 – 2.85
Disruptive behavior and substance use disorders	15	11	1.35	0.81 – 2.27
Anxiety disorders comorbid with:				
Disruptive behavior disorders	17	15	1.21	0.75 – 1.93
Substance use disorders	19	15	1.28	0.80 – 2.03
Disruptive behavior and substance use disorders	14	12	1.13	0.67 – 1.91
Disruptive behavior and substance use disorders	32	32	1.02	0.71 – 1.48
Two or more types of disorder	43	43	1.04	0.73 – 1.48
Three or more types of disorder	22	19	1.28	0.83 – 1.97
Four types of disorder	10	7	1.34	0.72 – 2.49
	Prison	Other	Rate Ratio (RR)	
Number of Disorders	Mean	Mean	RR	95% CI
Total number of types of disorders	2.15	2.01	1.09	0.90 – 1.31
Total number of disorders	1.40	1.35	1.05	0.89 – 1.23

^aResults are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center; all n's are unweighted.

^bAffective disorders include major depression, dysthymia, mania, and hypomania; anxiety disorders include generalized anxiety, separation anxiety, obsessive-compulsive, over-anxious, and panic disorders; disruptive behavior disorders include conduct, attention-deficit/hyperactivity, and oppositional defiant disorders; and substance use disorders include alcohol, marijuana, and drug use disorders other than marijuana.

Table 4

Differences in Prevalence of Specific Psychiatric Disorders Among Youths Processed in Adult Criminal Court Who Either Received a Prison Sentence or a Sentence Other Than Prison (n=275)^a

Disorders ^b	Sentence ^c		Odds Ratio (OR)	
	Prison (n=139)	Other (n=132)		
	%	%	OR	95% CI
Any disorder	74	57	2.20	1.25 – 3.85 ^{**}
Any disorder, except conduct disorder	74	55	2.36	1.36 – 4.12 ^{**}
Any affective disorder	26	17	1.78	0.94 – 3.35
Major depression	18	14	1.49	0.74 – 3.00
Dysthymia	15	8	1.95	0.86 – 4.40
Mania	4	2	1.79	0.39 – 8.19
Hypomania	2	0		
Any anxiety disorder	28	19	1.77	0.95 – 3.32
Separation anxiety disorder	19	13	1.64	0.79 – 3.39
Overanxious disorder	10	9	1.20	0.49 – 2.94
Generalized anxiety disorder	8	8	1.09	0.41 – 2.91
Obsessive-compulsive disorder	14	6	2.49	0.97 – 6.36
Posttraumatic stress disorder ^d	3	14	0.22	0.04 – 1.08
Psychotic disorders	3	1	3.84	0.33 – 45.33
Any disruptive behavior disorder	50	32	2.10	1.23 – 3.57 ^{**}
Attention-deficit/hyperactivity disorder	8	10	0.76	0.32 – 1.81
Oppositional defiant disorder	20	9	2.41	1.10 – 5.31 [*]
Conduct disorder	46	28	2.15	1.25 – 3.69 ^{**}
Any substance use disorder	65	45	2.28	1.34 – 3.69 ^{**}
Alcohol use disorder	39	19	2.83	1.55 – 5.17 ^{***}
Marijuana use disorder	60	39	2.30	1.36 – 3.89 ^{**}
Other substance use disorder	2	2	1.36	0.25 – 7.42
Alcohol and drug use disorders	34	14	3.29	1.71 – 6.34 ^{***}

^aResults are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center; all n's are unweighted.

^bPanic disorder was excluded due to zero prevalence among youth processed in adult court.

^cFour participants had sentencing data missing and were excluded from these analyses.

^dEstimates for posttraumatic stress disorder were based on a subsample (n=142).

* p < .05;

** p < .01;

*** p < .001

Table 5

Differences in Prevalence of Comorbid Psychiatric Disorders Among Youths Processed in Adult Criminal Court Who Either Received a Prison Sentence or a Sentence Other Than Prison (n=275)^a

Comorbid Disorders ^b	Sentence ^c		Odds Ratio (OR)	
	Prison (n=139)	Other (n=132)		
	%	%	OR	95% CI
Affective disorders comorbid with:				
Anxiety disorders	21	9	2.96	1.34 – 6.54 ^{**}
Disruptive behavior disorders	22	13	1.96	0.97 – 3.94
Substance use disorders	24	14	2.05	1.03 – 4.07 [*]
Anxiety and disruptive behavior disorders	16	7	3.05	1.24 – 7.50 [*]
Anxiety and substance use disorders	19	7	3.62	1.54 – 8.51 ^{**}
Disruptive behavior and substance use disorders	19	11	1.99	0.94 – 4.22
Anxiety disorders comorbid with:				
Disruptive behavior disorders	21	13	1.86	0.91 – 3.78
Substance use disorders	24	13	2.09	1.04 – 4.20 [*]
Disruptive behavior and substance use disorders	17	9	2.20	0.98 – 4.93
Disruptive behavior and substance use disorders	42	22	2.53	1.42 – 4.50 ^{**}
Two or more types of disorder	52	33	2.19	1.27 – 3.75 ^{**}
Three or more types of disorder	28	16	1.96	1.03 – 3.76 [*]
Four types of disorder	15	6	3.04	1.19 – 7.77 [*]
	Prison	Other	Rate Ratio (RR)	
Number of Disorders	Mean	Mean	RR	95% CI
Total number of types of disorders	2.64	1.11	1.60	1.19 – 2.14 ^{**}
Total number of disorders	1.68	1.66	1.51	1.18 – 1.93 ^{**}

^aResults are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center; all n's are unweighted.

^bAffective disorders include major depression, dysthymia, mania, and hypomania; anxiety disorders include generalized anxiety, separation anxiety, obsessive-compulsive, and over-anxious disorders; disruptive behavior disorders include conduct, attention-deficit/hyperactivity, and oppositional defiant disorders; and substance use disorders include alcohol, marijuana, and drug use disorders other than marijuana.

^cFour participants had missing sentencing data and were excluded from these analyses.

* p < .05;

** p < .01