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Mental Health Symptoms and Delinquency among Court-Involved Youth Referred for Treatment

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Abstract

Youth involved in the justice system meet criteria for psychiatric disorders at much higher rates than youth in the general population and a large body of research has established a relationship between mental health problems and delinquency or recidivism. However, only limited research has examined the relationship between specific types of psychopathology and specific patterns or types of delinquency for justice-involved youth and only a single study has explored the relationship between psychopathology and delinquency among youth with psychiatric diagnoses receiving mental health treatment. We examined the relationship between severity of offending and internalizing and externalizing symptoms among court-involved, non-incarcerated youth referred for mental health treatment. Over half of youth and over two-thirds of parents reported youth symptomatology at the 93rd percentile or above for internalizing symptoms, externalizing symptoms, or both. We found that youth engaged in serious or violent delinquency are more likely to have externalizing problems but that internalizing symptoms were equally high across youth committing minor, moderate, and serious delinquent acts. Findings from this study support the need for future research exploring the nuances of relationships between psychiatric disorder and patterns of delinquency, which can provide helpful information to justice system stakeholders in identifying youth needs.

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Keywords

juvenile justice; mental health symptoms; recidivism; court-involved non-incarcerated youth

Youth involved in the justice system meet criteria for psychiatric disorders at much higher rates than youth in the general population.¹ In one study that included all youth entering the justice system in one state, 92% of boys and 97% of girls met criteria for one of more of the following: a major depressive episode, a manic episode, panic attacks, posttraumatic stress disorder, conduct disorder, or substance dependence.² Moreover, rates of psychiatric disorders vary across justice system intercept points. One study found that 35.1% youth at system intake, 58.9% of detained youth, and 63.7% of youth in secure post-adjudication placements met criteria for a psychiatric disorder.³ Another study reported that, at intake to the juvenile justice system, 29.7% of youth met criteria for a psychiatric disorder.⁴ A meta-analysis explored rates of psychiatric disorder among incarcerated juveniles: 3.3% of boys and 2.7% of girls met criteria for a psychotic disorder, 10.6% of boys and 29.2% of girls met criteria for major depressive disorder, 11.7% of boys and 18.5% of girls met criteria for attention-deficit/hyperactivity disorder (ADHD), and 52.8% of both boys and girls met criteria for conduct disorder.⁵

Mental Health Problems and Delinquency Generally

In addition to research examining the prevalence of psychopathology among justice-involved youth, a large body of research has established a relationship between mental health problems and delinquency or recidivism. A matched-control study including nearly 100,000 delinquent youth found that delinquency predicted psychiatric diagnosis—and diagnosis predicted earlier age of first offense, felony rather than misdemeanor offense, and recidivism.⁶ Specifically, substance use disorder and disruptive behavior disorders roughly double the risk of recidivism, controlling for characteristics of the initial offense.⁷ Psychopathology is also associated with persistence of offending.⁸

Existing research and scholarship on mental health problems among justice-involved youth and the relationship to delinquency have several strengths. Research has included large samples and recruited juveniles with different levels of justice system penetration. Additionally, extant research has examined the relationship between psychopathology and both delinquency and recidivism and emphasized utilizing existing knowledge to develop/refine assessment and treatment approaches. However, only limited research has examined the relationship between specific types of psychopathology and specific patterns or types of delinquency for justice-involved youth in the United States. One study in this area found that substance use disorders, but not internalizing disorders or disruptive behavior disorders, significantly predicted severity of recidivating offenses when controlling for initial offense severity.⁹ However, others have found an association between higher internalizing symptoms and serious-chronic-violent and chronic minor patterns of delinquency. In contrast, lower internalizing symptoms were associated with escalating or no delinquency¹⁰ and depressive symptoms predicted increases in number of delinquent acts.¹¹ Further, conduct disorder predicted persistence of delinquency into adulthood.¹² With regard to trauma-related

disorders, there is a relationship between post-traumatic stress disorder (PTSD) and both number of arrests and severity of charges¹³ and recidivism.¹⁴

Notably, only a single study has explored the relationship between psychopathology and delinquency among youth with psychiatric diagnoses *receiving mental health treatment*. This study found that anxiety disorder and oppositional defiant disorder both predict self-reported breadth of delinquency (i.e., number of types of delinquent acts).¹⁵ Another study, examining the relationship between psychiatric diagnosis and likelihood of being placed in juvenile detention over the next year, reported that dual diagnosis is associated with a six-fold increase in detention placement.¹⁶ More research with youth identified as in need of mental health treatment can explore nuances of the relationships between mental health symptoms and delinquency by ensuring a sample with meaningful mental health needs. Additionally, for youth referred for mental health treatment, identifying relationships between mental health symptoms and delinquency may more accurately target the use of scarce system resources in addressing the most relevant mental health needs.

Relationships between Types of Mental Health Symptoms and Types of Delinquency

Most studies examining the relationship between adolescent psychopathology and delinquency have largely examined only one category of psychopathology (i.e., internalizing symptoms, disruptive behavior disorders) and a continuum (i.e., breadth or severity) or course of delinquency. Accordingly, extant literature does not allow for comparisons of the relationships between types of psychopathology and types of delinquency. However, more specific information in this area is needed as system stakeholders are likely influenced by diagnosis.¹⁷ Externalizing symptoms (but not internalizing symptoms) among justice-involved youth are more robustly predictive of clinician recommendations for residential placement—and judges' placement decisions—than offense history.¹⁸ Additionally, juvenile probation officers believe that youth with a conduct disorder diagnosis are more likely to recidivate than youth without such a diagnosis.¹⁹ Expectations among justice system personnel that aggressive and defiant youth are more serious offenders may, in fact, be accurate—but research to date cannot fully answer this question. Alternatively, additional data may challenge these expectations of juvenile justice personnel and may lead to more appropriate case decisions. Better understanding of the relationship between mental health symptoms and delinquency may also support calls for mental health screening for all justice-involved youth.

Obtaining a better understanding of the relationship between different types of psychopathology symptomatology and delinquency may also inform treatment needs and associated referrals. The risk-needs-responsivity (RNR) literature, which focuses on identifying risk factors for recidivism and then tailoring interventions to youths' specific criminogenic needs, provides a framework for considering the relationship between symptomatology and delinquency. From the RNR framework, some psychiatric disorders may function as risk factors for future offending (e.g., by definition substance use disorders include the criminogenic risk behavior of substance use, impulsive characteristics

attributable to ADHD may be captured by the personality/behavior domain of risk).^{20,21} The RNR literature has noted that such aspects of mental health are already conceptualized within the risk assessment framework and inclusion of a diagnosis does not add utility to risk prediction.²² However, research suggests that appropriate treatment of mental health needs may be associated with likelihood of having criminogenic needs addressed, as well.²² Additionally, the RNR literature recognizes mental health problems *beyond* those correlated with risk of offending as potential barriers to responsivity.²¹ That is, a youth's psychiatric symptoms may interfere with the youth's ability to successfully engage in treatment designed to reduce risk of reoffending.²¹ Youth referred for mental health treatment may be less likely to recidivate and, for those who do recidivate, have a longer time to recidivism.²³ Accordingly, even when psychiatric symptomatology is not conceptualized as a risk factor for re-offense, receipt of mental health treatment may function as a protective factor. Understanding the relationships between mental health symptoms and specific patterns of delinquency can therefore inform an understanding of youth responsivity and protective factors for systems working from an RNR framework.

Present Study

If particular types of mental health symptoms are associated with delinquency characteristics, then intake workers and case managers may be more alert to the associated mental health symptoms and can better target needed services. For example, if youth with depressive symptoms most commonly commit the least serious offenses, court staff may better screen for depression and link youth and their families to treatment. Better understanding the relationship between severity of delinquency and patterns of mental health symptomatology among youth referred for treatment may also lead to greater resources devoted to mental health treatment for justice-involved youth. Given the limited research on the relationship between types of psychopathology and type of delinquent behavior, especially among youth identified as having mental health needs, the primary aim of this study was to explore the relationship between severity of offending and internalizing and externalizing symptoms. We hypothesized that youth who reported ever engaging in serious offending would be more likely to have significant (clinically meaningful) externalizing symptoms, and youth who reported only engaging in minor offending would be more likely to have significant internalizing symptoms.

Methods

Procedures

This study involves secondary analyses of baseline data from a randomized controlled trial (RCT) of a combined HIV prevention and mental health treatment program. Court-involved, non-incarcerated (CINI) adolescents and their parents were recruited to participate, and adolescent assent and parental consent were obtained. Participants (adolescents and their parents) completed computerized assessment measures in private settings using an audio computer-assisted self-interview (ACASI) program, and some participants completed paper versions of the Youth Self-Report and Child Behavior Checklist.

Participants

Participants were adolescent-parent dyads from two cities in the Northeastern United States. Adolescents were eligible to participate in the RCT for which these data were obtained if they: 1) were between ages 11 and 17 at consent; 2) were able to speak and read English with a parent who could speak and read either English or Spanish; 3) lived with a legal guardian willing to attend weekly therapy sessions; and 4) had an open petition at the time of referral in one of two Family Courts. Exclusion criteria included: 1) diagnosis of obsessive-compulsive disorder or a pervasive developmental disorder; 2) currently receiving outpatient mental health treatment at time of study enrollment (as they were being enrolled for a treatment trial study); 3) psychotic symptoms; or 4) a sexual offense charge. Court officials (i.e., intake worker, probation officer, magistrate, or judge) referred adolescents to the study whom they believed may need mental health services, and interested families were screened by research assistants before being offered enrollment. Between November 2011 and April 2015, 598 youth and their parents were referred to the study; 53% ($n = 317$) were eligible to participate, and 54% of eligible families ($n = 170$) consented to participate. The present study utilizes data from 164 adolescents with valid baseline data for the variables of interest.

Of the 164 adolescents included in analyses, 57.9% were male and they ranged from 12 to 17 years old ($M = 15.19$, $SD = 1.35$). Youth identified as White (57.9%), multiracial (15.9%), African American (4.9%), Asian (3.7%), American Indian/Alaska Native (1.8%), and other (11.6%); 23.2% of youth identified as Hispanic. Household income was reported by the parent of each adolescent: 57.4% reported income under \$40,000, 17.9% reported income from \$40,000 to \$80,000, and 24.7% reported income above \$80,000.

Measures

Demographics used in the present study include adolescent self-report of sex (*male/female*), race (*White/non-White*), and ethnicity (*Hispanic/Non-Hispanic*), and parent report of annual household income (*\$0–40,000/\$40,000–80,000/\$80,000 and above*).

Youth Self-Report (YSR).—The YSR²⁴ is a 113-item self-report measure of youth psychopathology that assesses youth emotional and behavioral problems at home and in the community. The YSR is normed on youth ages 6–18, and composite scores are provided for internalizing (e.g., “I cry a lot;” “I feel nervous or inferior;” “I am too fearful or anxious”), externalizing (e.g., “I have trouble concentrating or paying attention;” “I argue a lot;” “I disobey my parents”), and total problems, in addition to behavioral syndromes and DSM-oriented scales. Youth are asked to answer questions on a 0 (*not true*) to 2 (*very true or often true*) scale. Higher scores on the YSR indicate more significant problems, with a T-score of 65 indicating problems in the Borderline Clinical range and a T-score of 70 indicating problems in the Clinical range. The YSR has strong internal consistency and validity with diverse populations.^{25,26} T-scores from the Internalizing, Externalizing, and Total Problems scales were dichotomized using a cut-off T-score of 65. We used the Borderline range as the cut-off because of research suggesting that the Clinical range fails to identify a substantial proportion of youth with meaningful symptomatology.²⁷

Child Behavior Checklist (CBCL).—The CBCL²⁸ is a 113-item parent-report measure designed to assess emotional and behavioral problems among youth. The CBCL is normed on youth ages 6–18, and composite scores are provided for internalizing (e.g., “There is very little that my teen enjoys;” “My teen deliberately harms self or attempts suicide;” “My teen is nervous, high-strung, or tense”), externalizing (e.g., “My teen can’t sit still, is restless, or hyperactive;” “My teen doesn’t get along well with other kids;” “My teen hangs around with others who get in trouble”), and total problems, in addition to behavioral syndromes and DSM-oriented scales. Parents are asked to answer questions (e.g., “There is very little that my teen enjoys.”) on a 0 (*not true*) to 2 (*very true or often true*) scale. The CBCL has strong internal consistency and validity with diverse populations.^{25,26} Higher scores on the CBCL indicate more significant problems, with a T-score of 65 indicating problems in the Borderline Clinical range and a T-score of 70 indicating problems in the Clinical range. T-scores from the Internalizing, Externalizing, and Total Problems scales were dichotomized using a cut-off T-score of 65.

National Youth Survey of Self-Reported Delinquency (NYS).—The NYS^{29,30} is a self-report measure assessing the frequency of 40 types of delinquent behavior (e.g., larceny, robbery, cheating, lying, fighting, selling drugs). Youth were divided into one of three delinquency severity categories based on offending history, including serious, moderate, and minor categories. Youth were included in the serious category if they reported ever committing any serious or violent offense, including: stole or tried to steal a motor vehicle; stole or tried to steal something worth more than \$50; attacked someone with the idea of seriously hurting/killing them; involvement in gang fights; sold hard drugs such as heroin, cocaine, or LSD; had or tried to have sex with someone against their will; used force to get money or things from students, teachers, or others; broke into a building or vehicle). Those grouped in the moderate offender category could not have a history of a serious offense and reported engaging in at least one moderate offense. Moderate offenses included: knowingly bought, stole, or held stolen goods; carried a hidden weapon other than a pocketknife; sold marijuana; and stole or tried to steal things worth between \$5 and \$50. Youth in the minor offending category reported no serious or moderate delinquency offenses (offending behavior consisted of only minor or status offenses).

Data analytic strategy

We conducted a series of logistic regression analyses to examine the extent to which delinquency severity as measured by the NYS (*Serious/Moderate/Minor*) predicted probability of being in the Borderline range or above (T-score ≥ 65) on the YSR or CBCL Total, Internalizing, or Externalizing Problems scales. Prior to conducting primary analyses, a series of independent samples *t*-tests, analyses of variance (ANOVAs), and Chi-Square Tests of Independence were calculated to test the relationship between demographic variables (gender, race, ethnicity, and household income) on planned outcome variables (Total, Internalizing, and Externalizing T-score on the YSR and CBCL) and on delinquency severity. Demographic variables with a significant relationship to an outcome variable were included as covariates in primary analyses with that outcome variable. All assumptions of logistic regression were tested for each analysis. Because of the exploratory nature of the

study, significance was set to $p < .05$ for all analyses. Odds ratios (ORs) were examined as a measure of effect size.

Assumptions were tested prior to conducting planned analyses. No significant outliers were observed for T-scores on any of the YSR or CBCL subscales, and multicollinearity (evaluated using tolerance and VIF values) was not observed for analyses including household income as a covariate.

Results

Descriptives

On the YSR, 21.0% of adolescents reported both internalizing and externalizing symptoms in the Borderline range or above; 18.5% reported externalizing symptoms only; 12.3% reported internalizing symptoms only; and 48.1% of adolescents did not report internalizing or externalizing symptoms in the Borderline range or above. On the CBCL, 44.2% of parents reported that their child had both internalizing and externalizing symptoms in the Borderline range or above; 16.6% reported externalizing symptoms only; 12.3% reported internalizing symptoms only; and 27.0% reported their child did not have internalizing or externalizing symptoms in the Borderline range or above. Combining data across the YSR and CBCL, both internalizing and externalizing symptoms in the Borderline range or above were reported for 47.9% of youth; only externalizing symptoms for 17.8% of youth; and only internalizing symptoms for 13.5% of youth. For 20.9% of youth, neither the adolescent nor parent reported internalizing or externalizing symptoms in the Borderline range or above.

On the NYS, 32.3% of youth reported ever having committed any serious offense, 34.8% reported having committed a moderate offense but no serious offenses, and 32.9% reported never having committed a serious or moderate offense.

Preliminary Analyses

Preliminary analyses assessed the relationship between demographic variables and scores on the YSR and CBCL. Internalizing Problems on the YSR significantly differed by household income level, therefore it was included as a covariate in analyses including Internalizing Problems. None of the other outcome variables significantly differed by household income level; see Table 1. None of the outcome variables significantly differed by sex, race dichotomized (*white/non-white*), or ethnicity; see Table 2. There was no significant relationship between delinquency severity and sex, $\chi^2(2, N = 162) = 3.81, p = .149$, Cramer's $V = .15$; race dichotomized, $\chi^2(2, N = 157) = .96, p = .620$, Cramer's $V = .08$; or ethnicity, $\chi^2(2, N = 160) = .66, p = .720$, Cramer's $V = .06$.

Primary Analyses

Logistic regression analyses were conducted to examine the extent to which delinquency severity (reference group: *serious*) would predict probability of being in the Borderline range or above on the YSR or CBCL Total, Internalizing, or Externalizing Problems scales. A binomial logistic regression equation revealed a statistically significant model for YSR-Externalizing, $\chi^2(2, N = 162) = 13.48, p = .001$, and for CBCL-Externalizing, $\chi^2(2, N =$

163) = 11.81, $p = .003$. Delinquency level significantly predicted YSR-Externalizing T-score of 65 or above and CBCL-Externalizing T-score of 65 or above; see Table 3. Delinquency Level explained between 8.0% and 10.8% of the variance in YSR-Externalizing and explained between 7.0% and 9.5% of the variance in CBCL-Externalizing. Delinquency level did not significantly predict YSR or CBCL Total or Internalizing Problems; see Table 3. See Figure 1 for percentages of youth scoring Borderline or above on each scale by delinquency category. For example, parents reported on the CBCL that 77% of youth with serious offenses had significant externalizing symptoms compared to only 45% of those with minor offenses. In contrast, reports by youth of internalizing symptoms were uniform across offense categories: 31% among those with serious offenses and 34% among those with minor offenses.

Given the finding of high levels of internalizing symptoms for youth across delinquency level, we also explored whether there was a significant relationship between delinquency severity and internalizing symptomatology for either boys or girls. On the YSR-Internalizing scale, 35% of boys with low delinquency severity, 32% of boys with moderate delinquency severity, and 19% of boys with high delinquency severity scored in the Borderline range or above. On the CBCL-Internalizing scale, 59% of boys with low delinquency severity, 46% of boys with moderate delinquency severity, and 50% of boys with high delinquency severity scored in the Borderline range or above. For boys, there was no significant relationship between delinquency severity and either YSR-Internalizing, $\chi^2(2, N = 94) = 2.43, p = .296$, Cramer's $V = .16$, or CBCL-Internalizing, $\chi^2(2, N = 94) = 1.03, p = .597$, Cramer's $V = .11$, scores in the Borderline range or above. On the YSR-Internalizing scale, 29% of girls with low delinquency severity, 38% of girls with moderate delinquency severity, and 50% of girls with high delinquency severity scored in the Borderline range or above. On the CBCL-Internalizing scale, 41% of girls with low delinquency severity, 69% of girls with moderate delinquency severity, and 71% of girls with high delinquency severity scored in the Borderline range or above. For girls, there was no significant relationship between delinquency severity and either YSR-Internalizing, $\chi^2(2, N = 66) = 1.68, p = .432$, Cramer's $V = .16$, or CBCL-Internalizing, $\chi^2(2, N = 67) = 4/54, p = .103$, Cramer's $V = .26$, scores in the Borderline range or above.

We conducted logistic regression analyses comparing minor and moderate delinquent youth (reference group: *minor*) as planned post-hoc analyses. Using these two delinquency levels, delinquency did not significantly predict YSR or CBCL Internalizing, Externalizing, or Total Problems; see Table 4.

Although household income level was included as a covariate in all analyses with YSR or CBCL Internalizing Problems as outcome variables, it did not significantly predict Internalizing Problems in any of these analyses (p values ranged from .148 to .507).

Discussion

The finding that youth engaged in serious or violent delinquency are more likely to have externalizing problems is consistent with the RNR literature, which views some characteristics of externalizing disorders (e.g., impulsivity, aggression) as themselves risk

factors for offending.²¹ This finding also provides additional nuance to extant research reporting a link between disruptive behavior disorders and both recidivism⁷ and breadth of delinquent behavior.¹⁵ Externalizing problems were very common among youth reporting history of serious delinquency, with 77% of parents of such youth reporting substantial externalizing symptoms. Given the relationship between externalizing problems and delinquency severity, justice-involved youth referred for mental health treatment based on externalizing symptoms could also be evaluated and considered for interventions targeting criminogenic needs related to serious offending, including violence, aggressive behavior, and lack of coping skills.

Contrary to our expectations, lower severity of delinquency was not associated with internalizing problems. We posited that youth who committed only minor offenses would be more likely to have an internalizing symptom presentation, but instead internalizing symptoms were equally high across youth committing minor, moderate, and serious delinquent acts. That all delinquent groups in this study had similarly elevated levels of internalizing problems highlights the importance of thorough mental health assessment of delinquent youth, considering not just the externalizing problems that may be thought of as a hallmark of delinquency, but also internalizing problems that youth may experience alone or in concert with externalizing problems. Nearly half of the youth in this sample had comorbid internalizing and externalizing symptoms; thus, even youth committing very serious offenses—who may present outwardly with conduct disordered behavior—are likely to also experience symptoms of depression or anxiety.

Of note, the sample in the present study reported high levels of both internalizing and externalizing symptoms, with over half of youth and over two-thirds of parents reporting youth symptomatology at the 93rd percentile or above for internalizing symptoms, externalizing symptoms, or both. This finding indicates the juvenile justice systems from which youth were recruited for this study are successfully identifying youth in need of services and referring them for needed mental health. However, given the very symptomatic nature of this sample, it is possible that system stakeholders referring youth to mental health treatment are overly specific at the risk of sensitivity, such that some youth in need of services are not referred because the symptoms are less noticeable. If this possibility is supported with future research, system stakeholders should consider lowering the threshold for referral for treatment.

Study findings should be considered in the context of certain limitations. First, delinquency severity was assessed via self-report. Despite substantial benefits of using self-report delinquency data, most especially capturing delinquent behavior for which youth have not been caught or charged, there remains the possibility that youth underreported delinquent acts and that such underreporting introduced bias into the data.³¹ However, it should be noted that adolescents were told that their assessment information would not be shared with the court and a federal Certificate of Confidentiality was in place to further protect their data from subpoena. Additionally, this study recruited a very specific subset of justice-involved youth: CINI youth referred to mental health treatment. Findings with this population hold important clinical implications, yet relationships found between psychopathology and delinquency severity in this sample may not generalize to other juvenile justice populations.

There was also no comparison group of non-referred youth; therefore, implications for other groups of justice-involved youth are unknown. Because of sample size limitations, this study only examined broad categories of both psychopathology and delinquency. It is possible that these broad groupings obscured relationships between mental health symptoms and delinquency that would have been apparent with a more nuanced grouping. Additionally, this study utilized screening tools for mental health symptoms—the YSR and CBCL—commonly used in the juvenile justice system but which do not thoroughly assess substance use. In light of extant research identifying a relationship between dual diagnosis and future detention placement for CINI youth,¹⁶ the inability to examine relationships between delinquency and substance use disorder symptoms is a limitation of this study.

Future research could extend and refine this area in order to address the limitations of this small study. Research could continue to examine relationships between symptom clusters and type of delinquency, which can inform screening/assessment and intervention practices for justice-involved youth and could explore whether substance use and substance use disorders moderate these relationships. Future work could also include a finer-grained analysis, breaking down psychopathology into more specific subtypes, and should utilize a longitudinal design to assess the causal relationship between symptomatology and future delinquency. To most accurately assess delinquency severity, future research could collect both self-report and official arrest and charging records. Finally, to evaluate the sensitivity and specificity with which youth are referred for mental health treatment, research could compare symptomatology of CINI youth referred to mental health treatment with symptoms of non-referred youth.

This is the first study to examine the relationship between type of psychopathology and delinquency severity among court-involved youth referred for mental health treatment. Results provide support for a relationship between externalizing symptomatology—but not internalizing symptomatology—and delinquency severity, at least among youth with identified mental health needs. Youth identified by the juvenile justice system as in need of mental health treatment have high levels of both internalizing and externalizing symptoms, and assessment and intervention should appropriately focus on both domains of psychopathology. Findings from this study support the need for future research exploring the nuances of relationships between psychiatric disorder and patterns of delinquency, which can provide helpful information to justice system stakeholders in identifying youth needs.

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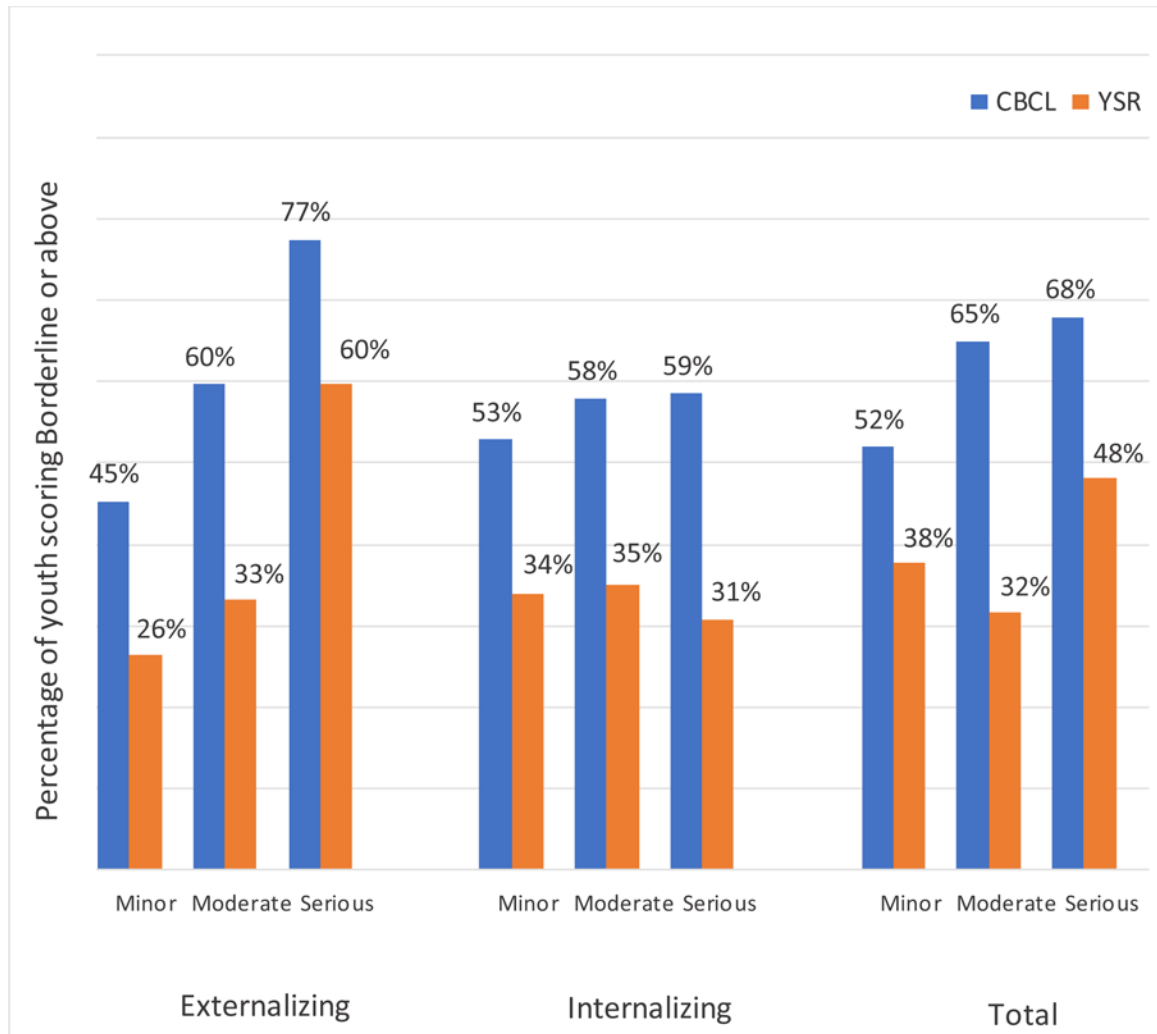


Figure 1. Percentage of youth scoring Borderline or above on each YSR and CBCL subscale, by delinquency type.

Table 1.

Differences in YSR and CBCL subscale T-scores by household income.

	<i>F</i>	<i>df</i>	<i>p</i>	η^2
YSR-Externalizing	.23	(2, 142)	.795	.003
CBCL-Externalizing	.74	(2, 144)	.479	.01
YSR-Internalizing	3.76	(2, 142)	.026	.05
CBCL-Internalizing	.211	(2, 144)	.810	.003
YSR-Total	2.57	(2, 142)	.080	.03
CBCL-Total	.15	(2, 145)	.864	.002

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Table 2.

Differences in YSR and CBCL subscale T-scores by gender, race, and ethnicity.

	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>	95% CI <i>d</i>
YSR-Externalizing					
Gender	-.10	143	.918	.02	[-.31, .35]
Race	-.18	138	.860	.03	[-.31, .37]
Ethnicity	-.29	142	.773	.06	[-.32, .44]
CBCL-Externalizing					
Gender	-.705	145	.482	.12	[-.21, .45]
Race	1.24	140	.215	.21	[-.12, .55]
Ethnicity	.14	144	.886	.03	[-.35, .40]
YSR-Internalizing					
Gender	-1.64	143	.103	.28	[-.06, .61]
Race	.29	138	.770	.05	[-.29, .39]
Ethnicity	-.50	142	.621	.10	[-.28, .48]
CBCL-Internalizing					
Gender	-1.42	145	.158	.24	[-.09, .57]
Race	1.16	140	.248	.20	[-.14, .54]
Ethnicity	.22	144	.823	.04	[-.33, .42]
YSR-Total					
Gender	-.74	143	.461	.12	[-.21, .46]
Race	.48	138	.630	.08	[-.26, .42]
Ethnicity	-.75	142	.453	.15	[-.24, .53]
CBCL-Total					
Gender	-1.26	146	.210	.21	[-.12, .54]
Race	1.72	141	.088	.30	[-.04, .63]
Ethnicity	.22	145	.823	.04	[-.33, .42]

Table 3.

Probability of Borderline or above symptomatology by delinquency type (minor, moderate, and serious), using serious delinquency as the reference category.

	<i>b</i>	<i>SE_b</i>	Wald	df	<i>p</i>	OR	95% CI OR
YSR-Externalizing							
Serious vs. Minor	-1.41	.42	11.30	1	.001	.24	[.11, .55]
Serious vs. Moderate	-1.08	.40	7.38	1	.007	.34	[.16, .74]
CBCL-Externalizing							
Serious vs. Minor	-1.42	.43	10.93	1	.001	.24	[.11, .56]
Serious vs. Moderate	-.84	.43	3.89	1	.049	.43	[.19, .99]
YSR-Internalizing							
Serious vs. Minor	-.05	.43	.02	1	.904	.95	[.41, 2.22]
Serious vs. Moderate	.10	.42	.06	1	.808	1.11	[.49, 2.51]
CBCL-Internalizing							
Serious vs. Minor	-.23	.41	.33	1	.569	.79	[.36, 1.76]
Serious vs. Moderate	-.04	.40	.01	1	.913	.96	[.44, 2.08]
YSR-Total							
Serious vs. Minor	-.42	.40	1.14	1	.285	.66	[.30, 1.42]
Serious vs. Moderate	-.70	.40	3.06	1	.080	.50	[.23, 1.09]
CBCL-Total							
Serious vs. Minor	-.68	.40	2.84	1	.092	.51	[.23, 1.12]
Serious vs. Moderate	-.14	.41	.11	1	.738	.87	[.40, 1.93]

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Table 4.

Probability of Borderline or above symptomatology by delinquency type, comparing minor and moderate categories only, using minor delinquency as the reference category.

	<i>b</i>	<i>SE_b</i>	Wald	df	<i>p</i>	OR	95% CI OR
YSR-Externalizing							
Minor vs. Moderate	.33	.42	.62	1	.430	1.39	[.61, 3.17]
CBCL-Externalizing							
Minor vs. Moderate	.58	.39	2.26	1	.133	1.79	[.84, 3.81]
YSR-Internalizing							
Minor vs. Moderate	.15	.41	.14	1	.708	1.17	[.52, 2.60]
CBCL-Internalizing							
Minor vs. Moderate	.19	.39	.23	1	.628	1.21	[.56, 2.59]
YSR-Total							
Minor vs. Moderate	-.27	.40	.46	1	.498	.76	[.35, 1.67]
CBCL-Total							
Minor vs. Moderate	.68	.40	2.84	1	.092	1.97	[.90, 4.32]