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Childhood Maltreatment and Psychiatric Disorders Among Detained Youths

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Abstract

Objective—This manuscript examines the prevalence of childhood maltreatment and the relationship between childhood maltreatment and current psychiatric disorder in detained youths.

Methods—Clinical research interviewers assessed history of childhood maltreatment with the Child Maltreatment Assessment Profile and psychiatric diagnosis with the Diagnostic Interview Schedule for Children version 2.3 in a stratified, random sample of 1829 detained youths at the Cook Country Juvenile Temporary Detention Center; final n=1735. History of maltreatment was also ascertained from records from the Cook County Court Child Protection Division.

Results—Over three-quarters of females and over two-thirds of males had a history of physical abuse (moderate or severe). More than 40% of females and 10% of males had a history of sexual abuse. Females and non-Hispanic whites had the highest prevalence rates of childhood maltreatment. Among females, sexual abuse was associated with every type of psychiatric disorder. For example, females who experienced abuse were 2.6 to 10.7 times more likely to have any disorder compared with females who had no maltreatment. Among males, maltreatment was associated with every disorder except anxiety disorders (odds ratios ranged from 1.9–7.9). Among those who were sexually abused, abuse with force was associated with anxiety and affective disorders for females and attention-deficit/hyperactivity (ADHD)/disruptive behavior and substance use disorders for males.

Conclusions—Psychiatrists and other mental health specialists must screen delinquent youth, not only for psychiatric disorders but also for past and ongoing maltreatment. Discharge planning should include protective and therapeutic services. Trauma-related mental health services should be available during incarceration.

INTRODUCTION

Youths who are detained are at great risk for both childhood maltreatment and psychiatric disorders. Depending on the sample and measure, 3% to 53% of delinquent youths have been sexually abused (1–6)and 27% to 75% have been physically abused (1,3,7,8). Recent studies also find that over two-thirds of detained youths have a psychiatric disorder (9,10).

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Studies of community, homeless, and clinical samples document an association between maltreatment and psychiatric disorders (11–18). Despite their high risk for maltreatment *and* psychiatric disorders, few studies have examined the association between them in detained youths. Instead, most studies have focused on childhood maltreatment and its association with drug use (5,19–22). We found only 3 studies of childhood maltreatment and psychiatric disorders in detained youths (4,7,23). All 3 reported an association between maltreatment and disorder. Yet, these studies focused on only 1 or 2 disorders and had methodological limitations.

Dixon et al examined post-traumatic stress disorder (PTSD) and childhood sexual abuse among female juvenile detainees in Australia (23). However, their sample was small (n=100) and of limited generalizability to youths detained in the United States. They also relied on only 1 screen question to assess sexual abuse. Using 1 screen question may result in under-reporting; a more reliable and robust approach is to ask a series of specific questions about types of sexual abuse (24).

Two studies of detainees conducted in the United States (4,7)had large samples (> 500) but also used only 1 screen question to assess maltreatment. Gover and MacKenzie examined the association between childhood maltreatment and depression and anxiety; however, they combined all types of maltreatment for analyses (7). Gover focused only on the relationship between childhood sexual abuse and depression (4).

To our knowledge, no large-scale study of detained youths has examined the relationship between childhood maltreatment and a range of psychiatric disorders. This omission is critical because findings from studies of community, homeless, and clinical samples (11–18)may not generalize to detained youths who are disproportionately poor, male, and racial/ethnic minorities. Furthermore, the detention center is a potential point of triage for child protection services *and* psychiatric treatment. Data on the association between child maltreatment and psychiatric disorders will help guide effective protective and therapeutic interventions.

This is the third article to examine childhood maltreatment among participants in the Northwestern Juvenile Project, a longitudinal study of health needs and outcomes of detained youths. The first article documented the low concordance rates between self-report and official records of physical abuse; only 17% of those who reported physical abuse had a court record of maltreatment (25). The second article examined forced sexual victimization as part of a larger study of PTSD and trauma; however, it did not examine physical abuse (26).

In this article, we present prevalence data on physical and sexual abuse, assessed by self-report and official records. We then examine the relationship between types of maltreatment and 4 types of psychiatric disorders: anxiety, affective, disruptive behavior, and substance use. We hypothesize that all types of maltreatment will be associated with psychiatric disorders, that youth with a history of severe maltreatment will have the highest prevalence rates of disorders, and that patterns of associations between maltreatment and disorder will differ for males and females.

METHODS

Sampling Procedures

Participants were 1829 male and female youths, randomly sampled at intake into the Cook County Juvenile Temporary Detention Center (CCJTDC) from November 1995 through June 1998 (27). 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). Within each stratum, we used a random numbers table to select names from the CCJTDC intake log. Selected demographic strata (e.g., females, non-Hispanic whites, 10–13 year olds) were over sampled to obtain adequate numbers of participants in key subgroups. The final sampling fractions ranged from .018 to .689 (additional information on the sample is available from the authors).

Interviewers described the study to participants and obtained written informed assent (if participants were <18 years) or consent (if they were ≥18 years). The Northwestern University Institutional Review Board, the Centers for Disease Control and Prevention Institutional Review Board, and the US Office of Protection from Research Risks, who all approved the study, waived parental consent, consistent with federal regulations regarding research with minimal risk. We nevertheless tried to contact parents or guardians to provide them information and offer them an opportunity to decline participation. Despite repeated attempts to contact a parent or guardian, none could be found for 44% of the participants. In lieu of parental consent, an independent participant advocate representing the interests of the participants oversaw youths' assent. Federal regulations allow for a participant advocate if parental consent is not feasible.

Participants were interviewed in a private area, almost always within 2 days of intake; most interviews lasted between 2 and 3 hours. Interviewers were trained for a month, and most had a master's degree in the social sciences and experience interviewing high-risk youths; one-third were fluent in Spanish. Female interviewers always interviewed females. Additional information on the study's methods is published elsewhere (27).

The rigors of the detention center's schedule required approximately 5% of the interviews to end prematurely. Because childhood maltreatment was assessed at the end of the interview, these data were missing for 94 participants. The final sample for this analysis (n=1735) consists of 1095 males, 640 females, 957 African Americans, 287 non-Hispanic whites, 488 Hispanics, and 2 youths who identified as "other" race/ethnicity. Females were more likely than males (97% versus 93%, $p < .05$) and non-Hispanic whites were more likely than Hispanics (97% versus 93%, $p < .05$) to receive the childhood maltreatment module. We account for potential bias from demographic differences in missing data by weighting the data. The mean age was 14.8±1.4 years (range 10–18 years), and the median age was 15 years.

Measures

Self-Report of Childhood Maltreatment—Interviewers administered the Child Maltreatment Assessment Profile (CMAP), a structured interview based on the Child Maltreatment Interview (24) and the Child Abuse Module for the NIMH Methods for the Epidemiology of Child and Adolescent Mental Disorders Study (MECA) (28). The CMAP assesses 6 types of sexual victimization, use of force, and relationship to the perpetrator. There is no screen question. Instead, participants are asked about each type of abuse by each type of perpetrator.

To assess physical abuse, participants were asked how many times they had ever experienced each of 5 types of corporal punishment by "an adult or person who was in charge" of them. We classified experiences of being "hurt by an adult that resulted in bruises, broken bones, or severe injury" as "severe physical abuse." We classified being "hit very hard," "hit with an object," or "beaten or kicked" as "moderate physical abuse."

Official Records of Childhood Maltreatment—Project staff searched current and past records from the Cook County Court Child Protection Division for participants' names.

These records consist of abuse/neglect petitions that were filed with the court after investigation by the Illinois Department of Children & Family Services (DCFS). Participants who were found to have "credible evidence" of physical or sexual maltreatment by DCFS were considered to have been abused. Petitions for "Excessive Corporal Punishment" and/or "Substantial Risk of Physical Injury" were classified as severe physical abuse.

Rates of severe physical abuse and any sexual abuse are based on self-report or record data; moderate physical abuse and specific types of sexual abuse are based on self-reported data only.

To analyze the relationship between maltreatment and psychiatric disorder, we created an independent variable with 5 mutually exclusive categories of maltreatment: none; moderate physical abuse *only*; severe physical abuse; sexual abuse; and sexual *and* severe physical abuse. Participants classified in one of the latter three categories may have also experienced moderate physical abuse.

Psychiatric Disorders—We used the Diagnostic Interview Schedule for Children (DISC) version 2.3 (29), the most recent version available at the time of data collection. The DISC 2.3, based on the *DSM-III-R*, assesses the presence of psychiatric disorders in the past 6 months. It is highly structured, contains detailed symptom probes, has acceptable reliability and validity, and requires relatively brief training. Data are based on youths' self-report because it was not feasible to interview caretakers.

We began collecting data on PTSD 13 months after the larger study began because this was when the DISC version IV (DISC-IV) module was available for use; n=898. Of those, 3 participants did not receive the CMAP; therefore, PTSD was measured in 895 participants in the current sample (531 males and 364 females).

For our analyses, we examine 4 types of disorder: any anxiety disorder (generalized anxiety disorder, over-anxious disorder, panic disorder, obsessive-compulsive disorder, separation anxiety disorders, or PTSD); any affective disorder (major depressive episode, manic episode, hypomania, or dysthymic disorder); any attention-deficit/hyperactivity (ADHD)/ disruptive behavior disorder (ADHD, conduct or oppositional defiant disorders); and any substance use disorder (alcohol, marijuana, or other substance use disorders).

Statistical Analysis

All analyses were conducted using the survey routines in Stata SE, version 11.0 (30,31). To generate descriptive statistics and model parameters that reflect CCJTDC's population, each participant was assigned a sampling weight augmented with a non response adjustment to account for demographic differences in missing data (32). We used logistic regression to compare rates of abuse by demographic characteristics and to compare rates of psychiatric disorder by history of maltreatment. Taylor series linearization was used to estimate model variances. We tested for differences between specific groups (e.g., African American versus Hispanic) when the overall categorical predictor (in this example, race/ethnicity) was significant at the $p < .05$ level. Only statistically significant findings with $p < .05$ are noted in the text and tables.

RESULTS

Prevalence Rates of Maltreatment (Tables 1 and 2)

Physical Abuse—Over three-quarters of females and over two-thirds of males had *any* type of physical abuse (moderate or severe; combined rates not shown in table). Over one-third of females and 15% of males had a history of severe physical abuse. Prevalence rates

of physical abuse from official records were low: 3% of females and 1% of males had records of physical abuse (not shown). Females had significantly higher rates than males of every type of physical abuse, and were 3 times more likely to have been severely physically abused. Among females, non-Hispanic whites and Hispanics had higher rates of severe physical abuse and of being beaten or kicked than African Americans. Non-Hispanic white males also had higher rates of several types of abuse, including severe physical abuse, than minority males.

Sexual Abuse—Approximately 40% of females and 11% of males experienced sexual abuse. Prevalence rates of sexual abuse from official records were low: 1% of females and 0.1% of males had records of sexual abuse (not shown). Compared with males, females had nearly 6 times the odds of any sexual abuse, and were 4 to 7 times more likely to have experienced each type of sexual abuse. Among females, non-Hispanic whites were more likely to have been victims of sexual abuse than minorities.

More than 20% of females and 4% of males had experienced sexual *and* severe physical abuse. Females had more than 6 times the odds of experiencing both sexual and severe physical abuse compared with males.

Childhood Maltreatment and Psychiatric Disorder

Tables 3 and 4 present prevalence rates and odds ratios describing the association between maltreatment and psychiatric disorder for females and males, respectively. Compared with females who had no childhood maltreatment, females who had been victims of moderate physical abuse (only) were more than twice as likely to have anxiety and substance use disorders; females who had been victims of severe physical abuse were more likely to have ADHD/disruptive behavior and substance use disorders. Females who had been victims of sexual abuse or victims of both sexual and severe physical abuse were more than twice as likely to have every type of disorder examined.

Compared with males who had no childhood maltreatment, males who had been victims of moderate physical abuse (only), severe physical abuse, or sexual abuse were significantly more likely to have all disorders examined except anxiety disorder. The prevalence of ADHD/disruptive behavior disorders was higher among males who experienced sexual and severe physical abuse than among those who had no maltreatment. The small number of males who experienced both sexual and severe physical abuse (n=37) may have limited our power to detect differences as statistically significant.

Sexual Abuse with Force and Psychiatric Disorder

Among participants who self-reported sexual abuse, 63% of females and 22% of males reported being abused with force. Table 5 shows that more than 90% of all youths who reported sexual abuse with force had a psychiatric disorder. Females abused with force had significantly higher rates of anxiety and affective disorders than females abused without force. Relatively few males reported sexual abuse with force (n=22); however, males abused with force had significantly higher rates of ADHD/disruptive behavior and substance use disorders than those abused without force.

DISCUSSION

Detained youths who have experienced childhood maltreatment have higher rates of psychiatric disorders than those who have not been maltreated. Nearly *every* type and combination of maltreatment types was associated with increased odds of 1 or more of the psychiatric disorders measured. Prevalence rates of disorder were especially high among

participants who experienced sexual abuse; nearly all youths who were sexually abused with *force* had a psychiatric disorder. Consistent with other studies of sexually abused children (33–36), our findings show that the severity of sexual abuse may increase the odds of having a psychiatric disorder.

These findings are particularly important given the high prevalence rates of maltreatment in our sample and in prior studies of juvenile detainees (2,20). The prevalence of maltreatment among detained youths far exceeds the prevalence of maltreatment in general population youths (15,18). For example, a telephone survey of adolescents in the general population found that 13% of females (versus 41% of female detainees in the current study) and 3% of males (versus 11% of male detainees in the current study) reported a history of sexual abuse (15,18). The discrepancy is even greater for physical abuse: 10% of females (versus 76% of female detainees in the current study) and 9% of males (versus 68% of male detainees in the current study) reported a history of physically abusive punishment (15,18).

Consistent with a prior study of delinquent youths (21), we found higher rates of maltreatment among non-Hispanic white detainees, especially among females. This finding differs from general population studies, which find similar or higher rates of maltreatment among minority youths (37). Our findings may reflect underlying racial/ethnic disparities in the juvenile justice system, and the different *pathways* by which non -Hispanic whites and racial/ethnic minorities enter the system (38,39). For example, non-Hispanic whites, who typically have greater access to services than minorities (40), may be less likely to be arrested than racial/ethnic minorities. Thus, those non-Hispanic whites who *are* arrested may have more psychosocial problems, including maltreatment, than racial/ethnic minorities who are arrested.

Prior studies of general population samples have not found consistent gender differences in the associations between types of maltreatment and types of psychiatric disorder (33,41). Similar to studies of youth who had been abused (33,41), both male and female detainees who reported sexual abuse had high rates of most disorders. Our findings suggest, however, that sexual abuse with force is associated with ADHD/disruptive behavior and substance use disorders for males and anxiety and affective disorders for females. We also found that among females, severe physical abuse alone was associated with ADHD/disruptive behavior and substance use disorders; in contrast, among males, physical abuse was associated with affective disorders. Our data provide some support for the theory that males and females may have different vulnerability to internalizing and externalizing disorders, at least for certain types of maltreatment (33,41).

Limitations

Findings, drawn from only 1 site, may not be generalizable to youths in other detention centers, especially those with different demographic compositions. Data are subject to the limitations of self-report and official records. Participants were sampled between 1995 and 1998; findings may differ for youth currently in detention. Adolescents may under-report painful experiences, and official records underestimate actual maltreatment (42,43).

Statistical power may have been too low to detect some differences. For example, the small number of males who reported sexual abuse may have limited our ability to detect association between sexual abuse with force and disorder. Some participants may tend to endorse positive responses, artificially inflating the association between abuse and disorder. Findings may have differed slightly if a later version of the DISC, based on *DSM-IV* criteria, were available. Despite these limitations, the study has implications for treatment, public policy, and research on delinquent youths.

CONCLUSIONS

Implications for Treatment, Public Policy, and Research

Investigate Gender Differences in the Relationship Between Maltreatment and Psychiatric Disorder—Future studies need to investigate whether the relationship between maltreatment and disorder is mediated by factors that affect males and females differently. For example, Meyerson et al. (33)studied 2 dimensions of family environment—conflict and cohesion—in maltreated youth. They found that lack of family cohesion is associated with depression for males who have been maltreated; however, family conflict is a better predictor of depression for females who have been maltreated (33). Identifying mediators that account for gender differences will help to improve gender-specific prevention and treatment models for victims of maltreatment.

Study Resiliency in Youths at Risk—Not all victims of maltreatment develop psychiatric disorders or become delinquent. Future studies need to investigate characteristics that promote resiliency among youths already at risk. Studies must focus on characteristics that can be altered and examine *when* protective factors have the most impact.

Identify Youths at Risk—Our findings highlight the importance of assessing the presence and severity of physical and sexual abuse when conducting routine mental health evaluations in detention. Referral and treatment could reduce the youths' risk of re-victimization, psychiatric disorders, criminal recidivism, and associated consequences (44,45).

Focus on Rehabilitation—Rather than adopting the more punitive stance of the adult justice system, the juvenile justice system should continue to focus on the mission of rehabilitation, particularly for youth with histories of abuse. One innovative strategy, adopted by several states and other jurisdictions in the past decade (e.g., New York City, State of Illinois, Los Angeles County), is to integrate the juvenile justice and child welfare systems (46,47). Practical and philosophical barriers notwithstanding (46), integration of these systems, as well as close collaboration with mental health services, promotes the decriminalization of many delinquent behaviors, prevents unnecessary institutionalization, and provides avenues for delinquent youths to receive necessary protective services and therapeutic services (48).

In conclusion, this study adds to a body of literature demonstrating that a substantial proportion of youth in detention have been or are being maltreated. There are consequences: Depending on the type of maltreatment, between 65% and 95% of youth who had been maltreated had at least 1 psychiatric disorder. The mental health, child welfare, and juvenile justice systems must collaborate to help these youth receive the protection and care they need when they return to their communities.

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Table 1

Prevalence rates of and racial/ethnic differences in childhood maltreatment among female juvenile detainees (n=640)[a]

Type of Maltreatment	Total[b] (n=640) %	Race/Ethnicity						
		African American (n=420)	Non-Hispanic White % (n=87) %	Hispanic (n=132) %	Test of Racial/ Ethnic Differences	Specific Tests Contrasting Racial/ Ethnic Groups[c] OR 95% CI		
						W vs. AA	W vs. H	H vs. AA
PHYSICAL ABUSE								
Severe Physical Abuse (Hurt by adult resulting in bruises, broken bones, or severe injury)[d]	35	28	44	48	p < .001	2.0 *1.2 – 3.2		2.4 *1.6 – 3.5
Moderate Physical Abuse[e]	76	74	83	77	NS			
Hit very hard	64	61	74	68	p < .05	1.8 *1.1 – 3.1		
Hit with an object[f]	63	60	66	68	NS			
Beaten or kicked	32	26	39	42	p < .001	1.8 *1.1 – 2.9		2.1 *1.4 – 3.1
SEXUAL ABUSE								
Any Sexual Abuse[g]	41	37	57	41	p < .01	2.3 *1.4 – 3.6	1.9 *1.1 – 3.3	
Specific Behaviors[e]								
Showed genitals to participant	24	20	33	24	p < .05	2.0 *1.2 – 3.3		
Masturbated in front of participant	24	21	25	23	NS			
Touched/kissed participant's genitals	28	24	38	27	p < .05	1.9 *1.2 – 3.1		
Forced to touch/kiss perpetrator's genitals	14	11	23	13	p < .05	2.4 *1.4 – 4.4		
Any kind of attempted penetration/ intercourse	30	27	36	26	NS			
Actual penetration/intercourse	22	19	27	17	NS			
BOTH Severe Physical and Any Sexual Abuse[g]	21	16	31	26	p < .001	2.4 *1.4 – 4.1		1.9 *1.2 – 3.0

NS indicates not significant. OR indicates Odds Ratio. CI indicates Confidence Interval

[a] Descriptive and inferential statistics are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center.

[b] One female of "other" race/ethnicity was excluded from analyses of race/ethnicity.

[c] We tested for differences between specific groups (e.g., African Americans versus Hispanics) only when the overall test for race/ethnicity was significant at the $p<.05$ level.

[d] Includes abuse noted on official records and self-report of being hurt by adult resulting in bruises, broken bones, or severe injury. Three additional females who reported other types of severe physical abuse were also included in this category.

[e] Includes self-report of abuse only.

[f] Forty-three females are missing values of this variable because it was added to the instrument after the study began.

[g] Includes self-report or official record of abuse.

* $p<.05$

Table 2

Prevalence rates of and racial/ethnic differences in childhood maltreatment among male juvenile detainees (n=1095)[a]

Type of Maltreatment	Total[b] (n=1095) %	Race/Ethnicity							Test of Gender Differences Contrasting Females vs Males[d] OR 95% CI
		African American (n=537) %	Non-Hispanic White (n=200) %	Hispanic (n=356) %	Test of Racial/ Ethnic Differences	Specific Tests Contrasting Racial/ Ethnic Groups[c] OR 95% CI			
						W vs. AA	W vs. H	H vs. AA	
PHYSICAL ABUSE									
Severe Physical Abuse (Hurt by adult resulting in bruises, broken bones, or severe injury)[e]	15	14	32	15	p < .001	3.0 *1.9 – 4.8	2.8 *1.6 – 4.7		3.0 *2.1 – 4.3
Moderate Physical Abuse[f]	68	68	72	65	NS				1.5 *1.1 – 2.0
Hit very hard	55	54	60	57	NS				1.5 *1.1 – 1.9
Hit with an object[g]	53	53	63	49	p < .05		1.7 *1.1 – 2.7		1.5 *1.1 – 2.0
Beaten or kicked	17	15	31	23	p < .001	2.6 *1.6 – 4.1		1.7 *1.1 – 2.7	2.3 *1.6 – 3.2
SEXUAL ABUSE									
Any Sexual Abuse[h]	11	11	8	12	NS				5.8 *4.0 – 8.5
Specific Behaviors[f]									
Showed genitals to participant	7	7	3	7	NS				4.2 *2.6 – 6.8
Masturbated in front of participant	5	6	3	5	NS				5.6 *3.3 – 9.5
Touched/kissed participant's genitals	6	6	5	8	NS				5.7 *3.5 – 9.3
Forced to touch/kiss perpetrator's genitals	4	4	3	7	NS				3.8 *2.0 – 7.2
Any kind of attempted penetration/ intercourse	6	6	4	8	NS				6.7 *4.1 – 10.9
Actual penetration/intercourse	4	4	2	5	NS				6.0 *3.3 – 10.9
BOTH Severe Physical and Any Sexual Abuse[h]	4	4	5	3	NS				6.5 *3.6 – 11.8

NS indicates not significant. OR indicates odds ratio. CI indicates confidence interval

[a]Descriptive and inferential statistics are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center.

[b] Two males of "other" race/ethnicity were excluded from analyses of race/ethnicity.

[c] We tested for differences between specific groups (e.g., African Americans versus Hispanics) only when the overall test for race/ethnicity was significant at the p<.05 level.

[d] Prevalence rates of maltreatment among females are shown in Table 1.

[e] Includes abuse noted on official records and self-report of being hurt by adult resulting in bruises, broken bones, or severe injury. Three additional males who reported other types of severe physical abuse were also included in this category.

[f] Includes self-report of abuse only.

[g] One hundred and eight males are missing values of this variable because it was added to the instrument after the study began.

[h] Includes self-report or official record of abuse.

* p<.05

Table 3

Prevalence rates of psychiatric disorder by history of childhood maltreatment among female juvenile detainees (n=640)[a]

	No Maltreatment (n=116)	Moderate Physical Abuse Only (n=168)			Severe Physical Abuse (n=93)			Sexual Abuse (n=134)			Sexual and Severe Physical Abuse (n=129)		
Type of Psychiatric Disorder	**%**	**%**	**OR[b]**	**95% CI**	**%**	**OR[b]**	**95% CI**	**%**	**OR[b]**	**95% CI**	**%**	**OR[b]**	**95% CI**
Any Disorder[c]	53	74	2.6 *	1.3 – 5.3	80	3.5 *	1.5 – 8.3	88	6.3 *	2.7 – 15.0	92	10.7 *	4.1 – 28.3
Any anxiety[d]	21	38	2.4 *	1.1 – 5.0	37	2.2	.96 – 5.0	51	3.9 *	1.8 – 8.3	63	6.4 *	2.7 – 14.9
Any affective[e]	19	21	1.1	.6 – 2.0	19	1.0	.5 – 2.1	35	2.3 *	1.2 – 4.1	45	3.5 *	1.7 – 7.4
ADHD/disruptive behavior[f]	27	37	1.6	.96 – 2.7	56	3.4 *	1.9 – 6.1	52	2.9 *	1.7 – 4.9	68	5.8 *	3.1 – 10.9
Any substance[g]	29	49	2.3 *	1.4 – 3.8	48	2.2 *	1.2 – 4.0	48	2.2 *	1.3 – 3.7	60	3.6 *	1.9 – 6.7

OR indicates Odds Ratio. CI indicates Confidence Interval

[a] Descriptive and inferential statistics are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center. The categories of abuse include official record abuse and self-report.

[b] Categories of abuse are mutually exclusive. The comparison group for odds ratios is the “no maltreatment” group.

[c] Assessed on the n=364 females who were assessed for post-traumatic stress disorder (PTSD). Any disorder includes any anxiety disorder, any affective disorder, attention-deficit/hyperactivity (ADHD) or any disruptive behavior disorder, any substance use disorder and psychosis. Specific prevalence rates of any psychosis are not presented because only 6 females had this diagnosis.

[d] Sample is n=364 females who were assessed for PTSD. Any anxiety disorder includes generalized anxiety, over-anxious disorder, panic, obsessive-compulsive and separation anxiety disorders, and PTSD.

[e] Any affective disorder includes major depressive episode, manic episode, hypomania, and dysthymic disorder.

[f] Disruptive behavior disorder includes conduct and oppositional defiant disorders.

[g] Any substance use disorder includes alcohol, marijuana, and other substance use disorders.

* p<.05

Table 4

Prevalence rates of psychiatric disorder by history of childhood maltreatment among male juvenile detainees (n=1095)[a]

	No Maltreatment (n=318)	Moderate Physical Abuse Only (n=521)			Severe Physical Abuse (n=153)			Sexual Abuse (n=64)			Sexual and Severe Physical Abuse (n=37)		
Type of Psychiatric Disorder	**%**	**%**	**OR[b]**	**95% CI**	**%**	**OR[b]**	**95% CI**	**%**	**OR[b]**	**95% CI**	**%**	**OR[b]**	**95% CI**
Any Disorder[c]	44	77	4.3 *	1.9 – 10.0	75	3.8 *	1.1 – 13.1	65	2.4	.5 – 11.8	82	5.7	.6 – 51.1
Any anxiety[d]	15	30	2.4	.8 – 6.9	27	2.0	.6 – 7.3	30	2.3	.5 – 11.6	28	2.1	.3 – 13.2
Any affective[e]	8	18	2.6 *	1.2 – 5.5	32	5.4 *	2.2 – 13.3	25	3.9 *	1.2 – 12.1	17	2.4	.6 – 9.7
ADHD/disruptive behavior[f]	20	45	3.3 *	2.0 – 5.7	62	6.7 *	3.2 – 14.1	61	6.4 *	2.6 – 16.0	66	7.9 *	2.4 – 26.6
Any substance[g]	37	53	1.9 *	1.2 – 3.2	59	2.5 *	1.2 – 5.0	66	3.4 *	1.4 – 8.2	54	2.0	.7 – 6.1

OR indicates Odds Ratio. CI indicates Confidence Interval

[a] Descriptive and inferential statistics are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center. The categories of abuse include official record abuse and self-report. Two males are excluded from these analyses due to missing data.

[b] Categories of abuse are mutually exclusive. The comparison group for odds ratios is the “no maltreatment” group.

[c] Assessed on the n=531 males who were assessed for post-traumatic stress disorder (PTSD). Any disorder includes any anxiety disorder, any affective disorder, attention-deficit/hyperactivity (ADHD) or any disruptive behavior disorder, any substance use disorder and psychosis. Specific prevalence rates for psychosis are not presented because only 11

[d] Sample is n=531 males who were assessed for PTSD. Any anxiety disorder includes generalized anxiety, over-anxious disorder, panic, obsessive-compulsive and separation anxiety disorders, and PTSD.

[e] Any affective disorder includes major depressive episode, manic episode, hypomania, and dysthymic disorder.

[f] Disruptive behavior disorder includes conduct and oppositional defiant disorders.

[g] Any substance use disorder includes alcohol, marijuana, and other substance use disorders.

* p<.05

Table 5

Prevalence rates of types of psychiatric disorder among juvenile detainees who were sexually abused with and without force (n=360)[a]

	Females (n=261)				Males (n=99)			
	Abused without Force (n=103)	Abused with Force (n=158)			Abused without Force (n=77)	Abused with Force (n=22)		
Type of Psychiatric Disorder	**%**	**%**	**OR 95% CI, Force versus no Force**		**%**	**%**	**OR 95% CI, Force versus no Force**	
Any Disorder[b]	86	93	2.2	.7 – 6.4	65	95	9.4 *	1.1 – 77.2
Any anxiety[c]	44	66	2.5 *	1.2 – 5.3	33	17	.4	.1 – 2.6
Any affective[d]	28	47	2.3 *	1.2 – 4.4	19	35	2.3	.4 – 12.6
ADHD/disruptive behavior[e]	52	65	1.7	1.0 – 3.0	55	92	9.5 *	2.6 – 35.6
Any substance[f]	51	55	1.2	.7 – 2.1	55	87	5.4 *	1.5 – 19.1

NS indicates not significant. OR indicates odds ratio. CI indicates confidence interval.

[a] Descriptive and inferential statistics are weighted to reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center. Data are self-report because official records of sexual abuse with force were unavailable.

[b] Assessed on the n=895 participants who were assessed for post-traumatic stress disorder (PTSD). Any disorder includes any anxiety disorder, any affective disorder, attention-deficit/hyperactivity (ADHD) or any disruptive behavior disorder, any substance use disorder, and any psychosis. Specific prevalence rates of any psychosis are not presented because only 17 participants had this diagnosis.

[c] Assessed on the n=895 participants who were assessed for PTSD. Any anxiety disorder includes generalized anxiety, overanxious, panic, obsessive-compulsive, separation anxiety disorders, and PTSD.

[d] Any affective disorder includes major depressive episode, manic episode, hypomania, and dysthymic disorder.

[e] Disruptive behavior disorder includes conduct and oppositional defiant disorders.

[f] Any substance use disorder includes alcohol, marijuana, and other substance use disorders.

* p<.05