

Criminal Justice Coordinating Council

A Study of the Root Causes of Juvenile Justice System Involvement

Report

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About the Criminal Justice Coordinating Council

As an independent agency, the Criminal Justice Coordinating Council (CJCC) for the District of Columbia is dedicated to continually improving the administration of justice in the District. The mission of the CJCC is to serve as the District of Columbia's forum for District and federal members to identify cross-cutting local criminal and juvenile justice system issues and achieve coordinated solutions for the criminal and juvenile justice systems.

CJCC is the home of the DC Statistical Analysis Center (SAC). The mission of the SAC is to apply the highest level of scientific rigor and objectivity in the study of criminal justice policies, programs and practices, and to identify activities that improve the administration of justice. The SAC aims to produce empirical research and analysis that informs stakeholders and enhances policy decision-making in the District.

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SECTION I

EXECUTIVE SUMMARY

Executive Summary

While the juvenile justice system is intended to rehabilitate children, involvement in the system, particularly secure detention, is well-established to have lasting negative effects on youth such as increased risk of adult incarceration, decreased likelihood of high school graduation and success in the labor market, and worsening of mental health disorders (Azier and Doyle 2015; Gatti, Tremblay, and Vetaro 2009; Holman and Ziedenberg 2006; Lundman 1993). Society, therefore, has a vested interest in targeting resources to serve the needs of youth to prevent them from engaging in delinquent behavior. Rigorous analysis to identify what factors contribute to youth engaging in delinquency and becoming justice system involved is intrinsic to any efforts for prevention. Research suggests that youth crime is a symptom of underlying economic and social conditions. Recent attention has turned to the importance of adverse childhood experiences (ACEs) for a variety of individual outcomes including criminal behavior and long-term health (Felitti et al. 1998).

To that end, the Council of the District of Columbia mandated the Criminal Justice Coordinating Council (CJCC) submit a report to the Mayor and Council on the root causes of youth crime and prevalence of adverse childhood experiences that incorporates results from a voluntary survey of justice-involved youth on their perspectives. The CYJAA specified that the report should examine factors “such as housing instability, child abuse, family instability, substance abuse, mental illness, family criminal involvement, and other factors deemed relevant by the CJCC” (D.C. Law 21-23).

In accordance with this mandate, CJCC obtained administrative data¹ from multiple sectors on a representative sample of youth enrolled in public schools in the District during the 2016 – 2017 school year and identified who was justice-involved, which was defined as being arrested² or petitioned/charged³ the following year. During the fall of 2018, we conducted surveys and focus groups with DYRS-committed and DOC-incarcerated youth under the age of 21, and, during the spring and summer of 2018, we conducted interviews with youth service providers. This report integrates the results and addresses the following questions:

1. How do justice-involved youth differ from non-justice involved youth?
2. What factors affect the likelihood that youth become involved in the juvenile justice system?
3. How and why do these factors impact youth behavior?

To answer these questions, we examined how justice-involved youth differ from non-justice-involved youth with regard to economic resources; experiences with childhood maltreatment; educational experiences; mental, behavioral, and neurodevelopmental disorder diagnoses; and residential proximity to crime using descriptive statistics. We then constructed a mathematical model to identify which factors were statistically associated with the probability that a youth became justice system involved. We then described the results of the model in light of the academic research literature, interview responses, and focus group themes. Additionally, throughout the report we present relevant youth survey responses as a snapshot of the self-reported experiences of committed and incarcerated youth. Finally, we provide recommendations to enhance or expand the District’s prevention-based initiatives and programs. The report’s key findings and recommendations are highlighted in the next section.

1 Administrative data are derived from the operation of an administrative system, including data collected by government agencies for the purposes of registration, transactions, and record keeping (Connelly et al 2016).

2 Arrests exclude youth who were pre-arrest diverted and youth who had interactions with police that did not result in arrest.

3 Youth who are petitioned have had a charging document filed in juvenile court by the state alleging that the juvenile is delinquent and describing the alleged offenses committed by that child. A petition is comparable to a charging document in criminal court.

How do justice-involved youth differ from non-justice involved youth?

We find that **males** and **Black youth** are overrepresented in the District of Columbia’s juvenile justice system. Additionally, for the indicators we included to measure economic Resources; childhood maltreatment; educational experience; mental, behavioral, neurodevelopmental disorders; IEP eligibility; and neighborhood environment, we found youth who are involved in the juvenile justice system have significantly higher rates of:

Economic Resources

- Homelessness
- TANF reciprocity
- Medicaid reciprocity

Childhood Maltreatment

- Removal to foster care
- Reported childhood abuse
- Reported childhood neglect

Educational Experiences

- Excused absences
- Unexcused absences
- Suspensions
- Grade retention
- Changed schools

Mental, Behavioral, and Neurodevelopmental Disorders and IEP Eligibility

- Comorbid externalizing and internalizing disorders⁴
- Externalizing-only disorders
- Psychotic disorders
- Specific developmental learning disorders
- Specific developmental motor disorders
- Individualized Education Plans (IEPs)

Neighborhood Environment

- Violent crime incidents within a quarter mile of their residences
- Residence on gun violence “hot blocks”

⁴ The internalizing domain represent disorders with prominent anxiety, depressive, and somatic symptoms; the externalizing domain represent disorders with prominent impulsive, disruptive conduct, and substance use symptoms (Achenbach et al. 2016). Internalizing-externalizing comorbidity is when youth have disorders in both the internalizing and externalizing domains

We find that among justice-involved youth, petition rates are significantly higher among:

- Males
- Hispanic youth
- Homeless youth
- Youth who have been suspended

We find that among youth who are petitioned, findings of delinquency⁵ are significantly higher among:

- Males
- Youth who have been suspended

What affects the likelihood that youth become involved in the juvenile justice system?

We conducted a multivariable regression analysis⁶ using the administrative data to identify factors that have a statistical impact on the likelihood of juvenile justice system involvement within one year. Our results find that males, Black youth, and youth around **age 15.4** are at the highest risk of involvement. Specifically, **males** are, on average, two times more likely to become juvenile justice system involved than females, and **Black youth** are 1.86 times more likely to become involved than White youth.

The data show that a youth who experiences **homelessness** has a 1.42 times greater likelihood of justice system involvement than had they not experienced homelessness. The data also demonstrate that youth with a history of **abuse** and/or **neglect** are 1.33 and 1.25 times more likely to become justice system involved, respectively. This finding is consistent with the perspective of interview participants that family environment is one of the most important factors for whether youth engage in delinquency.

Our findings suggest that educational indicators have the largest magnitude of association with justice system involvement. A youth with the average number of **unexcused absences** is 3.16 times more likely to become justice system involved than had they had no unexcused absences. Being **grade-level retained** is associated with a 1.75 times greater likelihood of justice system involvement, while one **suspension** increases the risk by 1.57 times. **Changing schools** at least once during a school year is associated with an increase by 1.77 times in the likelihood of justice system involvement the following year.

A youth who has both internalizing and externalizing disorders (**comorbid**) is 1.86 times more likely to become justice involved, while a youth with **externalizing disorders only**, no internalizing disorders, are 1.83 times more likely to become justice involved than a youth with no externalizing disorders.

Among youth who are internalizing-externalizing comorbid, having an IEP in place increases

⁵ Percentage of youth who were found delinquent by October 2018 on cases arrested or petitioned between June 2017 and July 2018.

⁶ Multivariate regression analysis is a statistical technique that estimates the extent to which multiple independent variables (predictors) are associated with one dependent variable (outcome). The method is used to predict the outcome associated with changes in the predictors.

the likelihood of justice system involvement by 2.32 times compared to comorbid youth without an IEP. Our results found no statistically significant effects of IEPs independently or conditioned on other disorder diagnoses categories.

Finally, our analysis suggests that community environment impacts youth. Living on one of the blocks with the highest number of gun violence incidences (“**hot blocks**”) is statistically associated with a 1.44 times greater likelihood of involvement. The research literature and our interviews suggest that the statistical finding may be capturing community environment more broadly in addition to exposure to violence, particularly as the number of violent incidents within a quarter mile radius was not significant when controlling for living on a hot block.

Beyond our statistical findings, the interviews and focus groups identified **peer influence, future uncertainty**, and a **lack of future expectations** as having an important effect on whether youth engage in delinquent behavior.

Recommendations

In alignment with our statistical findings, the needs identified by interview and focus group participants, and the research literature, we recommend the District explore the following opportunities for prevention-based programs and initiatives:

- Bring the Becoming a Man (BAM)© program to District schools, which is an evidence-based, trauma-informed school-based counseling, mentoring, and character development program for 7th – 12th grade males.
- Pilot a community-based, cross-age peer mentoring program where high school-age youth are paid to mentor elementary-age children under the supervision of formal program staff.
- Create a year-round youth employment program that includes vocational job training.
- Create universal ACEs screening for youth by providing training to primary care providers and Medicaid reimbursement for screenings, and increase funding for, and information dissemination around, age-appropriate and alternative trauma-informed treatment services.
- Expand capacity to provide ongoing, community-based case management services to youth and families who have not touched the legal system, and explore establishing a process where Birth-to-Three providers can connect families to case management systems once they age out.
- Provided stable, long-term funding for HealthySteps© Specialists and Birth-to-Three “community navigation service” coordinators.
- Create a process to facilitate a warm hand off between HealthySteps© providers and home visiting services for families-in-need.

Based on the findings in this report, we propose the following analyses for subsequent reports in accordance with the CYJAA:

- 2022: Conduct an analysis to identify the extent to which the relationship between educational experiences and juvenile justice system involvement is driven by underlying explanatory factors such as family environment, economic resources, and mental health needs.
- 2024: Conduct an analysis that identifies what types of school-based incidents led to a law enforcement referral and/or arrest, and whether factors such as economic resources, race, IEP eligibility, mental health conditions, school location, and SRO assignment statistically affect the likelihood of referrals/arrests, or
- 2024: Conduct a representative survey of District youth on self-reported delinquent behavior and potential explanatory factors such as exposure to ACEs.

We also identify the following research questions that extend from this analysis:

- Are there racial differences in arrests resulting from calls-for-service or police-initiated stops?
- Do runaway and throwaway youth experiencing homelessness have a different probability of juvenile justice system involvement than youth who are experiencing family homelessness?
- How does the establishment of IEPs affect youth with internalizing-externalizing comorbidity? Does the nature of the intervention or timing of the establishment mitigate the impact? Does the effect of an IEP differ from the effect of a 504 plan⁷?
- Does early identification and treatment of ACEs exposure and mental health disorders mitigate the impact on juvenile justice system involvement?
- What are the ecological factors in the top-35 hot blocks for gun violence that are affecting juvenile justice system involvement?

⁷ Similar to an IEP, a 504 plan is a formal educational plan that provides accommodations for students with disabilities under the Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 701) rather than the IDEA. A 504 provides for accommodations under a broader definition of disabilities and, unlike an IEP, is not special education but is a disability accommodation.

SECTION II

STUDY OVERVIEW

STUDY OVERVIEW

The Comprehensive Youth Justice Amendment Act of 2016 (CYJAA) enacted in April 2017 requires the Criminal Justice Coordinating Council (CJCC) to submit a report to the Mayor and Council on the root causes of youth crime and prevalence of adverse childhood experiences that incorporates results from a voluntary survey of justice-involved youth on their perspectives. The CYJAA specified that the report should examine factors “such as housing instability, child abuse, family instability, substance abuse, mental illness, family criminal involvement, and other factors deemed relevant by the CJCC (D.C. Law 21-23).”

To examine the root causes of youth crime and prevalence of adverse childhood experiences, CJCC conducted a comprehensive, mixed-methods study using administrative, survey, focus group, and interview data. The study addresses the following questions:

1. How do justice-involved youth differ from non-justice involved youth?
2. What factors affect the likelihood that youth become involved in the juvenile justice system?
3. How and why do these factors impact youth behavior?

We defined justice system involvement as being arrested⁸ or petitioned/charged⁹ between June 2017 and July 2018. To examine how justice-involved youth differ from non-justice-involved youth, we drew a representative sample of youth enrolled in District of Columbia public schools (DCPS) or public charter schools (PCS) during the 2016 – 2017 school year and used data provided by the Metropolitan Police Department (MPD) and District of Columbia Superior Court (DCSC) to identify which of them subsequently become justice system involved. We obtained information on the sampled youths’ demographics; economic resources; housing stability; child maltreatment histories; educational experiences; mental, behavioral, and neurodevelopmental disorder diagnoses;¹⁰ and neighborhood environment using data obtained from the Office of the State Superintendent (OSSE), Department of Human Services (DHS), Child and Family Services Agency (CFSA), Department of Health Care Finance (DHCF), and MPD. A full description of the sample selection, data process, and variable measurement is in *Appendix A*.

To identify the factors that affect justice system involvement, we used the administrative data on the sample of DC youth and constructed a statistical model of the likelihood of justice system involvement. Specifically, our model includes gender, race, age, Temporary Assistance for Needy Families (TANF) benefit reciprocity, homelessness, Medicaid reciprocity, removal to foster care by CFSA, reported childhood abuse, reported childhood neglect, number of excused and unexcused absences, number of suspensions, number of days excluded, grade-level retention, changed schools within the school year, internalizing disorder diagnoses, externalizing disorder diagnoses, internalizing-externalizing comorbidity, psychotic disorder diagnoses, specific learning disorder diagnoses, specific motor disorder diagnoses, IEP eligibility, number of violent and property crime incidents within a quarter mile of residence, and residence on a gun violence hot block. The model specification and results are presented in *Appendix B*.

8 Arrests exclude youth who were pre-arrest diverted and youth who had interactions with police that did not result in arrest.

9 Youth who are petitioned have had a charging document filed in juvenile court by the state alleging that the juvenile is delinquent and describing the alleged offenses committed by that child. A petition is comparable to a charging document in criminal court.

10 ICD-10-CM categories F06 – F99.

Using this model, we calculated the predicted probability of justice system involvement for each sampled youth and grouped them into risk quartiles based on the predicted probabilities. We then calculate the average marginal effects of each statistically significant factor within each risk quartile to evaluate their impacts in light of the youths' base risk-level.¹¹

Because statistical data analysis can only tell us that a relationship statistically exists, we conducted interviews with youth service providers and focus groups with justice-involved youth to gain their perspectives on how and why these factors affect youth. We describe the interview methodology in *Appendix C* and the focus group methodology in *Appendix D*.

To gain information on the prevalence of adverse childhood experiences (ACEs) and perspectives of justice-involved youth that could not be obtained from administrative data, we conducted a survey of youth under the age of 21 committed to the Department of Youth Rehabilitation Services (DYRS) or incarcerated at the Department of Corrections (DOC) and reviewed DYRS Juvenile Social Files (JSF) on committed youth. The results are presented throughout the report. We describe the survey methodology in *Appendix D* and the methodology for the JSF review in *Appendix E*. This information cannot be viewed as representative of all justice-involved youth since pre-disposition youth and youth on probation were not eligible for inclusion. Additionally, the survey results are not representative of all DYRS-committed or DOC-incarcerated youth and thus should be interpreted as the experiences and beliefs of the participants. The sample was not random, and those who chose to participate likely systematically differ from those who did not. Finally, the survey and JSF information cannot be used to draw distinctions between justice-involved and non-justice-involved youth as we did not collect comparable data on the latter.

Report Layout

Section III presents the descriptive statistics of how justice-system involved youth differ from non-justice-involved youth and how youth who are arrested-only, arrested and petitioned, and those who are found delinquent differ from each other.

Section IV identifies the factors that were found to be statistically associated with juvenile justice system involvement, presents the base average predicted probabilities of justice system involvement across four quartiles of risk, and presents descriptive statistics of youth within each risk level.

Section V presents the changes in average predicted probabilities associated with each of the factors found to be statistically associated with the likelihood of justice system involvement; discusses their impacts in the context of the research literature, interviews with youth service providers, focus groups with youth; and presents relevant survey data.

Section VI discusses the factors that were identified in the interviews and surveys as important for understanding youth crime but were not captured in the administrative data.

Section VII provides a summary of the empirical results and our policy and research recommendations.

¹¹ Confidence intervals and standard errors for all estimates presented in this report are available in an online appendix (*Root Cause Confidence Intervals and SE*) at <https://cjcc.dc.gov/page/statistical-analysis-center>.

Definitions

Below is a list of the definitions of the factors that are included in the statistical analysis and presented in the summary statistics. The definitions are listed in the order in which they are presented throughout the report and grouped by the substantive categories discussed in the report. More information on the data and measurement can be found in *Appendix A*.

Demographics

Age:	Age on 5/31/17
Gender:	Male/Female
Race:	Black/African American; White; Hispanic/Latino; Other

Economic Resources

Homelessness:	Verified as homeless in SY16-17 accordance with the McKinney-Vento (MKV) Assistance Act
TANF:	Received TANF benefits between 5/31/16 - 6/1/17
Medicaid > 365 days:	Received Medicaid for >365 cumulative days between 05/31/11 – 6/1/17

Childhood Maltreatment

Removed from Home:	Outcome of a CFSA referral is the youth being removed from home due to maltreatment
Child Abuse:	Has a substantiated, inconclusive, or family assessment abuse case on record with CFSA as of 5/31/17
Child Neglect:	Has a substantiated, inconclusive, or family assessment neglect case on record with CFSA as of 5/31/17

Educational Experience

Grade Retention:	Whether a youth was enrolled in the same grade in SY16-17 as they were in SY15–16
Excused Absences:	Count of a youth's number of excused absences in SY16-17
Unexcused absences:	Count of a youth's number of unexcused absences in SY16-17
Suspensions:	Count of a youth's number of suspensions in SY16-17
Enrollment Stability:	Whether a youth changed schools during the SY16-17

Mental, Behavioral, and Neurodevelopmental Disorder Diagnoses and IEP Eligibility

Internalizing Disorder:	Has internalizing disorder diagnosis but no externalizing disorder, according to Medicaid claims data
Externalizing Disorder:	Has externalizing disorder diagnosis but no internalizing disorder, according to Medicaid claims data
Comorbid Disorder:	Has both internalizing and externalizing disorder diagnoses, according to Medicaid claims data
Psychotic Disorder:	Has psychotic disorder diagnosis, according to Medicaid claims data
Specific Learning Disorder:	Has specific developmental learning disorder diagnosis
Specific Motor Disorder:	Has specific developmental motor disorder diagnosis
IEP:	Whether a youth had an IEP in place in SY16-17

Neighborhood Environment

Proximity to Violent Crime:	Number of violent crimes within one-quarter mile of a youth's residential address between 6/1/16 – 5/31/17
Proximity to Property Crime:	Number of property crimes within one-quarter mile of a youth's residential address between 6/1/16 – 5/31/17
Gun Violence Hot Block:	Whether a youth's residential address is on one of the 35 blocks with the most violent gun crime incidents

SECTION III

**PROFILE OF JUSTICE-
INVOLVED YOUTH IN THE
DISTRICT OF COLUMBIA**

Profile of Justice-Involved Youth in the District of Columbia

Most young people engage in some form(s) of behavior that society has found undesirable and criminalized. The vast majority of youth, left alone, will age out of delinquent behavior and desist (Moffitt 1993). However, while most youth engage in some form of delinquency, the majority reach adulthood without engaging in serious delinquency, and only a small proportion of youth become involved in the juvenile justice system.

Juvenile justice system involvement is the intersection between suspected behavior and system response. Because the justice system responds to suspected behavior, not all youth who become justice system involved are guilty of what they are accused. Additionally, differently-situated youth engaging in similar behaviors may face differential responses for factors outside of their control. For instance, research suggests that if a youth is in an environment where people are more likely to call the police as a response to delinquent behavior, that youth will be more likely to become justice system involved even if they are engaging in the same behavior as a youth in a different environment (Sullivan et al. 2016; Werling and Cardner 2011; Warner, Walker, and Reppucci 2014). Nevertheless, it is useful to examine youth criminal behavior in the context of juvenile justice system involvement as the intersection is the point where behavior has substantial consequences.

For this study, we drew a random sample of youth enrolled in DCPS and public charter schools in the 2016 – 2017 school year and obtained demographic information and data on a variety of different factors including ACEs such as homelessness, removal to foster care, abuse, neglect, and exposure to violence. We describe the factors included in the analysis above.

The summary statistics of each included factor are presented left, and the sampling method and data descriptions are provided in *Appendix A*. Confidence intervals and standard errors for all estimates in the report are available in an online appendix (*Root Cause Confidence Intervals and SEs*).¹²

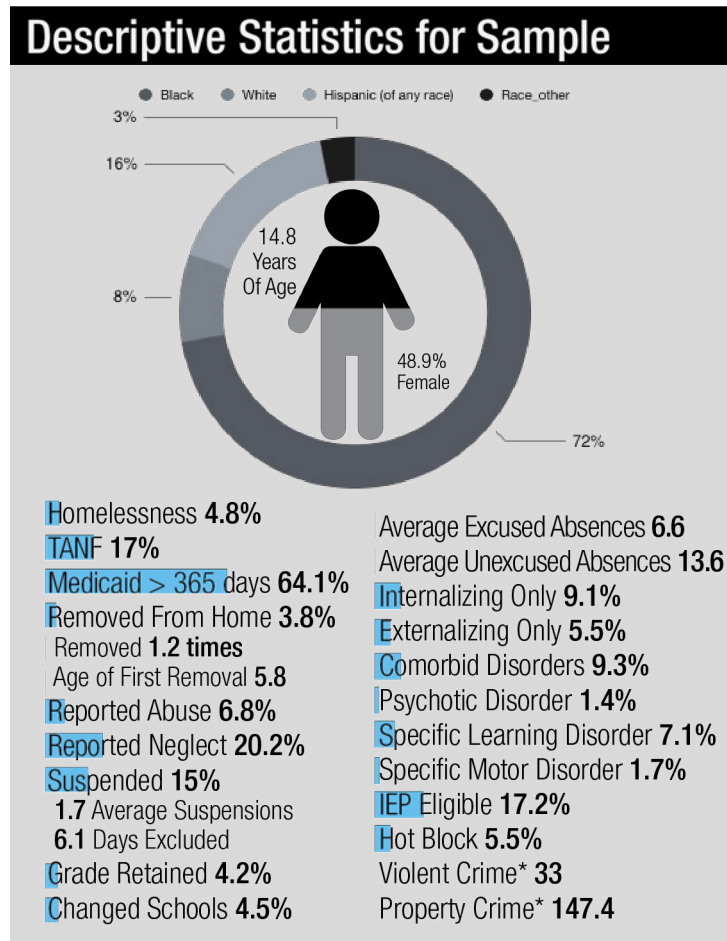


Figure 1

*Reported incidents within 1/4 mile of residence

¹² <https://cjcc.dc.gov/page/statistical-analysis-center>

We matched the sampled youth to juvenile justice data to identify which youth became justice system involved between June 1, 2017 and July 31, 2018, with justice system involvement defined as being arrested or petitioned. Of District public school youth, 4.2% became justice involved during the period under review. 77.6% of justice-involved youth were enrolled in DCPS or PCS during the SY2016 – 2017. Of the 22.4% who were not enrolled in DCPS/PCS, 5.8% of justice-involved youth provided residential addresses to the justice system outside of the District, while 16.5% provided DC addresses or no address but were not matched to OSSE enrollment data. While some of these youth may have been enrolled in private schools or had recently moved to the District, as enrollment data temporally precedes justice system data; others may have dropped out of school despite the District’s compulsory education requirements.

4.2% of Public-School Enrolled Youth Became Juvenile Justice Involved in One Year

Youth involved in the juvenile justice system differ significantly from other youth on a number of factors, though only some of those factors statistically contribute to justice system involvement. There are also significant differences among youth who were arrested and not petitioned and those who were petitioned,¹³ and between youth who were petitioned and found delinquent and those who were not found delinquent.¹⁴ All differences presented below are statistically significant at the .05-level.

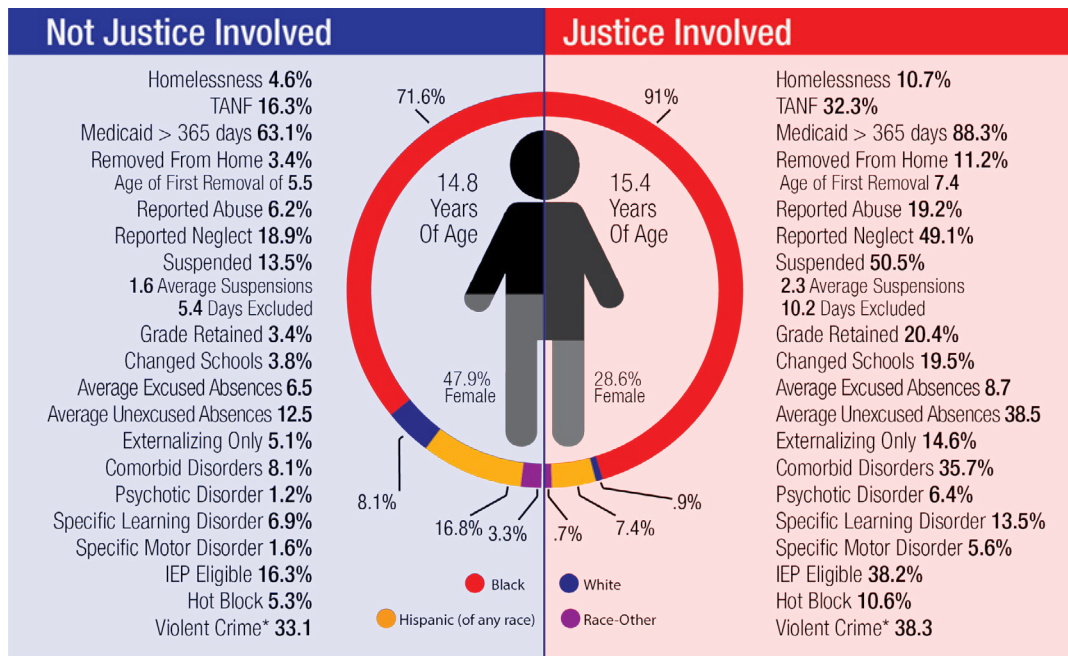


Figure 2: Significant Differences Between Not Justice Involved and Justice Involved Youth

*Reported incidents within 1/4 mile of residence

13 White and Race-Other are not presented because of the low N.

14 A finding of delinquency means that a youth was petitioned between June 1, 2018 and July 31, 2019 and found delinquent by October 1, 2019.

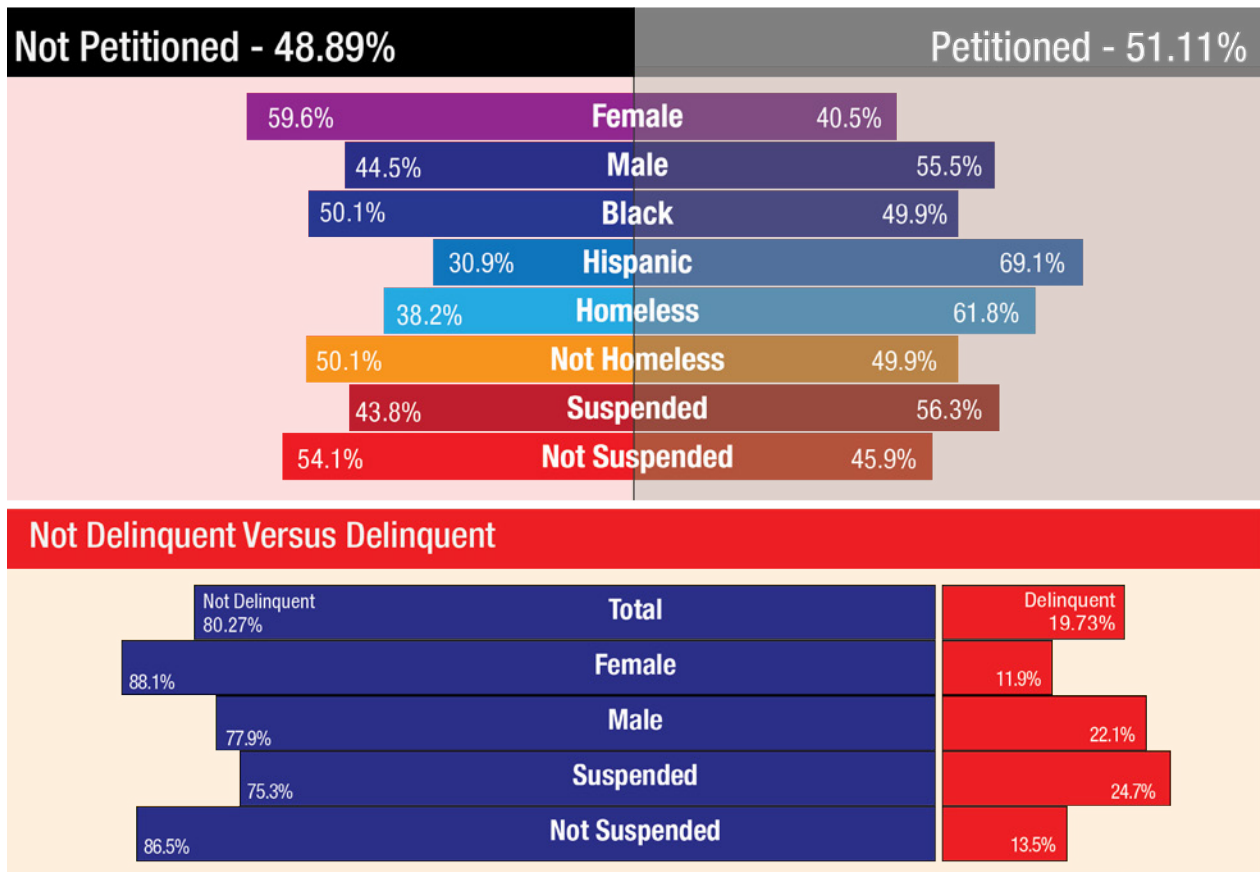


Figure 3: Significant Differences between Not Petitioned and Petitioned Youth and Not Delinquent and Delinquent Youth

SECTION IV

**RISK OF JUVENILE
JUSTICE SYSTEM
INVOLVEMENT**

Risk of Juvenile Justice System Involvement

Researchers have been attempting to understand what causes youth to engage in delinquent behavior for over a century (e.g. Banham Bridges 1927; Spaulding 1913). The body of research is grounded in a variety of different criminological theories including the social-ecological model of development, social learning theory, social bond-social control theory, strain theory, and social disorganization theory (see Agnew and Brezina 2014; Development Services Group, Inc. (DSG) 2015). Research has identified multiple risk factors that may contribute to a youth's likelihood of engaging in delinquency. Demographic characteristics such as age, gender, and race have consistently been associated with delinquent behaviors (e.g. Byrnes, Miller, and Shafer 1999; Hindelang 1981; Moffit 1993). Family factors such as family poverty (Jarjoura, Roger, and Brinker 2002) and childhood maltreatment (Crooks et al. 2007; Van Wert et al. 2017) have been associated with increased risk of delinquency, as have individual factors such as having certain mental health disorders (Barrett et al. 2014), learning disorders (Quinn et al. 2005), and substance abuse disorders (Huizinga and Jakob-Chien 1998). Research also suggests that school factors including grade retention, discipline, and engagement are correlated with delinquency (Institute of Medicine 2000). Finally, there is evidence that exposure to adverse community environments may lead to delinquent behavior (McCord, Widom, and Crowell 2001).

Many of these factors align with the growing body of research examining the prevalence and impact of adverse childhood experiences (ACEs). ACEs were initially described in reference to ten childhood experiences that were found to be linked to many of the leading causes of death in adults (Felitti et al. 1998). The original ten ACEs focused on three categories of childhood experiences: childhood abuse, childhood neglect,¹⁵ and household dysfunction. Childhood abuse included physical abuse, emotional abuse, and sexual abuse. Childhood neglect included physical neglect and emotional neglect. Household dysfunction included violence toward mother, household substance abuse, household mental illness, parental separation or divorce, and incarcerated household member. Later research expanded the original ACEs to include community-level factors including discrimination, witnessing violence, living in an unsafe neighborhood, racism, and poverty (Cronhold et al. 2015).

While ACEs were initially evaluated in the context of the health effects on adults, more recent literature has explored the prevalence of ACEs among youth who are justice-involved and the impact of ACEs on risk-taking behavior and delinquency. One study found high rates of ACEs and higher than average composite ACEs scores among justice-involved youth in Florida (Baglivio et al. 2014). Other studies have found evidence that adverse childhood experience contribute to behaviors such as alcohol use, marijuana use, and violence, as well as chronic delinquency and juvenile recidivism (Fagan and Novak 2017; Perez, Jennings, and Baglivio 2015; Wolff and Baglivio 20016).

We build upon this research and examine the statistical association between certain ACEs (abuse, neglect, poverty, exposure to violence, and neighborhood safety) and other risk factors for juvenile justice system involvement identified by previous research (demographics, educational experience, and mental health and learning disorders). To do this, we constructed a multivariable, logistic regression model to test the relationship of each factor controlling for the effects of the others. To interpret the results of the model, throughout the report, we present average predicted probabilities¹⁶ holding all other variables at their observed values. The full model specification and results are presented in *Appendix B*.

¹⁵ Added in the second wave of the CDC-Kaiser ACEs study.

¹⁶ Rounded to the nearest 1/10th of a decimal.

Factors with Statistically Significant Impact

Age

Gender

Race (Black)

Homelessness

Childhood Abuse

Childhood Neglect

Grade Retention

Suspensions

Unexcused Absences

Enrollment Stability

Externalizing Only

Comorbid

IEP if Comorbid

**Gun Violence
Hot Block**

We used the model to calculate the predicted probability of justice system involvement for each sampled youth based on their observed values¹⁷ and then divided the sample into risk quartiles based on the calculated probabilities. This approach allows us to take into account the cumulative effect of risk factors (DSG 2015). 83.3% of justice-involved youth had predicted probabilities that placed them in the highest (4th) risk quartile, and 95.2% of justice-involved youth were in top two risk quartiles. The average predicted probability of youth in the highest risk quartile is 13.9%¹⁸ while the average predicted probability for the lowest risk quartile (1st) is 0.3%. This means that on average, youth in the 4th quartile have a 13.9 out of 100 chance of becoming justice involved as compared to a 0.3 out of 100 chance for youth in the 1st quartile. Thus, there are clear statistical differences in the likelihood of juvenile justice system involvement based on the cumulative number of identified risk factors to which youth have been exposed. However, the vast majority of youth, even those in the highest risk quartile, do not become justice system involved. These factors, therefore, are not deterministic.

Identifying risk quartiles allows us to examine differences in the youth population based on their cumulative risk and examine the average effect of factors in light of different levels of exposure to other risk factors. This provides a more nuanced and accurate understanding of impact as it accounts for base exposure level. The summary statistics of each quartile are presented on the following page.

¹⁷ Predicted probabilities for the sample ranged from 0.0% to 93.6%.

¹⁸ The median predicted probability for youth in the 4th risk quartile is 8.1% and the skewness is 2.4.

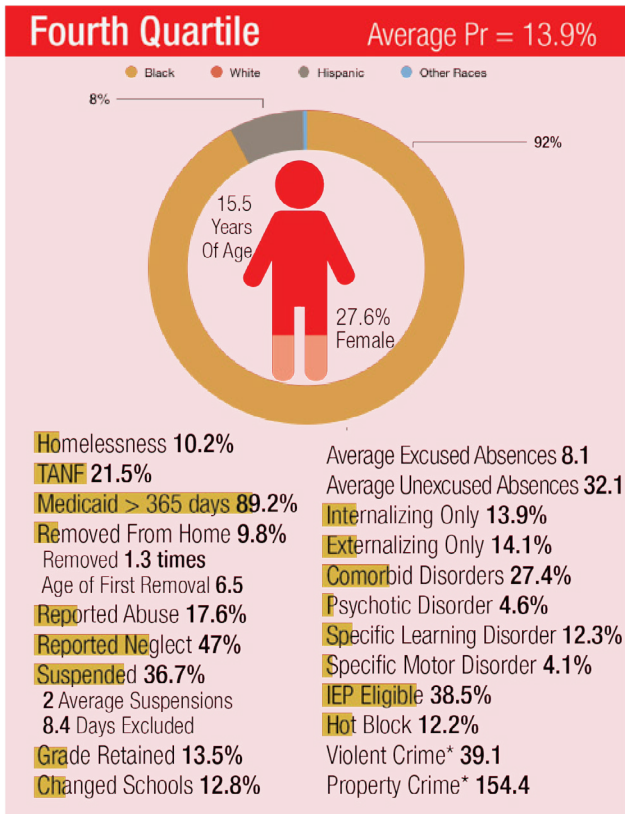
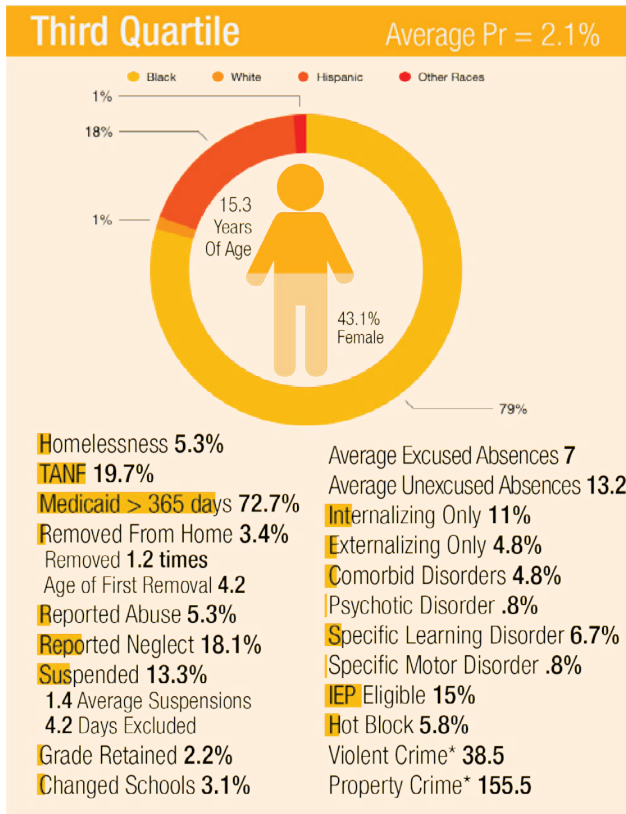
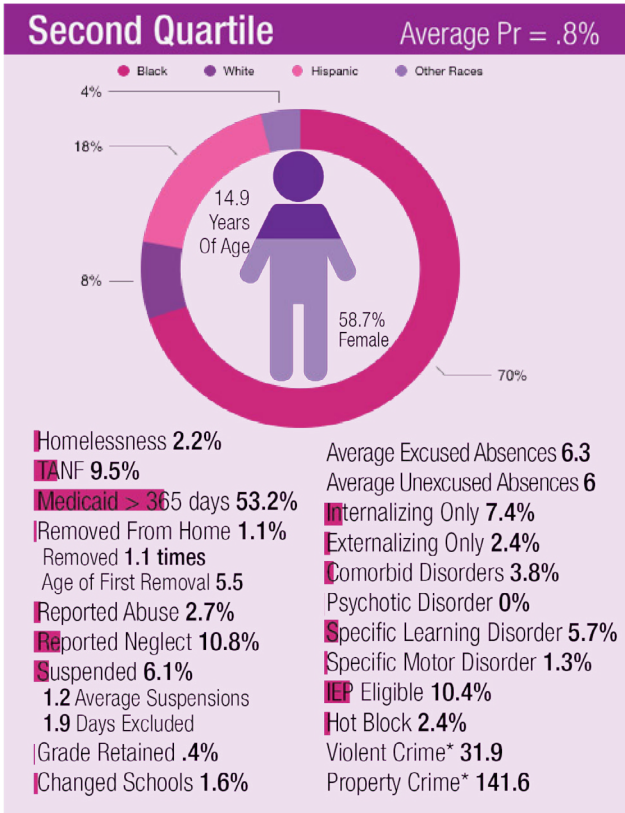
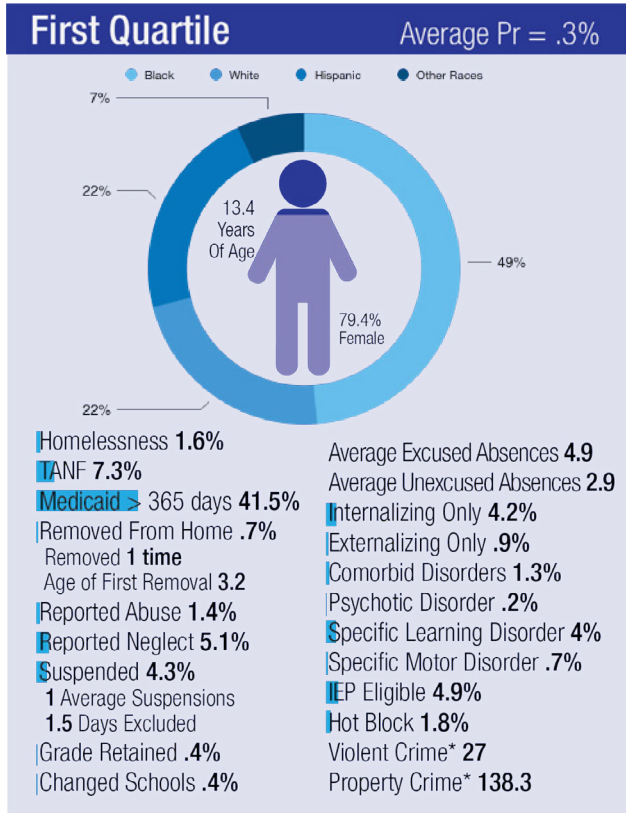


Figure 4: Descriptive Statistics of Youth in Each Quartile

*Reported incidents within 1/4 mile of residence

SECTION V

**WHAT AFFECTS JUVENILE
JUSTICE SYSTEM
INVOLVEMENT AMONG
DISTRICT YOUTH?**

Demographic Factors

The model shows that age, gender, and race are significantly associated with juvenile justice system involvement. These findings align with the research literature, which consistently shows that all three factors are highly correlated with juvenile delinquency (Byrnes, Miller, and Shafer 1999; DeLisi and Vaughn 2016; DSG 2015; Hindelang 1981; Moffit 1993).

Age

The probability of juvenile justice system involvement peaks at age 15.4

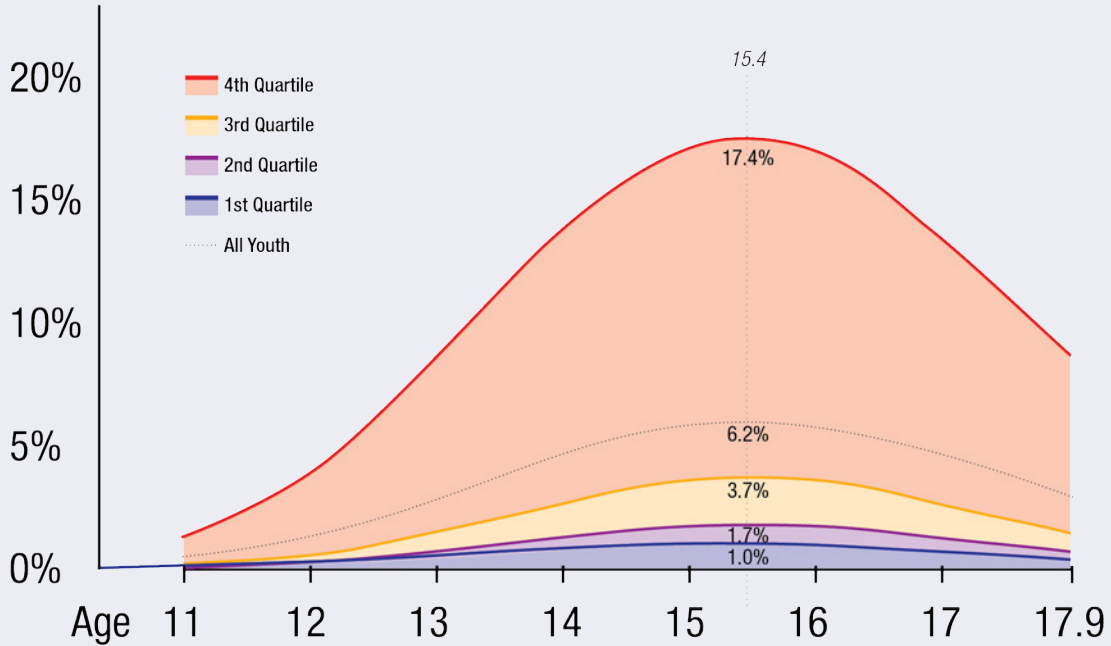


Figure 5.

Probability of Justice System Involvement by Age

1st Quartile		2nd Quartile		3rd Quartile		4th Quartile	
11	0.0%	11	0.1%	11	0.1%	11	1.1%
12	0.1%	12	0.2%	12	0.5%	12	3.8%
13	0.4%	13	0.7%	13	1.3%	13	8.8%
14	0.7%	14	1.3%	14	2.5%	14	14.5%
15	1.0%	15	1.7%	15	3.4%	15	18.0%
16	0.9%	16	1.7%	16	3.3%	16	17.6%
17	0.6%	17	1.1%	17	2.2%	17	13.4%
17.9	0.3%	17.9	0.6%	17.9	1.2%	17.9	8.2%

Figure 6.

Our data show that age has a curvilinear relationship with delinquency. In the District, the probability of juvenile justice system involvement peaks around 15 years and 5 months (15.4 years old). The curve is steep for youth in the 4th risk quartiles as the average predicted probability of justice system involvement doubles from 8.8% at age 13 to 18% at age 15 with the probability peaking at 18.4% at 15.4 years old, all else being held at observed values. The rate of decline is slower with the probability of justice system involvement being 4.6% less at age 17 compared to age 15 – 13.4% compared to 18.0%. For youth in the lower risk quartiles, age has a similar effect with similar relative differences, though the absolute change in probability is smaller. The relationship between age and involvement is at least partially driven by the fact that youth age out of the juvenile justice system and, therefore, may be engaging in the same behavior but becoming criminal justice system involved.

However, this finding is consistent with the research literature, which finds a bell-shaped relationship between age and the likelihood of criminal behavior; specifically, the age-crime curve shows that offending tends to increase from late childhood, peak in teenage years, and decline in the early twenties (Farrington 1986; Piquero, Farrington, and Blumstein 2007). Though the peak age and age of desistance have been shown to vary by offense, the shape and nature of the relationship has been consistent in research findings over time and culture. Research suggests that criminal behavior peaks during adolescence as a result of the biological, physiological, and psychological developmental processes. Specifically, adolescence is a period of socio-emotional growth with hormonal and neurological changes resulting in youth being increasingly more sensitive to rewards from ages 10 – 15, with that sensitivity decreasing from age 15 onwards (Steinberg et al. 2008).

Studies show that adolescents are particularly sensitive to social rewards, such as peer acceptance (Sebastian et al. 2010) and are more inclined towards short-term rewards in the presence of peers (O'Brien, Chein, and Steinberg 2011). Adolescents' cognitive-control functioning, which is critical for self-regulation and impulse control, is also developing (Steinberg et al. 2008). Though research suggests youth are able to make reasoned decisions in non-emotional settings by their mid-teens, they are less capable of stopping impulsive behavior in response to emotional stimuli such as peer acceptance (Steinberg et al. 2009; Steinberg 2010). The dual systems theory (e.g. Steinberg et al. 2008) posits that a temporal gap between youths' socio-emotional system and cognitive-control system makes youth more susceptible to criminal behavior, particularly crimes of opportunity and group crimes as they are crimes more driven by impulsivity and with greater social rewards.

Often citing the research literature on adolescent brain development, youth service providers who were interviewed suggested that, consistent with their developmental state, many youth commit crimes out of impulse, particularly when with their peers, and without consideration of the consequences. A common theme among the interviewees was that some youth become justice involved for engaging in typical, youthful behavior that is normal across youth of different backgrounds, such as fighting with siblings or peers, disorderly conduct, and experimentation with drugs. While most noted that some youth become involved in serious crimes, one social service provider explained that for others, **“Some of it is just regular adolescent stuff that I think we would be hard pressed to ask people to go back in their own history and figure out they didn’t do something, that if they had been picked up with legit crimes and stealing something from a store, staying out -- I think regular kids things, peer influence in particular (RID 553).”**¹⁹

Youth focus group participants similarly observed that some youth engage in crime impulsively without thinking through consequences. They explained that some people commit “dumb” crimes, meaning they are “doing illegal things and don’t need to.” One youth explained that some of the people they knew in YSC (Youth Services Center) were “Dumb, they can call their parents to get what they need,” but still commit crimes because “They’re trying to fit in.” The youths observed that most young people who commit crimes do not think about the consequences, which is consistent with research findings (e.g. Beyth-Marmon et al. 1993; Cohen et al. 1995; Steinberg et al. 2009). **“When you’re in the state of mind that you have to do it, you deal with the consequences after.”**

¹⁹ Participants were assigned a random research identifier numbers (RID).

Gender/Sex

Males are **two times** more likely to become juvenile justice system involved

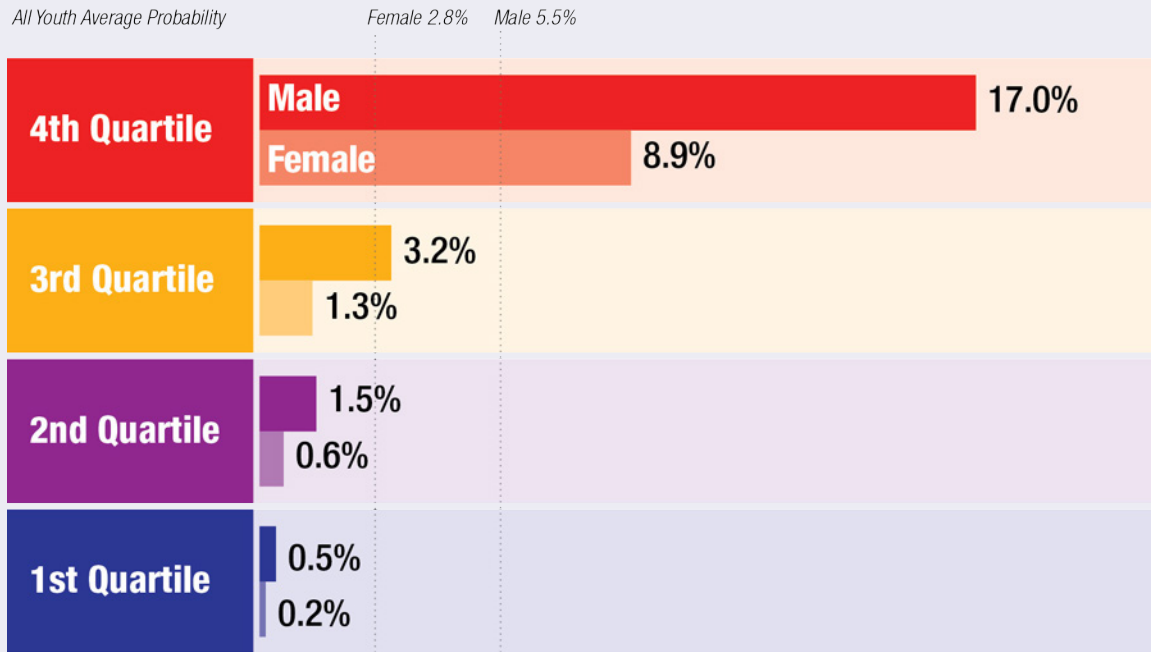


Figure 7.

Males are more likely to become juvenile justice system involved than females, holding all else constant. Across all youth, the average predicted probability among males is 5.5%, which is twice the average probability of females at 2.8%. Among youth in the 4th risk quartile, the average likelihood of justice system involvement goes from 8.9% to 17.0% if a person is male as opposed to female, holding all at their observed values.

Gender/sex²⁰ is viewed in the literature as one of the fundamental correlates of crime, with males having higher rates of criminal behavior across all continents (DeLisi and Vaughn 2016). There is no consensus, however, as to why males commit crimes at a higher rate. Research speculates that genetic differences (Eme 2009; Eme 2010), psychological differences (Cross, Coping, and Campbell 2011), and/or socialization differences (Lynton and Romney 1991) may contribute to the observed gender disparities. Gender differences in the District's juvenile justice system have been well-documented in reports and research studies, with males constituting the vast majority of justice-involved youth, though recent trends showed an increase in the relative number of females in the system (Vafa et al. 2017).

²⁰ The research literature switches between sex and gender in the theoretical explanations.

Race

Black youth are more likely to become juvenile justice system involved than all other races

There are no statistically significant differences between other races/ethnicities.

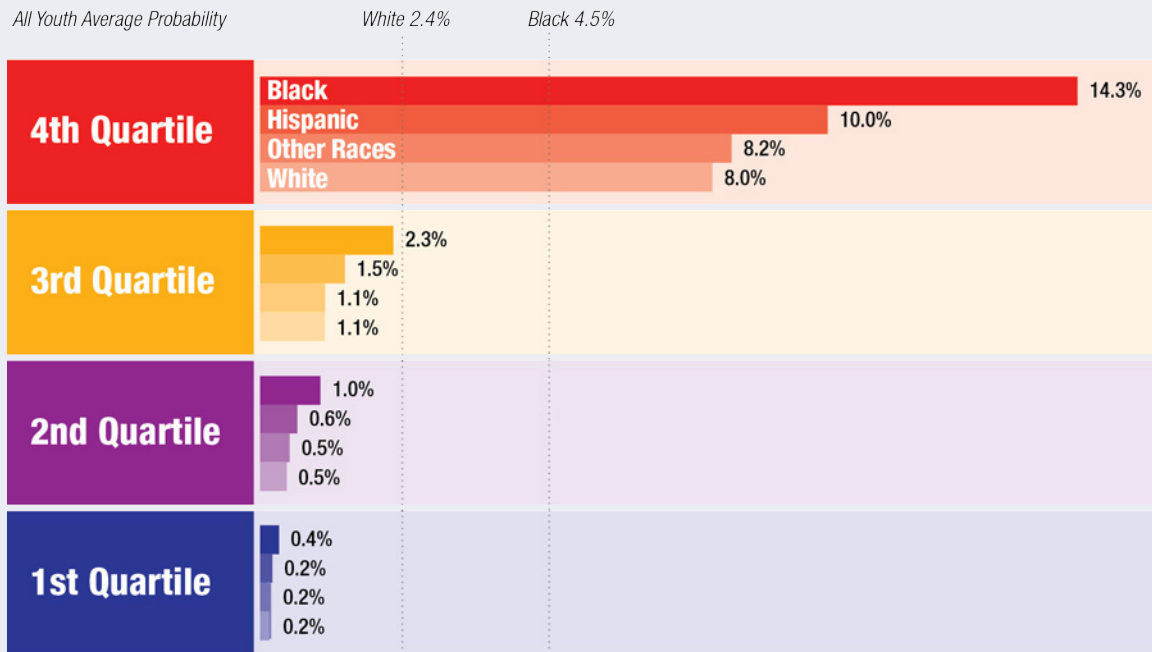


Figure 8.

* Differences between Hispanic, Other Races, and White are not statistically significant.

Our data suggest that Black youth in the District of Columbia are significantly more likely to become justice involved than youth of any other race or ethnically Hispanic youth; however, there are no significant differences in likelihood between being White, other races, or ethnically Hispanic. Across all youth, Black youth are 1.86 times more likely to become justice involved than White youth. Across youth in the 4th risk quartile, the average predicted probability if a youth is White is 8.0%, which is 6.3% less than the average probability if a youth is Black at 14.3%, all else held constant at observed values.

Interview participants consistently noted racial disparities in rates of justice system involvement within the District. When asked to describe commonalities among justice-involved youth, nearly all stated that justice-involved youth are Black/African American and many remarked that they do not see White youth in the juvenile justice system. Because our data examine formal justice system involvement predicated on an arrest, we are unable to distinguish whether the effect of race is due to differential rates of offending or differential system response. However, the racial effects are observed while holding constant all other factors in the model, thus race is associated with an increased likelihood even controlling for other risk factors.

According to government reports and the research literature, racial disparities within the juvenile justice system are documented throughout the United States, with racial minorities consistently having disproportionate rates of involvement. Much effort has gone into explaining these disparities, with researchers finding evidence to suggest that the disparities may be due to differential rates of offending across racial groups and/or differential system responses. Similar to the research literature, interviewees suggested that racial disparities are driven by both differential system response and by historical and institutionalized racism that has led to youth being more exposed to risk factors for criminal behavior and thus engage in differential rates of offending.

Research based on self-reported criminal behavior and victimization surveys suggests that minorities, Black youth in particular, have higher rates of serious offending, though studies find little evidence of racial differences in minor delinquency (e.g. Elliott 1994; Huizinga, Loeber, and Thornberry 1994; Wright and Younts 2009). In alignment with social disorganization theory, the most common explanations attribute higher rates of serious offending to racial differences in exposure to risk factors for delinquency. Scholars argue that past and present discrimination have resulted in minority, particularly Black, youth experiencing more risk factors and, as a result, being more likely to participate in serious delinquency (e.g. Hawkins et al. 1998; McCord, Widom, and Cromwell 2001; Sampson and Lauritsen 1997; Sampson and Wilson 1995).

Interview participants similarly explained that Black youth are more likely to find themselves exposed to factors that increase their exposure to risk factors for delinquent behavior as a product of the history of racism and institutionalization of racism. Many interviewees pointed to the lasting effects of the War on Drugs and crack epidemic on families of color. One interviewee explained, “So many young Black African-American men went away and was absent from the community for long periods, the whole drug epidemic sent them away for 20, 30 years, that left a significant void, women who were left to raise families . . . a lot of women have risen to the occasion and have done things that they were forced to do . . . so there’s a huge credit to them, but there’s also a huge deficit and void that’s been left in the community, especially in the Black community because they didn’t have the resources to really properly transform and get out there and do things that guys could do and get the job. So, it’s twice as difficult for them (RID 137).” Some interview participants also identified the effect of the racial disparities built into the origin of the criminal justice system and explained that they are mirrored in the juvenile justice system. “The whole history of the justice system sort of was borne in disparity and unfairness and bias and a set of destructive assumptions about youth of color; not great ones about youth overall, but I would say most impact youth of color in the most horrible kind of way (RID 573).”

Another explanation of differential offending offered by the researchers looks at the effect of racial discrimination



on Black youth and argues that being Black in a racist society affects youths' ability to develop strong bonds with conventional institutions and that Black youth who experience racial discrimination and internalize pejorative stereotypes may have their behavior shaped by those stereotypes (Unnever 2014; Unnever and Gabbidon 2011).

While research finds evidence of different rates of offending for serious crimes, the literature also finds that observed differences in offending are smaller than the observed differences in system involvement. It suggests this indicates that differential offending does not fully explain racial disparities. Scholars contend that differential system response accounts for some of the observed racial disparities. Research literature provides evidence of differential response to delinquent behavior at all parts of the process, from policing through disposition (for overview, see Bishop and Leiber 2012). Scholars argue that racial bias has been introduced into the justice system response in multiple ways, including institutionalized racism that is reflected in laws and policies and practices that result in differential treatment, particularly with regard to police contact (e.g. Crunchfield et al. 2012; Engel and Swartz 2014; Huizinga and Elliot 1987; Wright and Younts 2009). Consistent with this perspective, many interviewees noted that by virtue of where they live and where they associate, Black youth are more likely to come into contact with the police and come to the attention of the justice system than white youth. According to one interview participant, "I think some of it has a lot to do with the color of their skin, unfortunately. Racism does play a role in it. They say that, you know, D.C. is Chocolate City because there's a lot of Black people here. But the truth of the matter is even where there's a dense population of Black people, we are still over policed. And so our youth tend to be over policed as well. And I grew up in [city] so there was a lot of White people around. And so if a kid got in trouble, the cops would scold them, but they took them home. Like put them in the car and you pulled up in front of the house with the lights on. The parents came to the door. You got scolded. You got grounded. You got punished. You couldn't go to the dance; you couldn't go to the movies this weekend. If it happens to a Black kid, they are taken to the police station and you are booked. Now you are in the juvenile detention system as opposed to what happens to their White counterparts. So a lot of times kids are policed for things that they -- just for being Black. (RID 169)"

“The path, the trajectory, it sets children of color on a different trajectory that follows them for the rest of their lives (RID 32)”

Economic Resources

The likelihood of juvenile justice system involvement increases by 1.42 times if a youth experiences homelessness

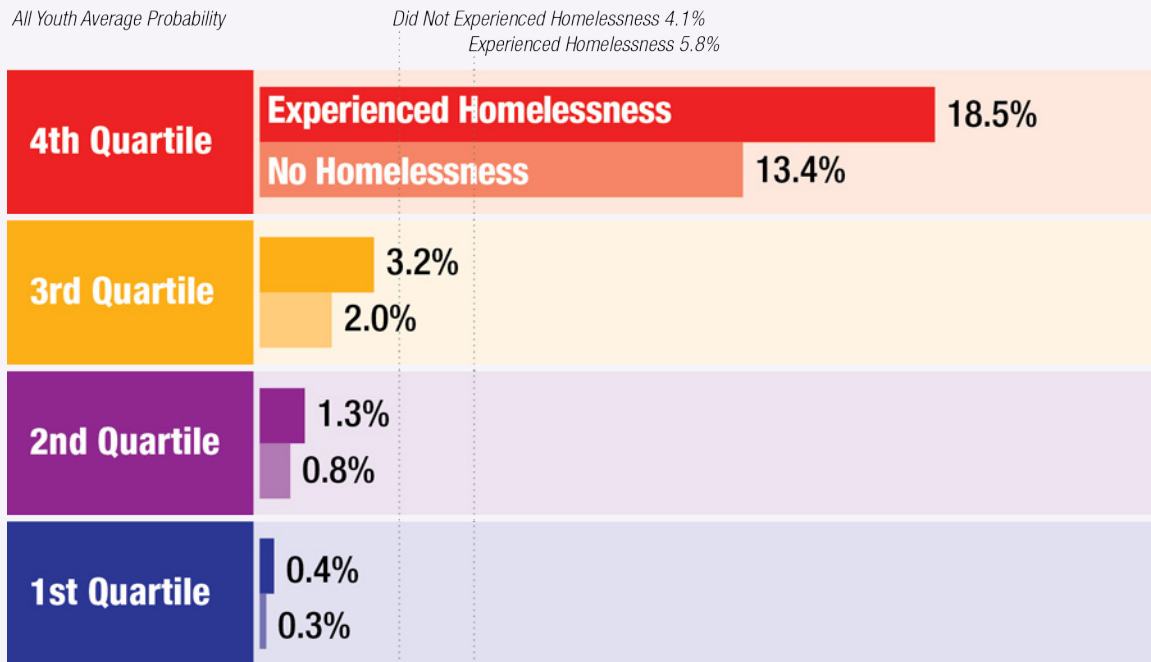


Figure 9.

The findings show that a youth who was reported as being homeless in accordance with the McKinley-Vento Act had a 1.42 times greater likelihood of becoming justice system involved the following year, holding all else constant. The average predicted probability of a youth experiencing homelessness was 5.8% compared to 4.1% if the youth did not experience homelessness, which is an average marginal effect of approximately 1.7%. Among high risk youth, the average predicted probability of a youth who experienced homelessness becoming justice system involved is 18.5% versus 13.4% for a youth who was not reported homeless, all else held constant at observed values.

These results may underestimate the impact of homelessness since the data do not identify homeless youth who do not come to the attention of their local education agency. The data also do not include youth who are homeless and not enrolled in the education system. Additionally, because this measure does not distinguish between runaway and throwaway youth and family homelessness, the findings do not speak to whether different causes of homelessness have differential effects.

“With the economic situation, ... many families are homeless. They are going from place to place, staying with friends, loved ones Some may be living in the hotels ... some may be in the D.C. General Hospital, which they are closing down, and people are being displaced or some parents may not have the financial needs to make sure they can pay the accommodations for housing (RID 269).”

Homelessness is often a product of extreme poverty and is a clear signal of basic needs deprivation.

We included two other indicators of economic deprivation in the model: receiving Temporary Assistance to Needy Families (TANF) benefits and receiving income-based Medicaid benefits; however, we did not find a significant relationship between receiving TANF benefits or Medicaid benefits and general justice system involvement. The lack of effect may be the result of the study controlling for mediating factors, so we cannot exclude the possibility that income has indirect effects through the other included factors. Another explanation may be that the measures are not fully capturing poverty as the measures are imperfect and likely under identify youth. The measures are only capturing youth who receive government benefits, and not all low-income youth apply for government benefits. Additionally, these measures fail to capture potentially important variation within income-levels. Youth at 109% or 216% the FPL have substantially different resources than youth at 319% the FPL.

One of the common themes in the interviews was that youth who become justice-involved often live in poverty and struggle to have their basic needs fulfilled. Participants describe youth as living in households where safe housing, food, and clean clothes are not always available. They explained that while many youths who experience economic deprivation do not engage in delinquency, deprivation can be an important factor contributing to delinquency especially among youth without protective factors, or factors that mitigate the harmful effects of economic need.



The interviewees, focus group participants, and criminological research describe multiple ways in which economic deprivation, including housing instability, may contribute to delinquent behavior. Specifically, economic deprivation is believed to impact criminal behavior both directly, as a motivating factor, and indirectly, by creating persistent conditions that contribute to delinquency.

Both interview and focus group participants pointed to economic deprivation as a motivation for delinquency. Consistent with research, respondents describe three motives for delinquency stemming from economic deprivation: need for survival, desire for material goods, and socioeconomic advancement (e.g. Agnew 1992; Baron and Hartnagel 1998; Jarjoura and Triplett 2002; McCarthy and Hagen 2005; Sanchez Jackowski 1995).

“If you don’t have food to eat, how can you function? (RID 431)”

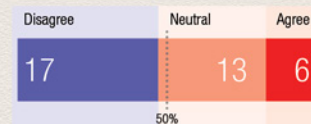
First, youth may engage in delinquency as a means of survival. Interview participants and academic research suggest that when youth lack the economic resources necessary to fulfill their basic needs, such as food, clothing, and hygiene, they may turn to crime to obtain what they need, particularly if legal channels are closed or difficult to access.

Additionally, according to interviewees, many youth in the District who become justice involved feel a responsibility to provide for the basic needs of family members in addition to their own and will do what they feel they must even if it is illegal. A social service provider described one type of youth they see becoming justice involved, “You have those that the family may have multiple children and if mom has 13 kids and I’m the oldest and mom is high or dad is not involved, then they need to eat because they are looking at me. So, I need to be able to figure out how to get the next meal. Or mom may get food stamps, but on the 1st we don’t see her . . . that means on the 28th, I need to go in mom’s wallet to take the food stamp card to make sure that my family can eat, and then mom will report that her stuff was stolen. Now the child is now juvenile dealt with. Now I can’t get your food stamp card because you hide it at your girlfriend’s house. So, now me and my boys are going to go out and we’re going to rob somebody and take care of the food stamp card to get money because at the end of the day I have 12 siblings that have to eat, and I really don’t want to tell anybody that this is what’s going on because I have a lot of . . . stuff already (RID 216).” Youth in all focus groups similarly reported that some delinquent behavior is motivated by the need to get access to basic needs for survival. They explained that young people commit crimes because they have to; they have no food, no place to stay, no power. “They’re trying to stay alive.” “They do what they need to do to survive and take care of their family.” “Their families may not have enough money.” Additionally, the focus group youth drew a distinction between crimes that were necessary for survival and crimes that are unnecessary and contended that sometimes criminal behavior was justified because it was necessary for survival. **“If you’re doing illegal things and don’t need to, it’s dumb. If you’re doing illegal things because you need to, it’s not dumb.”**

Second, research participants suggest that youth may have their basic needs met but their families may not be able to provide them with the additional things they desire such as new phones, clothes, and shoes, so they turn to criminal behavior as a means to obtain those items. Interviewees frequently observed that image and possessions are important to youth in the District, and when their families are unable to provide what they want, they sometimes turn to delinquency. One interviewee described the motivation of some of the youth they see becoming justice involved youth as “Not having the latest gear that everybody else, the popular clothes or shoes that everybody else is wearing so because of that I’m not going to school or I’m going to sell drugs to get that money to buy those new shoes (RID 618).” Focus group youth echoed the importance of having nice things, such as the “right shoes, clothes, and phones,” and

Snapshot from Justice Involved Survey

Most successful people probably use illegal means to become successful.



expressed that sometimes young people will engage in criminal behavior to get those things they do not have but they want. One youth described a situation where a youth may have holes in their shoes and “know that mom can’t pay but you know that people have things” so “people show you how to get the stuff you need the wrong ways, so you listen.” Another described youths’ motivations by explaining “they don’t want to wear hand-me-down clothes, so they go rob people to get those clothes they want.”

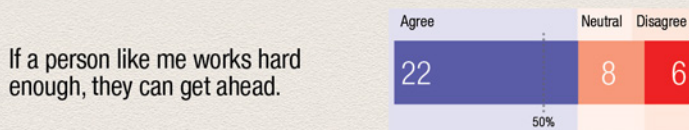
Third, according to research literature and interviews, youth may turn to criminal behavior because they view it as the only avenue for economic stability and socioeconomic advancement. Youth who participated in the focus groups uniformly stated that they wanted to be “be successful,” and many explained that success was making money, having financial

stability and security, and being able to provide for their families. Interviewees observed that the impoverished youth who become justice involved tend not to see many legal pathways as options for socioeconomic advancement. Instead, they strive for careers with which they are familiar, such as rapping or playing professional sports, or they turn to the careers they see around them that they perceive as lucrative but that are illegal, such as drug dealing. **“I would say for me what I have seen the most consistent variable for them ending up there is seeing people sell drugs in their neighborhood all of their lives and the people -- these are the people they are**

Snapshot from Justice Involved Survey



Snapshot from Justice Involved Survey



looking up to and then also not having a dad at home and looking up to the older guys in the area that are selling drugs not only selling drugs but will give them money to buy food for them because they are hungry, giving them money to buy shoes because they see that they don't have

the latest shoes, so ... these become their mentors and their role models, the people they look up to and essentially the people they want to be like themselves because there is no counter at home. There is not a dad that is getting up every day that is going to work that is providing for them. That's -- to me that's the overall thing that I've seen (RID 618)." The youth focus group participants similarly expressed this motivation for delinquency, though explained differently. They consistently talked about people engaging in delinquency because they are “chasing fast money.”

Additionally, research findings suggest that economic deprivation, specifically poverty, can create persistent problems that contribute to delinquency by negatively impacting other factors such as family stability, school performance, community environment, and engagement with delinquent peers (Elliot et al. 1996; Fergusson, Swain-Campbell, and Horwood 2004; Hagan and Peterson 1995; Sampson 1987; Sampson 1997; Sampson and Laub 1994; Stern and Smith 1995). Interviewees described the negative impact of poverty on family environment, specifically how constant financial stress may lead to parental disengagement, maltreatment, inconsistent discipline, and inadequate supervision. For instance, one participant explained how economic deprivation can result in CFSA involvement, “I mean if you are unemployed or underemployed and you don’t have money and you barely making the rent and you are not able to do the other things that you wanted to be able to do, unless you have the patience of a saint, you are going to lose your temper. If you lose your temper with your kids, you start down that track and then you slap them or do something (RID 785.)”

Interview participants also described how poverty impacts educational experience, including attendance, performance, and retention. They explained that they frequently see youth struggle with school attendance and performance when they become de facto caregivers of siblings while their parents are absent because the parents are trying to financially support their families. They also said that they see youth drop out of school because they feel pressure to provide financial assistance to their families. One school employee described, “**[The youth] have a lot of adult responsibility with so little access to like what it takes to really be an adult. So, that definitely affects their attendance a lot ... [As] an adult, if I take care of a child, I can feed it. I can go get a job so I can afford to take care of a child. Whereas the students ... have the responsibility of picking their siblings up, but they don’t have financial access. So, that becomes on them. Or food, I have had kids who would pocket or eat the food that they have here and they would bag it. They would eat some, put it up, put it in their backpacks to make sure that sibling [can eat]. It was just like having the responsibility or feeling like a parent, but not having the legit access to be able to afford and maintain what it takes to be able to really functionally take care of a small human being (RID 856).**”

Many interviewees further discussed how poverty can impact youths’ living environments, which subsequently affects their behavior and educational experience. Interviewees described youth who become justice system involved as often living in overcrowded, inadequate, or unsafe housing. These home environments make it difficult for youth to do homework, relax, or rest and can cause health problems. This can lead to acting out in school and poor academic performance. Additionally, some youth seek to escape their homes and so spend more time on the streets exposed to deviant peers and other negative stimuli. One interviewee who works with the juvenile justice system described the youth as coming from families with “**Four, five, six, seven children” and growing up where there are “Three kids in a room, total bedlam all the time,” and as a result “They raise each other in the streets ... because ... a lot of times hanging out at home isn’t the pleasant environment (RID 699).**”

Childhood Maltreatment

Child Abuse is associated with an increase of 1.33 times in the likelihood of justice system involvement

All Youth Average Probability

No Abuse 4.1% Abuse 5.4%

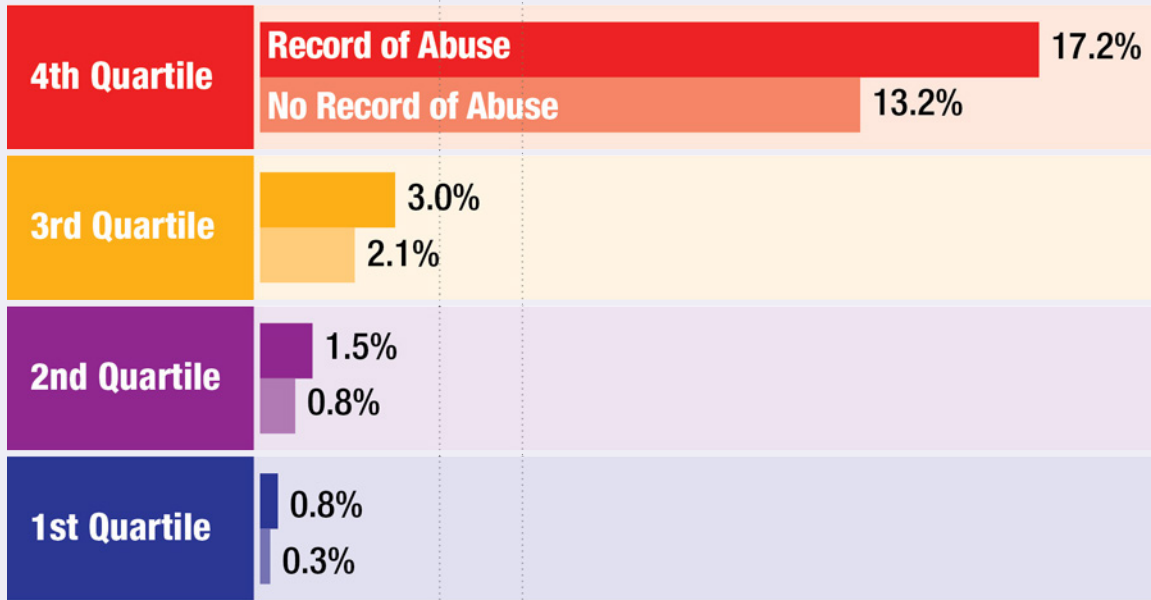


Figure 10.

Child Neglect is associated with an increase of 1.25 times in the likelihood of justice system involvement

All Youth Average Probability

No Neglect 3.9% Neglect 4.8%

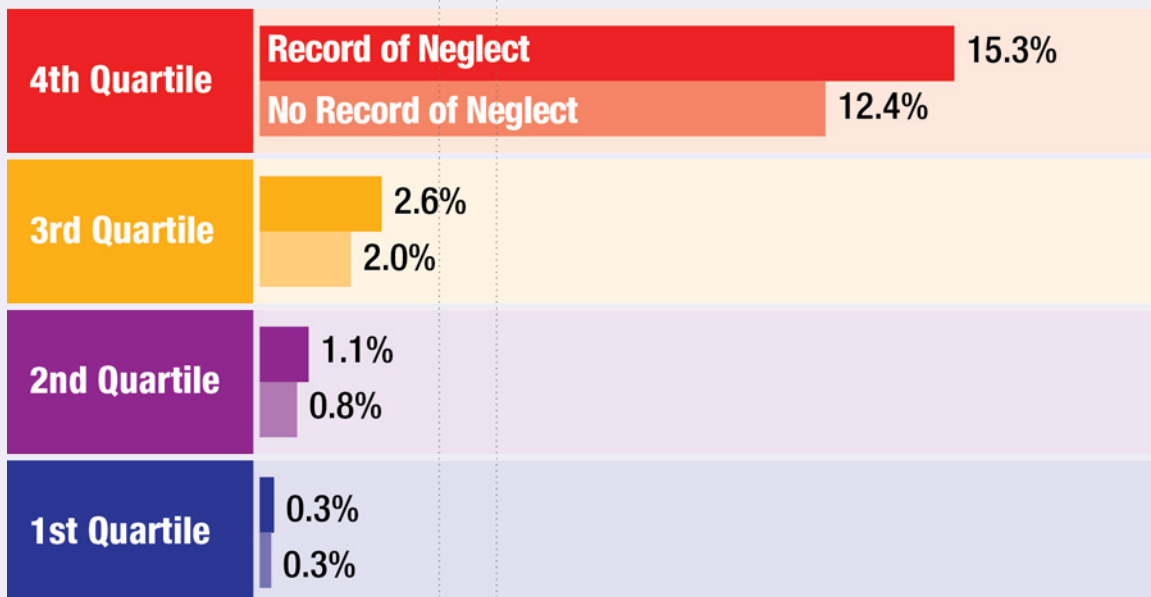


Figure 11.

Our model results provide evidence that youth with CFSA documented histories of abuse and/or neglect are at increased risk of juvenile justice system involvement. The data show that having one or more CFSA Family Assessment cases or substantiated/inconclusive investigations for abuse is associated with an increase by 1.33 times in the likelihood of justice system involvement holding all else constant – a change in average probability from 4.0% to 5.4%, rounded. For youth in the highest risk quartile, with all else being held at the observed values, the average predicted probability of justice system involvement with a history of abuse is 17.2% compared to 13.2% without a history of abuse.

The effect of having one or more CFSA Family Assessments cases or substantiated/inconclusive investigations for neglect is smaller but still statistically significant, with neglect being associated with an increase of 1.25 times in average probability. The average predicted probability of high-risk youth with a history of neglect is greater than the probability of a youth without a history of neglect - 15.3% compared to 12.4%.²¹

These results are consistent with a large body of academic research that finds that childhood maltreatment increases risk of delinquency (e.g. Behl 2003; Chiu, Ryan, and Herz 2001; Gisso 2002; Hamilton, Falshaw, and Browne 2002; Loeber and Farrington 2000; Maxfield and Widom 1996; Schwartz and Rendon 1994; Smith and Thornberry 1995; Vidal et al. 2017; Wiig, Wisdom, and Tuell 2003).

One common explanation found in the research literature to explain the relationship between maltreatment, specifically abuse, and delinquency is the “Cycle of Violence” in which violent victimization leads to the perpetration of violent behavior (e.g. Widom 1989, 1992; Thornberry, Knight, and Lovegrove 2012). Bender (2010) identifies four potential, non-mutually exclusive intervening factors by which the cycle is perpetrated. Specifically, Bender suggests that child maltreatment can lead youth to run away from home, experience mental health problems and substance abuse problems, disengage from school, and associate with deviant peers. These factors, in turn, increase risk of delinquency (e.g. Baron and Hartnagel 1988; Herrenkohl et al. 2001; Kilpatrick et al. 2003; Kaplan et al. 1999; Piquero et al. 2005).

Under a broader explanation offered by research, child abuse and neglect are indicators of a problematic family life, which has repeatedly been found to increase delinquent behavior (see Farrington 2010; McCord, Widom, and Crowell 2001).

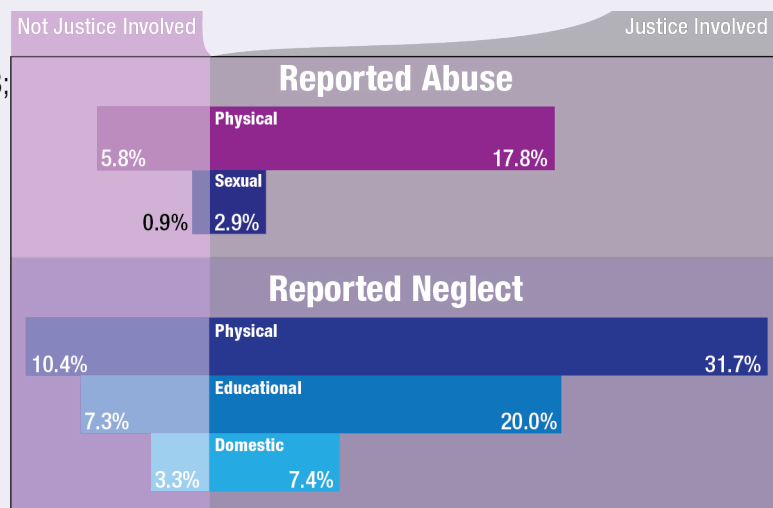


Figure 12: Significant Differences Between Not Justice Involved and Justice Involved Youth

²¹ Our data showed no statistically significant associations between removal to foster care and juvenile justice system involvement when controlling for other factors in the model.

Family life refers to multiple factors, including family interactions and family structure. Negative family interactions, such as inconsistent and aggressive or severe discipline, failure to set clear expectations, and poor monitoring or supervision, have been associated with increased risk of delinquency (see Farrington 2010; McCord, Widom, and Crowell 2001). By contrast, consistent discipline, supervision, and affection are associated with lower risk of delinquency (e.g. McCord 1991; Sampson and Laub 1993). Additionally, positive family interactions are found to be a protective factor that can mitigate the effect of other risk factors such as negative community environments and economic deprivation (e.g. Kolvin et al. 1988; Liska and Reed 1985; Stouthamer-Loeber et al. 1993).



Family structure, such as experiencing parental separation or divorce, being raised in a single-family household, having a parent who was incarcerated, or being raised with four or more children, have been associated with increased delinquency,

though the nature of the association has been subject to considerable debate (Dannerbeck 2005; Anderson 2002; Farrington and Loeber 1999; Johnson 1987; Kjellstrand and Eddy 2011; Kolvin et al 1990; Morash and Rucker 1989; Murray and Farrington 2005; Rutter and Giller 1983). For instance, some argue that divorced or separated household is a measure of family conflict, while some contend that certain family structures are associated with socioeconomic conditions, disciplinary styles, and problems in supervision on monitoring (e.g. Block et al. 1986; Cherlin et al. 1991; Crockett et al. 1993; McCord 1982; Rutter et al. 1998).



“If you identify the families, my experience is that’s the single biggest factor for at-risk. If you want to stop kids from committing offenses, look to see who the little kid in the [at-risk] family is that’s not being addressed (RID 159).”

Interview participants identified family life as an important, if not the most important, factor in whether youth become justice system involved. They stated that among similarly-situated youth, home life is one of the key differences between the youth who become delinquent and those who do not, namely whether they have safe, stable, nurturing home environments. The youth they observe become justice

involved often have caregivers who lack the skills or capacity to create a positive home environment. Some youth have caregivers with mental health, behavioral, or addiction issues that keep them from being present. More commonly, though, they see youth who have caregivers who are attempting to provide for their families but are overtaxed due to economic stress or responsibility for taking care of multiple children and thus struggle to be present and consistent. Interviewees explain that, from a young age, youth may not have routines established at home, such as regular mealtimes and bedtimes, nor have consistent discipline. A participant who works with justice-involved youth described one commonality as, “A lot of lack of parental supervision at home, parental or guardian supervision . . . that’s probably the most thing in common (RID 706).”



Interview participants also observe that the caregivers of youth who become delinquent often lack the skills or knowledge to emotionally support and appropriately discipline their children, especially when their children experience trauma such as violence or death of a close friend or family member. They explained that many caregivers are young, with parents who were equally young when raising them, and have experienced trauma that has gone untreated. As a result, the caregivers never learned appropriate parenting skills, lack the knowledge needed to model positive behavior, and are unable to teach their children appropriate coping skills. “You’re talking about people who were very young when they had children and so their kids are teenagers, and that person may be 32 years of age and, in most cases, these are people who didn’t do a traditional route of education, so it’s a struggle of education; it’s a struggle of housing; it’s the struggle of really just setting up an appropriate situation for your child . . . these are young people who literally have been kind of raising themselves . . . but then it’s like [the kid is] now in a similar situation as [their] parents because [they’re] 16-years old and [they’re] repeating the cycle (RID 92).”

In contrast, they remarked that youth who do not become delinquent, despite being similar with regard to demographics, economic resources, and community environment, tend to have stable family lives where caregivers are nurturing, model and reinforce positive behavior, and teach youth positive coping skills.



Consistent with the research literature, interview participants suggest that stable family lives help mitigate the effects of other risk factors. As one interviewee observed, “I mean you can grow up in a rough community but if you have some stability at home, depending on your level of

trauma, you can be okay. But if you are in an impoverished community, you don't have support at home, or say you are getting abused or whatever within your home, you have all of these needs that aren't being met in that community, your likelihood to make it out is slim to none (RID 425).” Another participant explained how caregivers can mitigate the decision-making challenges facing all youth due to their developmental state, “For most of our young kids that are in healthy familial environments or relationships . . . when kids get dysregulated²² or are making tougher decisions, parents end up being that prefrontal cortex, the decision-making part of their brain. . . . When kids are not connected to caregivers, or caregivers are using substances and they are not in most stable place in their lives, then kids don't have that adult in their life that becomes that prefrontal cortex that all kids need to help them navigate more difficult situations that are beyond their maturity . . . It's actually very reasonable for a child to be impulsive and want what they want when they want it. They just don't have that family structure to help them to readjust and to have some sense of delayed gratification and some kind of conversation about if this is what you want, this is what you need to do to get it (RID 767).”

“Having a competent parent makes all the difference (RID 524).”

²² Referring to emotional dysregulation or being unable to flexibly respond to and manage emotions (Carpenter and Trull 2013).

Educational Experience

Research literature has long established a link between educational experience and academic performance and delinquency, both as risk factors and protective factors. However, the relationship between these educational factors and delinquency is complex, with the causal direction debated and multiple, cyclical explanations (Institute of Medicine 2000). Specifically, the literature has not reached a consensus about whether the factors that contribute to negative educational experiences also contribute to delinquency, thus the relationship is spurious, or if negative educational experiences directly increase the risk of delinquency (Maguin and Loeber 1996; McCord, Widom, and Crowell 2001). Nevertheless, research studies have found associations between multiple aspects of educational experience and delinquent behavior, including academic failure, grade retention, disciplinary exclusion, truancy, and school disengagement (Christle, Jolivetter, Nelson 2005; Hirschfield and Gasper 2011; Jimerson et al. 1997; National Library of Medicine 2003; and Rocque et al. 2017).

Consistent with prior research, we find that grade retention, number of suspensions, number of unexcused absences, and enrollment instability are significantly associated with increased likelihood of subsequent juvenile justice system involvement.

Grade Retention

A youth who is grade retained is 1.75 times more likely to become juvenile justice-system involved

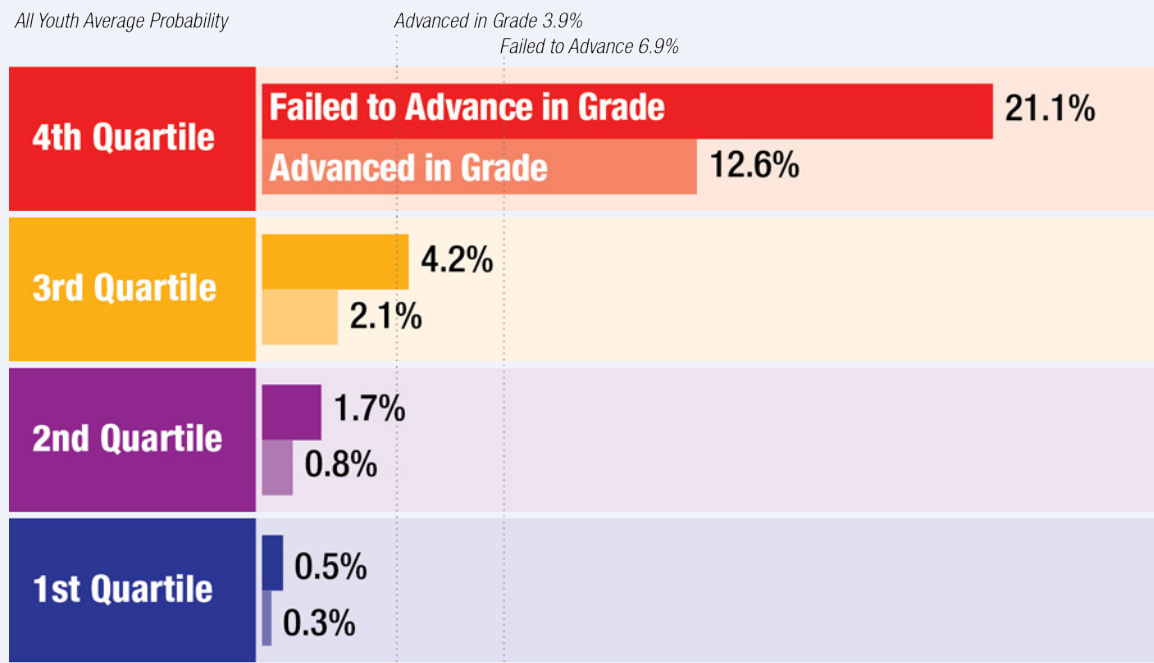


Figure 13.

Grade retention is when a student is not promoted to the next grade at the end of the school year and thus repeats the previous grade. Being grade retained is often treated as an indicator of low academic achievement (Jimerson et al. 1997) and may be suggestive of academic failure (Gottsfredson 1997). Our findings show grade retention the previous year is statistically associated with an increase of 1.75 times in the likelihood of juvenile justice system involvement the subsequent year, with the average probability of justice system involvement going from 3.9% to 6.9%. The average predicted probability of a high-risk youth becoming justice involved is 8.7% greater if they are grade retained, from 12.6% to 21.1%, all else being held at their observed values. Research argues that grade retention has negative effects on youths' emotional adjustment (Yamamoto and Byrnes 1984) and may result in youth developing negative attitudes towards school and characteristics of "learned helplessness." These attitudes contribute to students dropping out of school, which has been associated with delinquency (Roderick 1994; Shepard and Smith 1990).

Suspensions

The 1st suspension a youth receives increases the likelihood of juvenile justice system involvement by 1.57 times

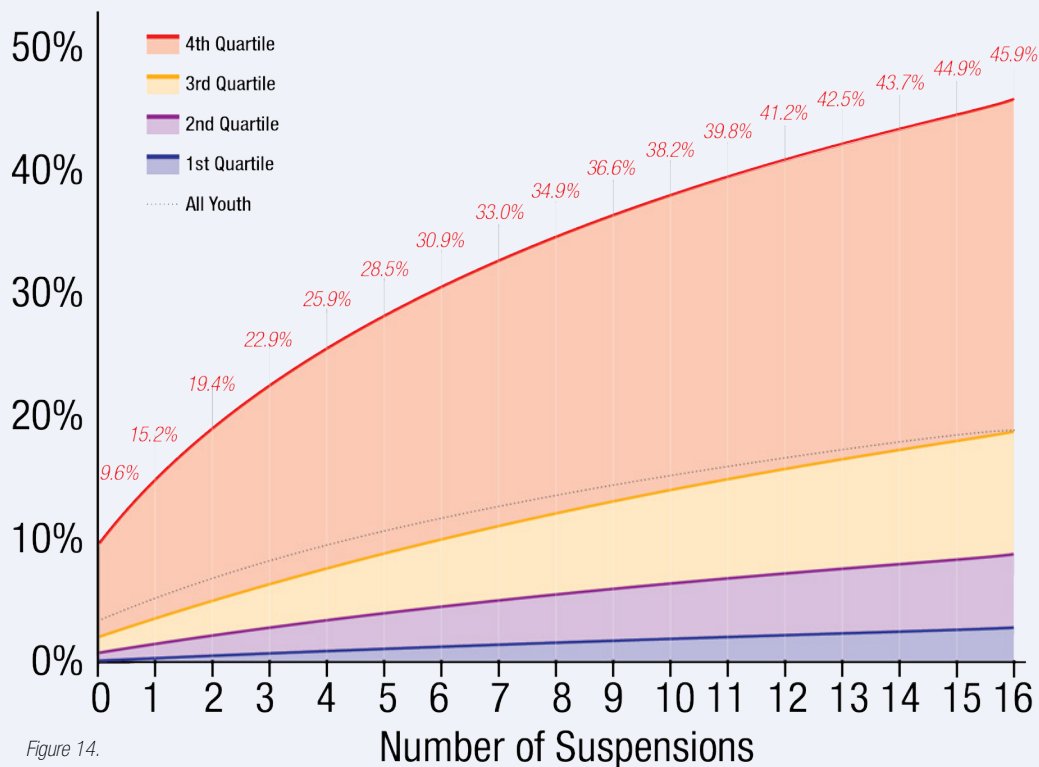


Figure 14.

The data indicate that the number of suspensions²³ has a positive, curvilinear association with the likelihood of juvenile justice system involvement, with the first suspension having a larger impact on justice system involvement than subsequent suspensions. Across all youth, holding all else constant

²³ Suspension is a count of the number of in-school and out-of-school suspensions a youth had within an academic year.

at observed values, the average predicted probability for a youth with zero suspensions is 3.3%; this goes to 5.2% with one suspension – an increase of 1.57 times in probability. For a high-risk youth, the average probability of justice system involvement is 10.2% if they have zero suspensions, this goes up to 15.5% with one suspension, with all else held at the observed values. The predicted probability goes to 19.6% with the second suspension and to 22.8% with the third suspension. The average number of suspensions among justice-involved youth is 2.3 compared to 1.7 for non-justice-involved youth.

The research literature offers multiple explanations for why suspensions, particularly out-of-school suspensions, increase delinquency (McCord, Widom, and Crowell 2001). For instance, researchers find being suspended can make it harder for youth to keep up with their academic work, which can lead to academic performance difficulties and perpetuate a failure cycle (Costenbader and Markson 1998). Additionally, the act of out-of-school suspension creates more time where a youth is unsupervised and thus increases the chance of contact with delinquent subculture (Williams 1989).

Unexcused Absences

The likelihood of justice system involvement increases by 3.16 times if a youth accrues the average number of unexcused absences

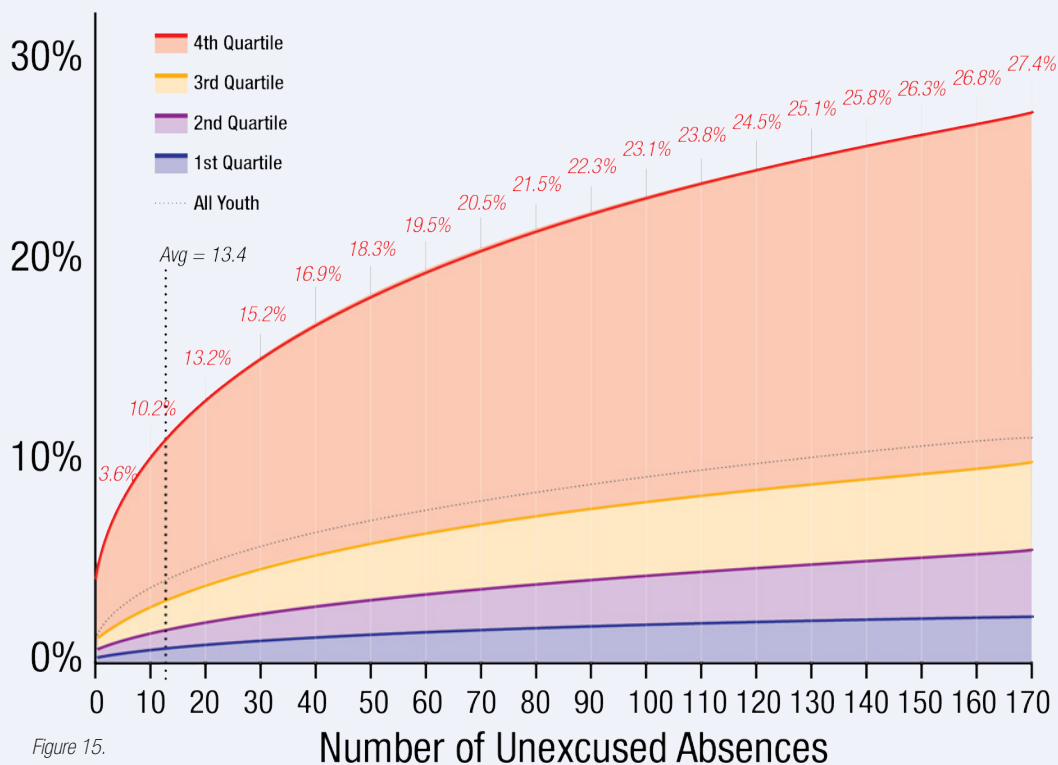


Figure 15.

The results suggest that the number of unexcused absences significantly increases the likelihood of juvenile justice system involvement, while excused absences had no statistically significant association when controlling for other factors. As with suspensions, the relationship is curvilinear with the first unexcused absences having the largest magnitude of effect. Specifically, the change in probability associated with the first 30-unexcused absences is the same as for the next 150. Across all youth, the average predicted

probability of justice system involvement goes from 1.3% to 1.8% with the first unexcused absence, holding all else constant at their observed values. The average predicted probability goes up to 3.8% when unexcused absences reach 10,²⁴ and to 4.2% at the sample mean of 13.4, which is an increase in probability of 3.16 times from zero unexcused absences to 13.4. For youth in the 4th risk quartile, the average number of unexcused absences is 32.1. The average predicted probability of youth in this quartile with no unexcused absences is 4.0%, this goes up to 12.0% with the sample average number of absences and to 16.2% with 32.1 absences.

Unexcused absences, or truancy,²⁵ is well-documented as being associated with delinquency (see Rocque et al. 2017). Research suggests that unexcused absences impact delinquency through multiple processes. For instance, some contend that unexcused absences are a sign of school disengagement, which is associated with dropping out, and dropping out has been repeatedly shown to increase the risk of delinquency (Archambault et al. 2009; Henry, Knight, and Thornberry 2012; Janosz et al. 2008). In another explanation proposed in the academic research, unexcused absences can result in youth having low school achievement, which in turn may increase acting out and the risk of dropping out (Farrington 1980; Vaughn et al. 2013). Research also finds that youth may be more exposed to delinquent peers and have more opportunities for delinquency when they have unexcused absences, which may contribute to justice system involvement (Rocque et al. 2017). These findings have led some scholars to argue that inadequate school attendance is a gateway to future antisocial behaviors (Rocque et al. 2017).

Enrollment Stability

A youth who changed schools during a school year is 1.77 times more likely to become juvenile justice system involved

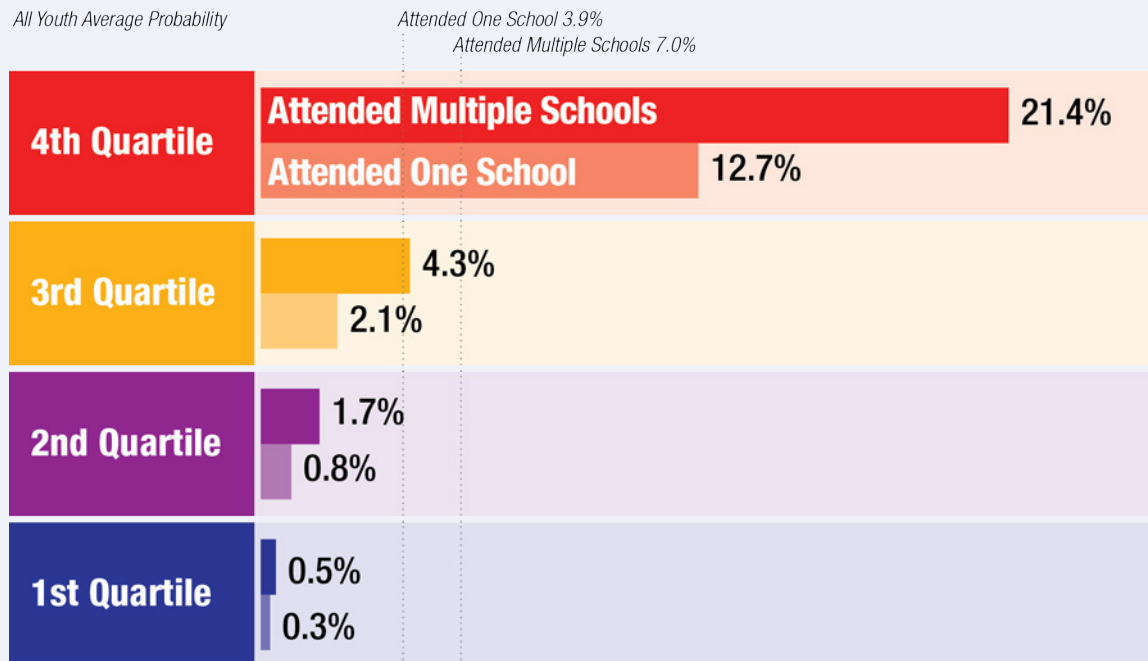


Figure 16.

24 Ten-unexcused absences is the legal threshold for truancy in the District.

25 Truancy is defined in the literature as the unexcused or illegitimate missing of school sessions. This is different than the legal definitions specified in compulsory education laws.

The findings demonstrate that enrollment instability, as defined as changing schools within a school year, is associated with a significant increase in the likelihood of justice system involvement. The average probability goes from 3.9% to 7.0% if a youth is enrolled in more than one school during the previous school year. 4th-quartile youth enrolled in the same school for one year have a 12.7% average predicted probability of becoming justice system involved; however, the probability goes up to 21.4% with one or more school changes, all else held constant – an increase by 1.77 times in the likelihood. While few studies have explored the effect of student mobility on delinquency, research suggests that enrollment instability is negatively associated with school performance, academic achievement, grade-level promotion, and graduation, which have all been found to impact delinquency (Engec 2010; Rumberger 2002, 2003; Rumberger and Larson 1998; Schwartz, Stiefel, and Cordes 2017; South, Haynie, and Bose 2005).

In line with the statistical findings, many interviewees reported that school engagement and achievement impacts whether similarly-situated youth become justice system involved or not. They describe the youth they see becoming justice system involved as generally having high rates of truancy and poor school performance. Participants explained that poor school performance can contribute to justice system involvement because when youth fall behind in school they can act out of frustration or act out as a way of deflecting from their learning challenges. For example, one interviewee described what it feels like for struggling youth, “I don’t understand the work and the teacher doesn’t explain it and I don’t want to feel any different so I won’t share it. So, what I will do is just disrupt the class just to take attention off of it so I wouldn’t have to do the work and no one would know I was struggling in these particular areas but I think it is different reasons and . . . my home environment might not be the best so I come to school and [feel] possible anger. I need to channel that energy somewhere. So, it is going to go to wherever and that . . . leads back into some of the behavior in terms of the juvenile system (RID 121).” Another described, **“How embarrassing is that, that you are handing me this paper that I have to turn in, but every time you give my paper back I get a big F on it, not because I want to be defiant, because I can’t read it. You are embarrassing me in front of my peers (RID 216).”**

Consistent with academic findings, interviewees suggest that youth who fall behind their peers and are grade retained may not want to go to school resulting in higher rates of truancy. According to one education-sector participant, “A lot of our students are co-morbid so they will have a range of disabilities

“I have seen students who are disengaged in school for whatever reason are very vulnerable to becoming involved with the criminal justice system. Specifically I think I have noticed that students who are chronically truant, absent from school, have greater rates of getting involved for two reasons. One, they are disengaged with schoolwork and school in general because they are missing school, missing friends and the connection is like outsiders when they do come back. So, school just isn’t a vital piece of their life as much as it was before. And two, students have more time unsupervised, of course, outside the school building. And so trouble finds you when you are idle, hanging out, doing random things, being a kid, right. Not doing anything that any other kids would do (RID 581).”

together . . . but a lot of times they will also have the SLD [specific learning disability] component with it . . . a lot of our students that have these slow processing disorders, you'll see their behavior manifest when they are kept back. So, a lot of our SLD students are retained once, twice, so they kind of start getting into trouble because, hey, you get to a point where I'm a little older so I'm going to stop going to school. If I'm 16 and I'm going to the 9th grade, I'm nine times out of 10 likely not to finish high school because . . . I can't finish traditionally (RID 425)." Interviewees also suggested that poor school performance can also lead youth to question their intelligence²⁶ or ability to be successful through legal employment, and thus increase their willingness to turn to illegal means.

When asked about perceptions of school, focus group youth generally expressed recognition that school can be beneficial, and some expressed enjoying school; however, they described the motivation for attending schools of many youth who become justice involved as "running hall," meeting girls, showing off clothes, shoes, or money, or getting drugs. They said that school is "a waste of time" and that "education is important but you don't use it in the real world." Repeatedly, the youth expressed the belief held by some that school would not help them make money and that it got in the way of other opportunities. As one youth explained, **"If you're too deep in the streets, you might not want to go to school anymore. If you're going to school, it's for girls or to show stuff. But then you realize you can do that on the outside, and school is going to take up time. It's not helping you. School is an obstacle. You may go because you're required, but you don't need to go."** Additionally, participants explained that not attending school is not an indication of a lack of intelligence; instead, they expressed that most justice-involved kids are smart and do not need to go to school.

Educational Experience as an Indicator. Interview participants explained that behaviors such as having difficulty concentrating in the classroom, learning new material, being unable to complete homework, being more impulsive, having less emotional regulation in the classroom, and being chronically truant are often symptoms of deeper underlying issues, particularly in the family or environment. Thus, they expressed that youth who are struggling, especially at an early age, are signaling the need for support and offer an opportunity for intervention. One service provider explained that **"You can tell by second or third grade about behaviors, how people respond, PTA meetings, what parents come and don't come . . . scholastic testing [shows] how the kid is adjusting . . . all these are telltale signs. [For instance,] socially in recess, how they're supposed to be engaged with other kids. Who's the person that's running the playground or want[s] to bully or take the swing or eat someone else's lunch -- Is this someone we need to keep a close eye on (RID 363)?"**

Protective Effects. While interview participants described the negative impact of poor school performance, they also emphasized that school engagement and academic success are important protective factors as they offer opportunities for youth to forge positive relationships with adults and peers. Research similarly points to school engagement and academic performance as protective factors that can mitigate the negative impact of other risk factors. Research finds that forming positive bonds within the school environment is associated with desistance, and caring capable teachers and support staff increase social skills and self-esteem. Positive school environment has also been found to help moderate the negative impacts of family disruption and childhood maltreatment (Blum and Ellen 2002; Bender 2012; Chung et al. 200; Crooks et al. 2007; Zingraff et al. 1994).

²⁶ This explanation is in line with School Failure Theory (White and Loeber 2008).

Mental, Behavioral, and Neurodevelopmental Disorder Diagnoses and IEP Eligibility

Youth with internalizing-externalizing comorbidity are **1.86 times** more likely to become justice system involved

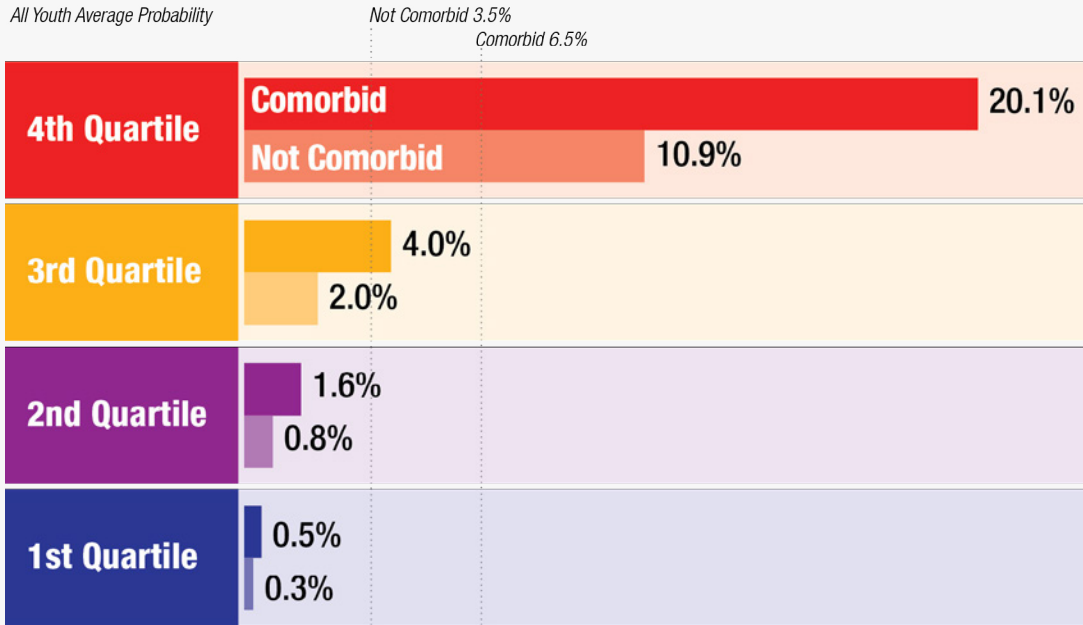


Figure 17.

Youth with externalizing disorders only are **1.83 times** more likely to become justice system involved

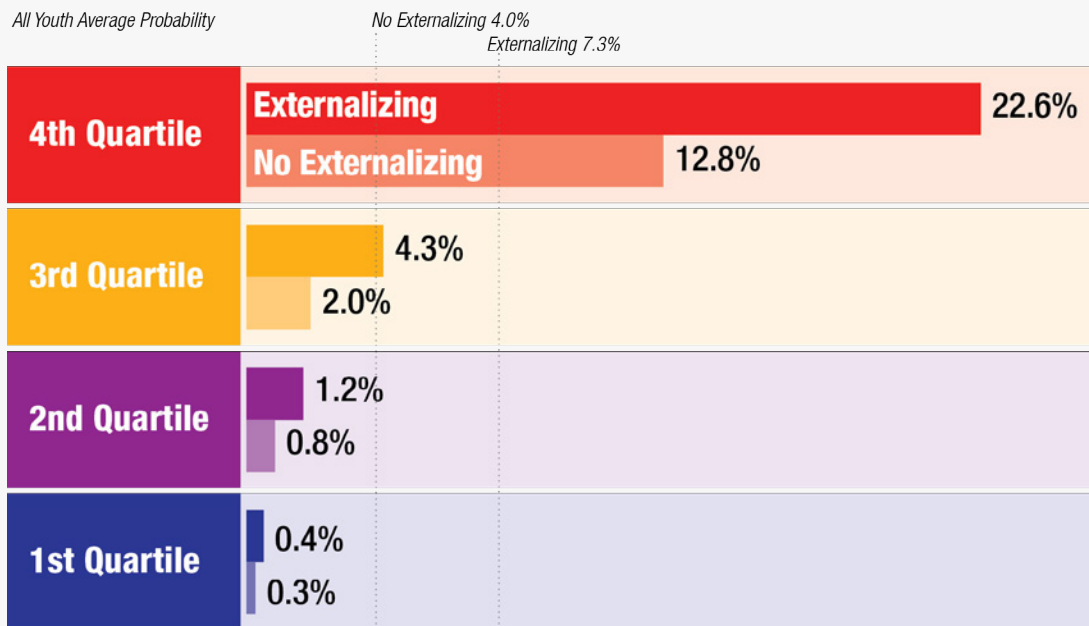


Figure 18.

The analysis includes indicators for five disorder categories/domains: internalizing disorders, externalizing disorders, internalizing-externalizing comorbidity, psychiatric disorders, specific developmental learning disorders, and specific developmental motor disorders. The data show that youth diagnosed²⁷ with both internalizing and externalizing disorders (comorbid) and with externalizing disorders only (no internalizing disorders)²⁸ are 1.86 and 1.83 times more likely to become juvenile justice system involved, respectively, holding all else constant. The average predicted probability of youth with comorbidity is 6.5% compared to 3.5% for youth without. Among high risk youth with comorbid disorders, the average predicted probability is 20.1% versus 10.9% with youth without comorbidity. The average predicted probability of youth with externalizing disorders only is 7.3% compared to 4.0% for those without. Among high-risk youth with externalizing disorders only, the average predicted probability is 22.6% compared to 12.8% for youth without. We find no statistically significant effect of internalizing disorders only (no externalizing disorders), psychotic disorders, specific developmental learning disorders, or specific developmental motor disorders when controlling for the other factors in the model.

Internalizing, Externalizing, and Comorbidity

The “internalizing” and “externalizing” dimensions are widely used to group behavioral, emotional, and social disorders (Achenbach et al. 2016). The internalizing dimension characterizes individuals’ tendency to express distress inwards, and the externalizing dimension is the propensity to express distress outwards (Cosgrove et al. 2011). The internalizing domain thus represents disorders with prominent anxiety, depressive, and somatic symptoms, and the externalizing domain represent disorders with prominent impulsive, disruptive conduct, and substance use symptoms (Achenbach et al. 2016). “Internalizing and externalizing expressions of dysfunction comprise one of the most widely agreed upon classifications of behavior disorders in psychopathy research (Cicchetti and Natsuaki 2014, 1189).” Internalizing-externalizing comorbidity occurs when individuals have both internalizing and externalizing disorder expressions (Cosgrove et al. 2011; Willner, Gatzke-Kopp, & Bray, 2016). The internalizing-externalizing dimensional structure explains the majority of interrelationships among behavioral and emotional disorders (Achenbach et al. 2016; Cosgrove et al. 2011).

For this analysis, we classified social, behavioral, and emotional disorders under the internalizing and externalizing dimensional groupings rather than diagnoses because the dimensional approach better captures patterns of problems, particularly in adolescent populations, as their developmental changes in biological, psychological, and social contexts often blur the boundary between normal and abnormal behaviors (Cicchetti & Rogosch, 2002; Liu et al. 2016). Mental health disorders are not distinct diseases with defined boundaries and clear diagnostic tests; rather, they are based on behavioral symptoms that are graded in severity to determine whether they are sufficiently intense and/or persistent to be considered disordered on enough dimensions to meet the diagnostic criteria. Thus, diagnoses are categorizations that force somewhat arbitrary choices based on artificial thresholds, which may not fully capture or identify mental health problems among youth and their needs (Achenbach et al. 2016; Clark et al. 2017).

A substantial body of research literature has examined and generally come to a consensus on which common disorders are internalizing or externalizing. Common internalizing disorders are major

²⁷ Diagnoses identified from Medicaid claims data.

²⁸ Using ICD-9-CM and ICD-10-CM diagnoses codes to identify disorder diagnoses.

depressive disorders, dysthymias, affective disorders, generalized anxiety disorders, neurasthenia, social phobias, panic disorders, agoraphobia, obsessive compulsive disorders. Post-traumatic stress disorders (PTSD) and bi-polar disorders have also been found to be in the internalizing domain (e.g. Cosgrove et al. 2011; Eaton et al. 2013; Forbush and Watson 2013; Krueger 1999; Sanders, Ray, Ollendick 2015; Slade 2007; Vollebergh et al. 2001). Common externalizing disorders are antisocial personality disorders, oppositional defiant disorder, conduct disorders, and substance use disorders. Attention-deficit/hyperactivity disorder (ADHD) has also been classified as an externalizing disorder (Cosgrove et al. 2011; Eaton et al. 2013; Forbush and Watson 2013; Kimonis and Frick 2016; Krueger 1999; Sanders, Ray, Ollendick 2015; Slade 2007; Vollebergh et al. 2001).

This research served as the basis of our classification of International Classification of Diseases (ICD) diagnoses, and we included and coded the disorders commonly found to be internalizing or externalizing in accordance with the consensus in the literature. Youth were coded as comorbid if they had diagnoses for one or more co-occurrence of internalizing and externalizing disorder. We also coded youth with disruptive mood dysregulation disorder (DMDD) as comorbid using the internalizing-externalizing dimensional approach, as DMDD is associated with both internalizing and externalizing disorders. A full listing of all ICD-10-CM general categories coded as internalizing and externalizing can be found in Appendix A.

We classified disorders based on the ICD category rather than the subcategory diagnosis because general diagnosis captured by the category is more interpretable than subcategory diagnoses, and we lack theoretical justification to focus on more specific diagnoses subcategories. For instance, PTSD (F43.1) falls under the category of Severe Reaction to Stress (F43), so all diagnoses under that general category are treated in the analysis as internalizing.

Prevalence of Mental Health Disorders Among Justice-Involved Youth

Studies have found that many mental health disorders are found at higher rates among justice-involved youth than the general population (see Wibbelink et al. 2016). Specifically, research finds that a number of internalizing and externalizing disorders are overrepresented in the justice-involved population including anxiety disorders, mood disorders, PTSD, and bi-polar disorder, conduct disorder, oppositional defiant disorder, substance use disorder, and attention-deficit hyperactivity disorder (ADHD) (Fazel et al. 2008; Kerig and Becker 2010; Kretschmar et al. 2016; Mallett et al. 2009; Shufelt and Cocozza 2006; Thomas and Morris 2016; Wasserman 2010; Wibbelink et al. 2016). Studies have also found that psychotic disorders and developmental disorders are found at a higher rate among justice-involved youth (Fazel et al. 2008; Rutherford and Nelson 2005; Thomas and Morris 2016).

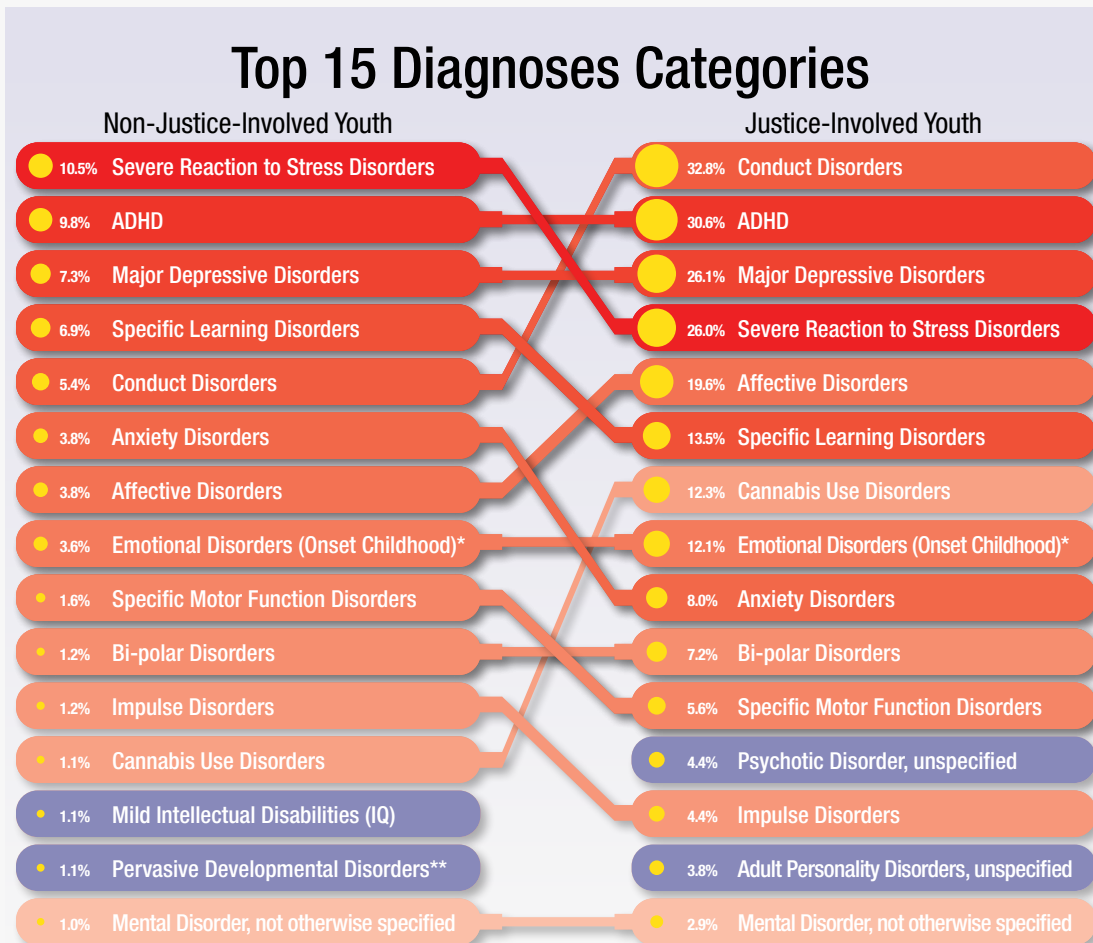


Figure 19.

*ICD-10-CM Categories F93, F98, & F94
 **E.g. Autistic disorder, Asperger's syndrome

Our data similarly find that many of the internalizing and externalizing disorders, psychotic disorders, and developmental disorders are found at higher rates among youth who became justice involved as compared to those who did not. For the top-15 most prevalent mental, behavioral, and neurodevelopmental disorders categories²⁹ found among the sampled justice-involved and non-justice-involved youth, justice-involved youth were diagnosed at statistically higher rates in all categories except mild intellectual disabilities and pervasive developmental disorders.³⁰ The data show statistically significant differences in the percentage of youth with common internalizing disorders, including severe reaction to stress, major depressive disorders, anxiety disorders, affective disorders, bi-polar disorders, and common externalizing disorders, including conduct disorders, ADHD, and cannabis disorder.

There are also statistically significant differences in the percentage of justice-involved youth with psychotic disorders, specific learning disorders, and motor disorders compared to non-justice-involved youth, though they had no statistically significant impact on justice system involvement when controlling for other factors. Additionally, we find significant differences in the percentage of broadly-defined, unspecified “emotional and behavioral disorders.”³¹

29 ICD-10-CM F06 – F99 diagnoses categories.

30 Differences in percentages significant at $p < .05$.

31 Emotional and behavioral disorders found under ICD-10-CM Codes F93, F94, F98. These include “emotional disorders with onset specific

In addition to differences in percentage, the order of prevalence of the top-15 diagnoses categories differs between justice-involved and non-justice-involved youth. Conduct disorders (CD) are the most prevalent diagnosis category among justice-involved youth, but they are the fifth most prevalent among non-justice-involved youth. However, justice-involved youth have higher rates of both diagnoses with conduct disorders being diagnosed in 6.1 times more non-justice-involved youth (27.4% more). Severe reactions to stress diagnosis category, which includes PTSD, is the most prevalent diagnosis category among non-justice-involved youth and the fourth most prevalent among justice-involved. Similar to conduct disorder, however, justice-involved youth have higher rates of diagnoses for severe reactions to stress being diagnosed in 2.5 times more than non-justice-involved youth (15.5% more). ADHD and major depressive disorders (single and multiple occurrences) are the second and third most prevalent disorders, respectively, but the percentage of youth with each disorder is more than three times greater among justice-involved youth. Specific learning disorders³² are the fourth most prevalent among non-justice-involved youth and the sixth most prevalent among justice-involved youth; however, the percentage of youth diagnosed is higher among justice-involved youth (2 times higher or 6.5% more).

Cannabis Use Disorder has the largest relative difference in prevalence between justice-involved and non-justice-involved, with the percentage of justice-involved youth diagnosed being 11 times greater than non-justice-involved (12.3% compared to 1.1%).

These results may underestimate the prevalence of mental health and developmental disorders and potentially the impact as the data only capture diagnosed conditions documented through Medicaid claims data. Thus, the data do not include undiagnosed mental health disorders or individuals diagnosed/treated through private insurance or otherwise not billed through Medicaid. However, 64.1% of the sample were at some point between 2010 and 2017 Medicaid beneficiaries, thus, our data captures a substantial proportion of the youth.

The diagnoses reflected in the Medicaid claims data report lower rates of mental and behavioral health disorders among justice-involved youth than a random sample of DYRS-committed youth's Juvenile Social Files (JSF) for some diagnoses and higher rates for other.³³ The review of JSF found 96% of committed youth met the criteria of one or more DSM-5 diagnosable conditions, and 92% met the criteria of more than one, compared to 64.8% and 48.31% in the Medicaid claims data, respectively. Sixty-two percent met the criteria for ADHD as compared to 30.6% in the Medicaid claims data; 54% met the criteria for major depressive disorder compared to 26.1%. Twenty-four percent met the criteria for oppositional defiant disorder (ODD) compared to 17.9%; 21% met the criteria for substance use disorders compared to 13.8% for any substance use disorder in the Medicaid claims data, and 10% met the criteria for PTSD compared to 6.4%. Ten percent met the criteria for conduct disorder according to the JSF compared to 32.8%. Beyond potential differences in diagnoses criteria between the two sources, this difference may be partially explained by the fact that

to childhood, "disorders of social functioning," and "other behavioral and emotional disorders." These categories of ICD diagnoses have not been established to be internalizing or externalizing by the research literature.

32 ICD-10-CM category F81 is titled "Specific Developmental Disorders of Scholastic Skills" and includes disorders in which the normal patterns of skill acquisition are disturbed. This includes specific reading disorders, specific spelling disorders, and specific disorders of arithmetical skills.

33 Juvenile social file diagnoses reflect DSM-V diagnoses while Medicaid reflect ICD-9/ICD-10-CM diagnoses. Thus, while similar, they are not perfectly comparable.

Medicaid data is likely to underreport diagnoses, and DYRS-committed youth may have higher rates of mental health disorders than youth who become justice involved but do not get committed, which is the most severe level of juvenile justice system involvement.

Relationship between Mental Health Diagnoses and Justice System Involvement

There are many explanations offered in the literature to explain the relationship between mental health disorders, delinquency, and justice system involvement; however, the relationship is complex particularly as it is unclear whether there is a causal link. Many youth with mental health disorders do not become juvenile justice system involved, and many youth who are justice system involved do not have mental health disorders.

The statistical findings of a relationship between justice system involvement and externalizing and comorbid disorders are consistent with studies that have posited theories on the relationship between externalizing disorders and delinquency (Wibbelink et al. 2017). Several explanations have been provided; many of which focus on specific externalizing disorders such as ADHD, ODD, and CD. The explanations generally suggest that the emotional and self-regulation symptoms of the disorders increase the risk of, or manifest as, aggression, maladapted behavior, and lack of impulse control (Grisso 2008; Loeber et al. 1995; Pardini and Fite 2010 - Wibbelink). These behaviors can directly contribute to delinquent behavior or delinquent behavior is symptomatic of the disorders, such as conduct disorders (Loeber et al. 1995). As one interview participant explained **“if you’re having ... mood disorder, a lot of that’s impulse control and regulation. Their abilities to cope get overwhelmed and if their reaction is to lash out and destroy property or to run away, that can increase their risk. If you are prone to a very aggressive reaction when your ability to cope is punch a hole in a wall, depending on your age, they very well might call the police ... with the older kids, if they’re getting super aggressive because they have this underlying mental health condition, they end up getting arrested for a behavior that the root cause is their mental health (RID 20).”** They can also indirectly contribute to delinquency by affecting academic performance and the ability to form positive peer relationships, which are all risk factors for delinquent behavior (Polier, Vloet and Herpertz-Dahlmann 2012; Polier et al. 2012; Pardini and Fite 2010; Bagwell et al. 2001 - Wibbelink; McCord, Widom, and Cromwell 2001).

Interview participants offered two additional, non-mutually exclusive explanations that are consistent with the research literature. One explanation posits that both delinquency and mental health disorder diagnoses are affected by underlying trauma, such as exposure to violence. There is evidence in the research literature that exposure to trauma and/or violence increases the likelihood of justice system involvement (e.g. Eittle and Turner 2002; Ford, et al. 2012; Ludwig and Warren 2009; Mrug and Windle 2010). Under this explanation, exposure to trauma can mimic the symptoms or lead to the development of diagnosable mental health disorders (e.g. PTSD, ADHD) (Spates et al. 2003). Thus, underlying trauma is viewed as the link between mental health disorders and delinquency.

Another explanation suggests that mental health disorders result in increased involvement with the juvenile justice system if society does not provide sufficient mental health services, or if people are unaware of mental health services, because the justice system becomes the de facto mental health

service provider or a holding place for youth with nowhere else to go (Grisso 2008). Under this explanation, youth with mental health issues are overrepresented in the justice system because parents and other authority figures turn to police to manage mental health problems due to a lack of other resources. One interview participant who works in the juvenile justice system described, **“I have a lot of kids assaulting their mothers ... those kids need counseling ... they need mental health treatment. It’s like the parents haven’t taken them for mental health treatment but then they call the police they finally beat you up” ... so they eventually get charged “... at least to get them in and get them a psychological evaluation (RID 706).”**

This may be exacerbated among youth with under-resourced families as they may be unaware of available services and, as suggested by interviewees, see the justice system as the only avenue for helping their children.

The lack of significance of internalizing disorders is consistent with the lack of consensus in the literature surrounding the relationship with justice system involvement. Some literature argues that internalizing disorders such as depression may be expressed by aggressive or disruptive behaviors, according to the “acting out model” (Ryan and Redding 2004); however, many aspects of internalizing problems in youth may not be easily detectable to external observers (e.g., parents or teachers), which provides further support for the significance of examining comorbidity between internalizing and externalizing domains. Other research finds that some internalizing disorders may have a protective effect on delinquency if they manifest as apathy and lower energy levels (Vermeiren et al. 2002; Zara and Farrington 2009).

“Kids who have been through trauma, adults, too, if they’re in this fight, flight, freeze, very suspicious of the world, they perceive things as threats that you and I wouldn’t necessarily, as people who haven’t been through that trauma, their reactions, they’re in survival mode. I think sometimes they’re utilizing skills that were necessary to keep them safe at certain points in their life. But, if you continue to function like that, every situation where you perceive something is a threat where you either run or attack, depending what the reaction is, if the reaction is that it causes someone else to call the police, you’re going to be interacting with the justice system (RID 22).”

IEP Status

Comorbid youth with IEPs are **2.32 times** more likely to become justice involved than those with no IEP

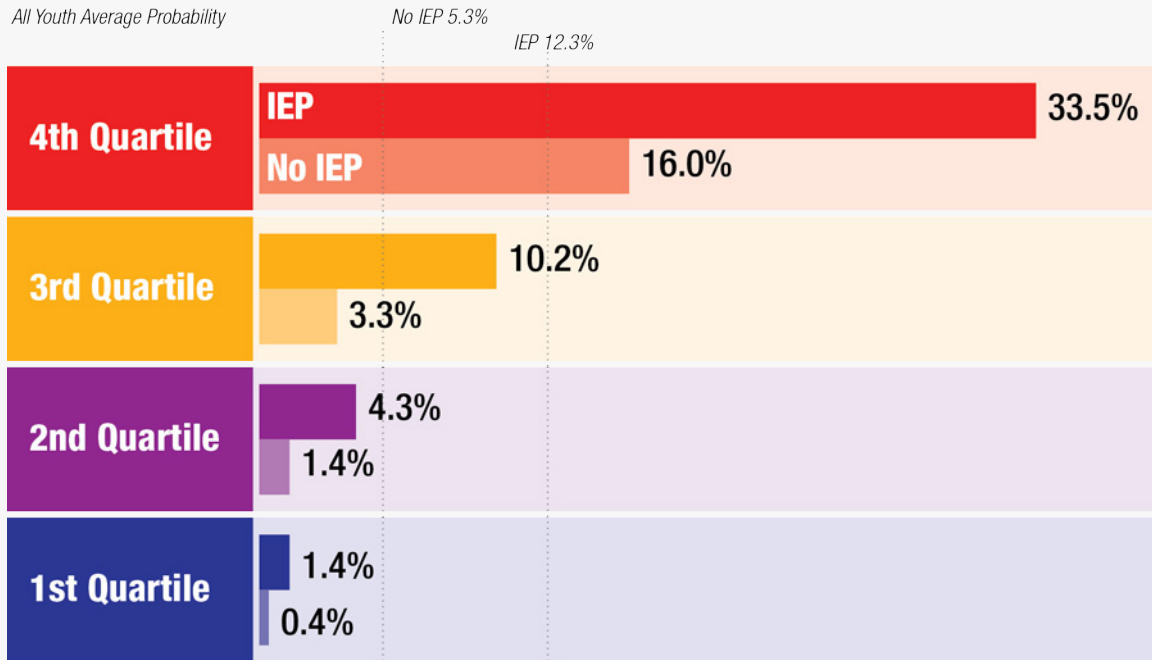


Figure 20.

The results suggest that having an IEP increases the likelihood that youth with internalizing-externalizing comorbid disorders become juvenile justice-system involved; however, our findings suggest that IEPs do not have an independent effect or interactive effects with other disorders including learning or motor disorders. The average probability of justice involvement for youth with comorbid disorders without an IEP is 5.2%. This goes up by 2.32 times to 12.3% if a youth with comorbid disorders has an IEP, all else held constant. For high-risk youth with comorbid disorders, the average predicted probability if they do not have an IEP is 16.0%, but this doubles to 33.5% if they have an IEP.

An IEP is a legal document that lays out a plan to ensure that youth with disabilities receive specialized instruction and services as required by the Individuals with Disabilities Education Act (IDEA 2004), thus all youth with IEPs have a disability identified under the law that requires specialized educational accommodations. IEPs are developed by teams of school personnel, parents/guardians and, when appropriate, the student. The purpose of an IEP is to set educational goals for the student and state the services that will be provided to the students to help them meet those educational goals (Kupper 2000). There are many different types of disabilities eligible for IEPs including intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbances, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities.

Mental and behavioral health disorders, including internalizing and externalizing disorders such as anxiety disorders and conduct disorders, can result in youth having IEPs when they negatively impact educational performance. However, not all youth with diagnoses with mental health disorders are eligible for IEPs; they must meet the legal requirements which require the disorder to adversely affect educational performance (IDEA 2004).³⁴ Among the youth included in the sample, 46.1% of youth with comorbid disorders have IEPs while 53.9% did not.

The IEP data included in this analysis do not identify the qualifying disability(ies) or identify when an IEP was put into place, thus the data do not speak to whether the IEP placement is related to the internalizing-externalizing comorbidity diagnoses, for how long the youth had an IEP in place, or timing between diagnoses and IEP establishment. Thus, these findings suggest that further research into the relationship between IEPs, mental health disorders, and justice system involvement is needed to more fully understand the impact of IEPs.

Specifically, two potential paths may explain the interactive relationship between internalizing-externalizing comorbid disorders and IEP status, which should be explored as they have different intervention implications. First, because IEP placement requires manifestations of disorders that affect education achievement, it is possible that IEPs are put into place for youth with comorbidity when their behavioral manifestations are more extreme, and the extreme behavioral manifestations may be more likely to result in juvenile justice system involvement. Furthermore, because IEPs must be reevaluated every three years to determine whether a youth is still a “child with disability” under the IDEA, if a youth has an IEP in place for comorbid disorders then the disorders must be manifesting in some academically harmful ways. Thus, the findings may be reflecting that youth with comorbid disorder diagnoses who have IEPs do not have their disorders managed, while youth with comorbid disorder diagnoses without IEPs may have received earlier treatment and have their conditions managed such that they no longer qualify for an IEP. This could speak to the importance of earlier intervention and the timing of IEPs.

A second potential path may be that, due to the complexity associated with comorbidity in internalizing and externalizing disorders, the interventions placed through IEPs are not sufficiently addressing the needs of youth, and insufficient interventions are exacerbating the challenges youth face. Some research has suggested that interventions, including IEPs, for youth with emotional and behavioral difficulties may neglect the diverse needs of these youth and be inadequate if they fail to be tailored to each individual’s need for behavioral intervention and support and, instead, attempt to group youth in special schools or provide a standardized intervention (Laughlan and Boyle 2007; Kershaw and Sonuga-Barke 1998).

The literature suggests two possible, complementary, explanations for how insufficient interventions might exacerbate the relationship between mental health diagnoses and juvenile justice system involvement. The School Failure Theory suggests that struggling academically is the start of a path that leads to delinquency. For instance, poor academic achievement leads to low self-esteem, peer rejection, and frustration. This leads youth to act out in school to deflect from their academic performance, which leads to suspensions, potentially dropping out of school, and seeking out social relationships with peers that make them feel successful. Under the School Failure Theory, if youth

³⁴ IDEA Sec. 300.8 (c).

with comorbid disorders are struggling academically to the point where they require an IEP, and the IEP accommodations do not sufficiently address the needs of youth, then continued poor academic performance may lead to delinquency (Morris and Morris 2006; Thomas and Morris 2016; White and Loeber 2008). Additionally, through a similar process, research suggests that the labeling of youth as disabled may contribute to justice system involvement by lowering a youth's self-esteem, teaching learned helplessness, lowering expectations of parents and teachers of a student thereby setting them up for academic failure, and may contribute to peer rejection (Blum and Bakken 2010; Boyle 2014; Golds and Richards 2012; Henley, Ramsey, and Algozzine 2009; Powell 1990). Labeling is necessary under the current statutory requirements for youth to receive individualized instruction that may be needed, and scholars have noted the benefits of being labeled under the IDEA (Hallahan and Kauffman 1982; Gold and Richards 2012; Kaufman 1993). However, scholars have also argued that the special education label can bring more negatives than positives particularly for Black youth (Baker 2002; Blanchett 2009; Gold and Richards 2012; Perlin 2009). Thus, this implies that if the label is not accompanied by sufficient interventions, then the potential harm associated with the label might outweigh the service benefits. If this is driving the identified relationship, then it may speak to the importance of better or more tailored interventions for youth with comorbid internalizing and externalizing disorders.

Because of limitations in the data, we are unable to examine these questions in greater depth; further research could help disentangle the nature of this interactive relationship. However, this finding suggests that there might be value in looking more carefully into the relationship between mental health diagnoses, IEPs and justice system involvement.

Neighborhood Environment

The likelihood of juvenile justice system involvement is **1.37 times greater** for youth who reside on gun violence hot blocks

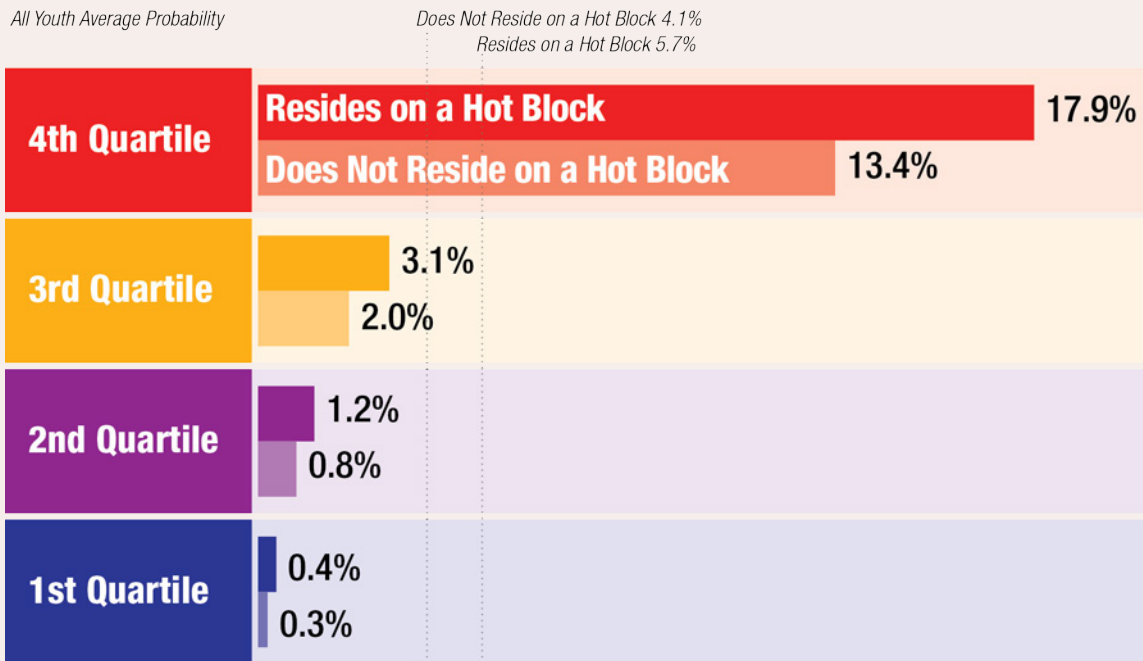


Figure 21.

Our findings suggest that youths’ residential environments affect juvenile justice system involvement. Specifically, the data indicate that living on one of the 35 blocks with the highest number of gun violence incidents, a “hot block,” is significantly associated with an increased likelihood of juvenile justice system involvement. The average predicted probability of justice system involvement for all youth goes up from 4.1% to 5.7% if youth reside on hot blocks versus if they live on other blocks - an increase by 1.37 times in the likelihood. For youth in the 4th risk quartile, the average predicted probability if they lived on a hot block is 17.9% as compared to 13.4% if they live elsewhere; all other factors are held constant at their observed values. However, the analysis does not find a statistically significant association between justice system involvement and the number of violent crime incidents or property crime incidents controlling for other factors including hot block residence. This finding suggests that the environmental factors affecting youth are broader than crime incidents, including violent crime.

Previous research provides evidence that ecological factors, including community violence, contribute to criminal behavior including delinquency (McCord, Widom, and Crowell 2001). Social disorganization theory argues that certain ecological factors, such as poverty, residential instability, racial heterogeneity, and family disruption, impede the development of social ties and lead to disorganized communities. Disorganized communities are communities with little solidarity, cohesion, integration, collective efficacy, social capital, and they possess social networks that incentivize crime and neighborhood cultures that foster criminal behavior (Sampson 1987). The theory suggests that youth

who grow up in disorganized communities are at increased risk of delinquency because disorganized communities are unable to exercise informal control by coming together to report general grievances, intervene in public disturbances, and assume responsibility for the supervision of youth activities (Kirk and Papachristos 2011; Kubrin and Wo 2016; Patchin et al. 2006).

Interview participants similarly suggested that social disorganization may be contributing to delinquency. They describe youth growing up in communities where crime and violence are normalized behavior and where youth are regularly exposed to and associate with people who are or have been involved in the criminal justice system and/or engage in criminal activity. “A common theme is seeing violence in the neighborhood from an early age. A common thing is seeing people in the neighborhood selling drugs from a very early age (RID 618 pp. 6).” For some youth, violence may be so normalized they do not recognize it as traumatic. **“One of the things that I think is so remarkable is the amount of trauma that the youth and families have experienced, but how they don’t recognize it as trauma. It’s more just like you actually have to probe a little bit to say -- if you asked the question, have you ever experienced anything that felt really traumatic and terrifying, the answer might be no. Have you ever seen somebody be shot? And the answer could be yes (RID 533 pp. 8).”**

Participants further remarked that some communities no longer informally monitor and correct youth behavior. “Our communities have been destroyed because we don’t even talk to the neighbors anymore. And the neighbors was the ones that kept us in line when our parents wasn’t home or they was out trying to fend for their family. We respected that neighbor. The neighbor is just another kid now. So that’s what’s ruining the community. And that’s where most of our trouble is coming from (RID 873 pp. 3).”

While social disorganization theory is consistent with the finding of a statistically significant effect of living on a gun violence “hot block,” it does not explain the process through which disorganized communities impact individual development and behavior, particularly as the majority of youth who grow up in such communities do not engage in serious offending (Patchin et al. 2006). However, numerous studies have explored the impact of exposure to community violence on youth behavior, including delinquency. Interviewees commonly identified two prevailing researched-grounded explanations for the impact of community violence: psychological trauma and the need for self-protection.

Research suggests that through a psychological trauma pathway youth who are exposed to community violence experience trauma that affects their psychological development which can lead to externalizing problems and subsequent antisocial behavior including delinquency (Eitle and Turner 2002; Mrug and Windle 2010). Additionally, the neurological literature suggests that traumatic experiences affect youths’ neurological structure and physiology related to stress response, affect



regulation, memory, social development, and cognition (Bus, Warren, and Horton 2015; Evans-Chase 2014; Wilson, Stover, and Berkowitz 2009). For instance, research suggests that trauma affects the development of the amygdala, which is essential for the detection of threat or enhanced vigilance, and the prefrontal cortex, which is critical for emotional regulation. This can result in youth having heightened perceptions of threat and decreased inhibitions especially in response to perceived threats (Bath 2008; Bus, Warren, and Horton 2015; Evans-Chase 2014; Thomas et al. 2015). Interviewees described many of the youth they see becoming justice involved as having experienced trauma that goes untreated and subsequently affects their behavior. These youth stay in the “survival brain” state caused by the trauma, resulting in flight, fight, freeze responses that result in justice system involvement.



“You are talking about living in very violent communities. The trauma that comes from seeing someone shot on the block, we’re not getting at that with our kids. We are not doing that work. We are just saying once we see a behavior come out of that, let’s do some behavior mod. Let’s do consequences and rewards. Well, that doesn’t work when your brain is wired differently and you are triggered and feel unsafe by things you can’t even see, touch or feel. You can’t identify it. That behavior mod is not going to work on that. And so kids get progressively worse to the point that then they are in the juvenile system (RID 767).”

In the need for self-protection pathway, research suggests that some youth respond to violence in their neighborhood by arming themselves, joining gangs for self-protection, and/or by adopting a more aggressive interpersonal style (Anderson 1994; Beardlee 2018; Patchin et al. 2006). This taking of personal responsibility for ones’ safety and eschewing formal law enforcement is referred to by researchers as the “code of the streets.”

“A lot of times, the neighborhood they come from, they have to project a certain toughness because you can’t be seen as weak ... because you’ll get your ass beat, taken advantage of (RID 699).”

Interview participants similarly observed that some of the youth they see become justice involved lack a sense of safety and may resort to joining crews³⁵ or carrying weapons for self-protection. “It’s either walking to school in a group. It’s carrying a knife. It’s proactively jumping the biggest kid in the class because you want to show that you are tough. And because basic survival is, of course, what all of us need to have before you can think about anything else, unfortunately I think we never get to the anything else.” Another participant explained that for some youth “You don’t want to stray too far from your group, from your block, from anything, so you’re always sort of looking inwards. It’s dangerous. And literally there are kids on 37th street that can’t go up to Benning Road because you are going to get shot. And you really are going to get shot, it’s not a joke (RID 524).” Additionally,

interviewees suggest that youth can be drawn into crew conflicts without choosing to be involved. “Some of those beefs, most of them are not even about this kid here did something to this kid ... It’s about people in the community telling them we don’t mess with them, we ain’t never messed with them. My mother told me about how she didn’t mess with them. My dad told me about how they didn’t -- a lot of this is folklore. And with that comes this false sense of a swagger or persona that you have to present (RID 885).”

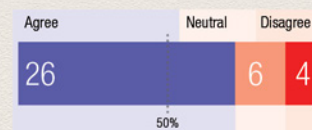
Some focus group participants discussed how being part of a crew is unavoidable for some youth and perceived as necessary for self-protection. One focus group youth described how being in a crew feels safer because it offers protection. **“If you are not part of a crew, it does not prevent you from being targeted by other crews.”** Another youth described, as an example, the challenge of attending an “uptown” school being from Southeast. They explained that “uptown looks down on Southeast” so if you go there you’re going to get jumped. So, it’s safer to go with your group because then you’re protected.

However, other focus group youths expressed that crews and neighborhood beefs are less of an issue today than for older generations, though neighborhood lines still play a part in how they perceive other youth.³⁶ One youth said that when they started getting locked up, they were not calling

people by their names, they were calling them by their neighborhood but now it is “not as bad in DC as it used to be – most people now trying to get money.”

Snapshot from Justice Involved Survey

I feel safe walking around my neighborhood.



³⁵ In DC, a crew is a loosely-knit organization similar to a gang but usually less organized and more localized. Crews are frequently named after a housing development or neighborhood from which they are based. Certain neighborhood crews have historic rivalries, or “beefs,” with other crews, often in proximate neighborhoods, and these rivalries are known to result in inter-neighborhood violence.

³⁶ All of the participating youth were, by virtue of their attendance, willing to take part in activities that cross neighborhood boundaries. Generally, youth who felt unable to cross boundaries lines would have been less likely to participate due to the sampling method.

SECTION VI
**ADDITIONAL
EXPLANATORY FACTORS**

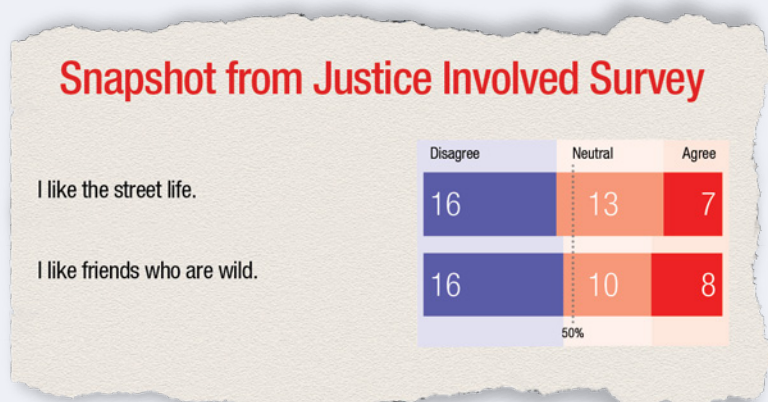
Interview and focus groups participants identified factors that were not included in the statistical model but were prevalent explanations of why youth become justice system involved. Specifically, youth focus group participants identified peer influence affecting youths' decision to engage in delinquent behavior. Interview participants identified uncertainty about the future and a lack of exposure to alternatives as affecting youth and whether they become justice system involved.

Peer Influence

Youth focus group participants consistently identified peer groups, or “hanging with the wrong crowd,” as influencing youth and contributing to delinquent behavior. They described many youth who participate in delinquency as **“crash test dummies”** or **“git wits – people get locked up to be a crash dummy just following everyone else.”** They explained that these youth do not have a rational motivation, such as need, nor are they thinking about the consequences; instead, they are trying to fit in and “want to be a follower.” One youth stated, “If you see someone else doing it, you want to do it.” Another youth described an example of peer pressure as when an older brother calls a younger brother out for “being a punk” (being bullied), so the younger brother has to “stand up for himself.” Others described peer pressure as not wanting to let their friends down as opposed to being told what to do. When youth were asked why they might choose to associate with delinquent peers, they explained that the “wrong crowd” can be the fun people, that there is pressure to hang out with that group, or that they can “make you feel safe.”

Interviewees likewise identified deviant peer groups as a contributing factor to delinquent behavior, though they emphasized that many youth are able to withstand negative peer pressure and peer influence. Many interview participants observed that some youth, particularly repeat offenders, are highly concerned with what their friends think of them and thus more susceptible to negative influences. For these youth, peers have a strong impact on youth decision making. Furthermore, participants indicated that peer groups can serve as a barrier to providing services because youth may be reluctant to change or participate in programs unless their friends do the same.

Decades of research has established a link between deviant peers and delinquent behavior (e.g. Akers 1985; Lipsey and Derzon 1988; Mcgloin 2009; Paternoster et al. 2013; Sutherland 1947). Warr (2002) suggests that the youth will engage in delinquent behavior to gain respect, status, and avoid ridicule from peers. Delinquent peers have also been found to contribute to the development of pro-delinquency attitudes (Sutherland 1947). Specifically, social learning theory argues that youth may adopt delinquent behavior through imitating or modeling the behavior of their peers or by observing positive consequences from their peers' behavior (Akers 1985).



Research has found that risk factors such as family dysfunction, trauma, and poor school performance increase the likelihood that youth will associate with delinquent peers (Lansford et al. 2014). Some studies suggest that for youth with dysfunctional families, deviant peer groups can serve as surrogate families and as a place to turn for stability and protection (Bender 2009; Brunson and Miller 2001; Dishion et al. 1991; Kaplan, Pelcovitz, and Labruna 1999). Interviewees remarked that because of youths' negative home lives they may turn to peers in similar situations to get acceptance and respect; these groups turn into surrogate families, providing support and sometimes resources. Youth then come to depend and rely on these peer groups. **“A lot of them don’t have families, and they feel like their friends are their family that are in the community (RID 425).”**

Research finds that youth with trauma-related behaviors and/or poor school performance are more likely to associate more with deviant peers as a consequence of being rejected from more conventional peer groups (Langsford et al. 2014). Specifically, the research suggests that youth who experience trauma are often excluded from conventional peer groups when they have difficulties regulating their emotions as this dysregulation makes socializing with conventional peers more difficult (Dishion et al. 1991; Schwartz and Proctor 2000). Similarly, studies show that youth with poor school performance may be alienated from more mainstream peers (Dishion et al. 1991).

Research has also found gender differences in the effect of deviant peers on delinquent behavior with males, generally, being more susceptible to peer influence. Most of the studies that find an association between deviant peers and delinquency focus on males, while the research on females find that they are more resistant to negative peer influence (Carroll et al. 2003; Warr 2002).

Future Uncertainty

“When you are in a household where your father is in prison or just got back from jail or is on ... supervised release ... and your siblings spent time in a facility, when your mother is going off to court, and you have the trauma of people getting shot at in your neighborhood and maybe some you know or at least was [acquainted] with or sibling of someone you know ends up getting shot, whether they are killed or not, that then becomes your reality. The question is, what are your expectations when you grow up? Is your expectation that I’m going to be an electrician? Or is your expectation I’m going to go to college? Or is your expectation people go to jail and they get shot by age 25 (RID 159)?”

Interview participants observed that many of the youth they see become juvenile justice system involved focus on short-term gains and are unconcerned with long term consequences in part because they face uncertainty about their futures. **“I have heard a lot of youth say, especially in poor situations say, I don’t think I’ll live past 25. I don’t think I’ll make it past 30. So let me make the best of my life now (RID 891).”** As one interviewee explained, “I think it is difficult for younger people to sort of look

to the future. I think it’s harder because they see so many young people that don’t live long. They see so many people that are not successful. So, they tend to not want to discuss or maybe address their future (RID 93).” The focus group youth did not directly express that uncertainty about the future impacted behavior, but some expressed that they think about dying frequently or that success is living to 21. A one youth said, “If I don’t want to be on the streets, I’m either going to be dead or locked up and I’ve accepted it.”

Snapshot from Justice Involved Survey



Research provides some support for the interview participants’ observations. Grounded in rational choice theory, scholars argue that individuals who view the future as uncertain or unpredictable or lack confidence in their survival will focus on the here and now (Caldwell, Wiebe, and Cleveland 2006; Hill, Ross, and Low 1997; Wilson and Daly 1997). Ethnographic studies and limited quantitative research provide evidence that delinquency is partially attributable to future uncertainty, particularly expectations of early death or imprisonment (Anderson 1994; Brezina, Tekin, and Topalli 2009; Caldwell, Wiebe, and Cleveland 2006; Wilson and Daly 1997).

A number of studies provide that uncertainty about the future is found to be more prevalent in economically distressed, high-crime communities where youth are exposed to high mortality rates and rates of imprisonment (Anderson 1994; Brezina, Tekin, and Topalli 2009; Wilson and Daly 1997). Research suggest when youth have experienced the death of family members and peers, especially as a result of violence, they may discount the future as part of “a normal, adaptive reaction,” particularly if the mortality is viewed as independent of the decedent’s choices (Wilson and Daly 1997). Similarly, scholars argue that when youth are surrounded by people who have been or are incarcerated, they may come to view it as inevitable and may even believe they have something to gain from imprisonment (Anderson 1994). According to the academic literature, for youth, given uncertainty about the future, delaying present gratification for future rewards or to avoid future punishment makes little sense, thus youth may be more impulsive and weigh short-term gains more heavily than long-term consequences (Caldwell, Wiebe, and Cleveland 2006; Wilson and Daly 1997).

“[It’s an accomplishment if] I’m in a suit before I’m in a casket. Because for some of us, that’s the only time we wear a suit. So, if you wear a suit and you go into a situation where you’re being celebrated in life not in death, [that’s a] huge confidence boost ... [and] the kids, they feel so good about themselves when they make little steps like that (RID 732).”

Lack of Exposure to Alternatives

***“If a kid has never been exposed they don’t have any expectations (RID 241).”
“They have to see different -- They have to know different (RID 878).”***

Interview participants said that youth who become justice system involved often have limited exposure to people and environments outside of their immediate community and, as a result, do not have expectations or ambitions beyond what they regularly observe. Participants explained that many of the youth stay within their own neighborhoods and rarely venture to other areas of DC, let alone outside of DC or the DMV areas. One community service provider stated, “All of our young kids have not been exposed to other than their area. I’m not talking about Ward 8. I’m talking about where they live ... some of the kids in the street [have] not utilized the museums in the city. I was just shocked (RID 216).”

Participants explained that because youth lack exposure beyond their immediate situations and environment, the conditions and challenges within their communities can become consuming and seemingly unavoidable or insurmountable. Moreover, participants suggest that without exposure to other environments, youth may feel uncomfortable outside of their current environment and thus uncomfortable with change. One participant described the discomfort youth feel, “They don’t leave their neighborhood ... don’t even know [their] own city. Can’t even help a tourist out because you yourself are just a tourist when you step out of your neighborhood and you’re unfamiliar. It’s unfamiliar territory.

And you’re uncomfortable in an unfamiliar environment. We all are ... we want to live in the familiar. We want to interact with the familiar. And I’ve got no reason to go outside of this area where I’m going to feel uncomfortable. We look for comfort, as bad as this area may be, it’s my home (RID 699).”

Likewise, youth who have limited or no exposure to adults outside of their immediate neighborhood may not be aware of some career paths, let alone view them as achievable. One participant described asking justice-involved youth their five or ten-year plans, “It’s fascinating to have those conversations sometimes with the kids. A lot of them reflectively [say] ‘what do you want me to say, I’m going to be a lawyer or I’m going to be a judge?’ ... Those are the only people they know. They don’t have any data analysts, computer technician, which all of them are so far ahead of me in terms of computers, and they actually could get that kind of job they don’t know anything about (RID 524).” As another put it, “You have to personalize it. Have you seen anyone in your community do X, Y, and Z? Have you touched them? That’s the piece. Was it tangible? Did you know them? Did you have a personal relationship with them (RID 740)?”

“The current exposure experience I would say hardly none. Yesterday I did an intake with a kid ... I asked her -- all she knows is her neighborhood. I said what else do you know? She said I know how to get to [friend]’s place. She is a D.C. resident. She is from D.C. All she knows is a 6 – or less than a three-block radius. That’s all she knows and she knows how to get that and that’s it. I asked her about other places in D.C. she had been to. She said ‘I don’t know how to get there. I don’t know about it’ (RID 244).”

Conversely, participants remarked that when youth are exposed to alternatives and connect with positive mentors, they are less likely to engage in delinquency or persist in delinquent behavior. One participant described what they see as separating youth who become justice involved from those who do not, “What I can say is what they are exposed to based on the family, their community, I see some differences in that . . . Kids who are exposed to more, broadens their perspective about how they view things, how they communicate, what they share out. And, unfortunately, some of the kids that I have worked with from these communities that are not as great, they don’t get a lot of exposure in that community. Going to a theme park, going to Maryland is out of town for a DC kid. But to go to a math camp or go on some mission trip, going to Mexico or going to Europe on an exchange program, not a lot of our kids do those things on a regular basis (RID 386).” Another stated, **“If we can find a way to create exposure and opportunity that’s a part of the trajectory of development, I think we are going to really find the key that fits the lock on root cases . . . I think if we can expand the experience, our young people want to learn. They want to grow in their development. They really do. We just have to give them the opportunity (RID 858).”**

“I think exposure is important. I think taking our youth outside of our community, outside of the District is important. Showing them different things, different lifestyles. I think that’s truly important. Everything is not always about hanging around the block and the area. Being able to see different things, being exposed (RID 121).”

Interviewees emphasized the importance of positive mentors for expanding youths’ exposure and preventing justice system involvement. Mentoring is a common prevention and/or intervention strategy for at-risk or delinquent youth, and there is substantial evidence supporting its effectiveness (Duriez et al. 2017). One interview participant explained, “For them to be able to identify with people who have been able to have [the] opportunity to take advantage of it is really important for their ability to see themselves in that (RID 458).” Another remarked that positive mentors can prevent justice system involvement, **“I think the ones that have more connection to positive people have more of an opportunity to build self-esteem and less of an opportunity to get involved (RID 93).”** As one participant described, “[when] you have someone who he respects and looks up to that he doesn’t want to disappoint, that person who has taken an interest in him, believes in him; he feels he has something to prove. That’s the one believing in him and telling him that you’re special, you’re different, and no one has taken the time to tell him that before or heard that before. They start to believe what’s being said to them and work hard and learn how to become what’s being taught (RID 363).” Interviewees expressed that exposure to positive mentors serves as a protective factor or, as one interviewee explained, “that is a bumper for trauma. It’s a protective factor in terms of guidance and mentoring and steering the young person, helping them make the right decisions. It’s the person that helps them scaffold and figure out how to problem solve and figure out how to work their way through issues. And, it’s a person who, honestly, when a relationship is working well, especially when it’s a young person they are mentoring, the young person’s behavior reflects an internal desire to make that person proud or to continue that relationship (RID 885).”

“HOW CAN YOU CHANGE THE MIND OF SOMETHING WHEN YOU SEE NOTHING DIFFERENT? (RID 878)”

SECTION VII

**CONCLUSIONS AND
RECOMMENDATIONS**

Empirical Summary

The statistical findings suggest that demographics, economic resources, childhood maltreatment, educational experiences, IEP eligibility, and neighborhood environment affect juvenile justice system involvement. The analysis indicates that the probability of juvenile justice system involvement peaks around age 15.4, and males and Black youth are at a higher risk than females and youth of other races, particularly White youth. Additionally, the data show that homelessness, child abuse, child neglect, grade retention, unexcused absences, suspensions, changing schools, externalizing disorders, internalizing-externalizing comorbidity, an IEP for comorbid youth, and living on a hot block all significantly increase the likelihood of justice system involvement. Controlling for these factors, the data did not show significant effects for receiving TANF benefits, Medicaid benefits, excused absences, internalizing disorders, psychotic disorders, specific developmental learning or motor disorders, or the number of property or violent crime incidents near a youth's residence.

Besides demographic factors, statistically, educational experiences have the largest impact on justice system involvement. Unexcused absences had the largest independent effect, with accruing the average number of unexcused absences (13.6) increasing the likelihood of justice system involvement across all youth by 3.16 times, holding all else constant. The additive effect of internalizing-externalizing comorbidity and IEP is the largest relative change, though the effect of IEPs on those with comorbidity is the next largest independent effect (increase of 2.09 times in likelihood). Changing schools, grade retention, and suspensions were associated with the next three largest relative effects. The figure below presents that the relative effects of each factor and the average predicted probability associated with non-demographic factors for youth with the highest base risk (4th Risk Quartile) of juvenile justice system involvement.

Comparison of Effect Size for Youth in the 4th Risk Quartile

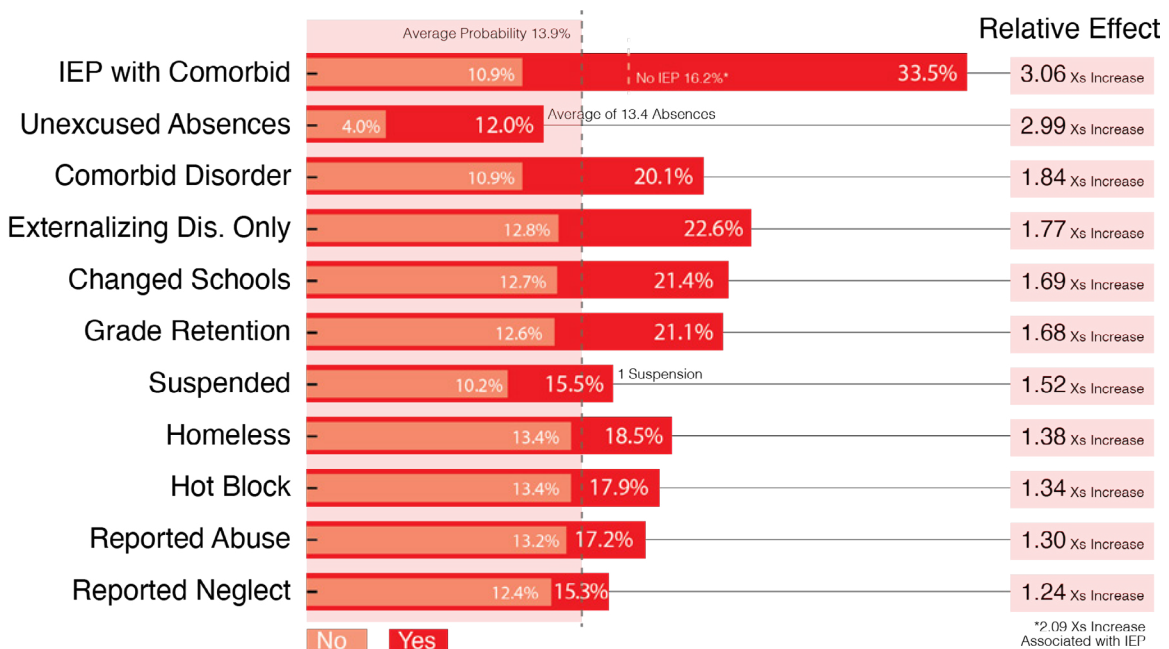


Figure 22.

The factors identified as affecting justice system involvement are often co-occurring and interrelated with many youth experiencing multiple risk factors, and exposure to some of the factors contributing to exposure to others. As a result, strategies to address one issue may involve addressing another issue, resulting in an additive reduction in the probability of justice system involvement. For instance, the interview participants suggest that housing instability contributes to truancy, and unexcused absences has the largest effect on justice system involvement. So, for youth in the 4th risk quartile (high-risk youth), the average predicted probability of justice system involvement associated with having 31 unexcused absences (the mean of the 4th quartile) is 16.0%. If the number of unexcused absences were to decrease to 14 (the sample mean rounded), the probability goes down to 12.2%. This suggests that successfully reducing truancy among high risk youth should be associated with decreased risk of juvenile justice system involvement. However, since strategies to address truancy may include reducing youth homelessness, the overall decrease in risk would be greater. For instance, holding all else at their observed values, the average probability of justice system involvement for high-risk youth with 14 absences would go to 11.4% if no high-risk youth experienced homelessness the prior year, compared to the 12.2% with homelessness at the observed value. If, in addition to reducing homelessness and truancy, no high-risk youth experienced grade-retention, the average predicted probability would go down to 10.7%, all else held constant. Therefore, changes to the three factors would result in an additive reduction of 5.3%, or 1/3 of the probability.

“I may not have proper clothing to go to school. I may have an odor because we don’t have running water so the kids tease me when I go to school. I may not have nothing to eat at home, so I try to get to the school early to have a breakfast program, to participate in the breakfast program and in the lunch program. And if I don’t have food at home, I can’t really study. I can’t really come to school prepared, so then I’m labeled. And they think I’m slow, but I’m not slow. I just ... have all these other things going on (RID 740).”

While youth who are exposed to multiple risk factors are more likely to become juvenile justice system involved, the vast majority of even high-risk youth will not become justice involved in spite of negative exposure. The data show that among youth in the 4th risk quartile there is still an 86.1% average probability of not becoming justice involved. Risk factors, thus, are not determinant of future behavior.

Interview participants consistently referenced the strength and resiliency of the youth they work with and explain that a lot of the youth are able to overcome substantial adversity. “I think all of my kids are extremely resilient and are really working through weathering some really terrible life experiences. I think they are all, in whatever ways kids’ brains do these things, they are all trying to figure out how to survive (RID 767).” They expressed that oftentimes youth have one or more protective factors that help them overcome adverse experiences, such as a supportive family structure, caring adults, and positive school experiences. “When I think about my clients who have had these traumatic experiences and have ended up having very minimal if any contact with the juvenile justice system; oftentimes, it’s because they have supportive folks either in their homes or in their schools who like give them that space and allow them to step out (RID 458).”

Risk factors, thus, are surmountable challenges facing youth that they can successfully overcome, particularly with resources and supports.

Current Programs and Initiatives

The District currently has a variety of programs and initiatives designed to address the risk factors identified in the report, including juvenile justice system interventions. Some are listed below.

Economic Resources

- **Homeward DC** is the District's strategic plan for 2015 - 2020 to end long-term homelessness, including chronic homelessness among individuals and families. The plan identifies five key strategies: 1) develop a more effective crisis response system; 2) increase the supply of affordable and supportive housing; 3) remove barriers to affordable and supportive housing; 4) increase economic security in our system; 5) increase prevention efforts to stabilize households before housing loss occurs (ICH N.d.). Under this plan, 6,341 families were served from Fiscal Year 15 – September 2019 and DC saw a 38% reduction in family homeless between 2016 and 2018 (ICH 2019). The second next iteration, "Homeward D.C. 2.0," will articulate a strategic plan for 2021 – 2026.
- **Solid Foundations DC** is the District's first ever data-driven plan to end youth homelessness focusing on unaccompanied youth. The Solid Foundations DC Strategic Plan was issued in May 2017 and articulates a 5-year plan with a goal of ensuring that youth experiencing a housing crisis will have access to stable housing within an average of 60 days or less by 2020 (ICH 2017).
- **TANF Program** was modified in April 2018 by the Department of Human Services to raise the cash benefit, end the 60-month lifetime limit, and split cash grant benefits between children and parents (80/20), so youth receive cash benefits even if parents are sanctioned for failing to comply with TANF rules (Lassiter 2017).
- **The Mayor Marion S. Barry Summer Youth Employment Program (MBSYEP)** is a locally funded initiative that provides District youth ages 14 – 24 with subsidized, paid employment in the private and public sectors for six weeks during the summer. In 2019, nearly 10,000 youth, 53% of applicants, participated in the program (The Coles Group 2019).

Educational Factors

- **Every Day Counts!** is a citywide initiative to improve student attendance with the goal of ensuring every student attends school every day. This initiative includes a public awareness campaign, a Taskforce to coordinate public agencies and stakeholders, and investments in data-driven strategies to increase attendance.
- **"Student Fair Access to School Amendment Act of 2018"** became effective August 25, 2018 and established parameters for local education agencies' policies on school climate and discipline to limit the use of out-of-school suspensions, expulsions, and disciplinary unenrollment beginning SY19-20 for K-8 and SY20-21 for 9-12 (D.C, Law 22-157). The law was passed to limit youth exposure to out-of-school disciplinary practices, in part, to prevent

harmful consequences such as school disengagement and criminal justice involvement and encourage schools to look to alternative means to create positive school climate (DC COE 2018). Even prior to the passage of this law, DC-area schools had been implementing disciplinary alternatives including:

- **Restorative Justice** is used in school settings as an alternative to suspension and expulsion, and to improve the student’s social and emotional development. There is no one school-based restorative justice framework to which all schools subscribe. Both the District of Columbia Public Schools (DCPS) and OSSE empower schools to customize and implement practices, while offering support and technical assistance to local schools (CJCC 2019).
 - **Conscious Discipline Brain State Model** is an evidence-based, trauma-informed approach for social-emotional learning and classroom management that has been implemented at Langley Elementary School. It integrates social and emotional learning with classroom management and is designed to modify teacher and child behavior based upon a brain-state model that helps adults identify strategies to assist youth (Jones et al. 2017). Langley Elementary School uses the model to teach socioemotional skill to students, teachers, staff, and parents.³⁷
- **Parent and Adolescent Support Services (PASS)** is a DHS program that works with youth ages 10-17 who are committing status offenses (e.g. skipping school). It operates as a voluntary, early intervention program that employs several evidence-based approaches to supporting families. The program is often the last resort before young people get referred to the juvenile justice system or the family faces child welfare involvement.

Childhood Maltreatment/Family Support

- **“Birth-to-Three for All Amendment Act of 2018”** became effective October 30, 2018 and laid out a comprehensive system to support families and youth (D.C. Law 22-179). The bill included provisions to create or expand programs designed to build family capacity and connect families to community resources:
 - **HealthySteps© Program** is an evidence-based, early childhood pediatric primary care model that supports families by, in part, having a child development expert, a “HealthySteps© Specialist,” join youths’ pediatric primary care teams. The Specialist builds relationships with families, provides guidance on childhood development concerns, and assists with care coordination and referrals. In addition to the traditional model, the DC legislation provides families with “community navigation services” to help families access additional care and services including home visiting services and early learning providers (D.C. Law 22-179; HealthySteps© 2020). In FY2019, Children’s National served as a HealthySteps© site, and the FY2020 budget included funding for two additional sites.
 - **“Home Visiting Program”** was established by the Birth-to-Three legislation and requires the DC Department of Health (DC Health) to administer funds for home visiting services and conduct an analysis of home visiting needs, capacity, and utilization (D.C. Law 22-179).

³⁷ <https://www.langleylelementary.org/conscious-discipline.html>

- **Help Me Grow Program** is a comprehensive resource and referral system for child development and family support services (D.C. Law 22-179). The system provides a free, confidential, centralized telephone number that families can call to be linked with a care coordinator. The care coordinator answers questions about pregnancy and child development and connects families with services including home visitation services.
- **Thrive by Five** is a comprehensive initiative focused on maternal and childhood health, child development, and early learning. It provides a centralized repository of resources for families and providers, and has a Working Group and Coordinating Council. The Working Group is an advisory group of agencies and organizations working to identify issues and trends, gaps in services, and examples of innovation and positive outcomes. The Coordinating Council consists of government and organization representatives and public members, and is tasked with tracking progress and outcomes, making recommendations, and identifying gaps and opportunities for additional services for children from birth to age five.³⁸
- **Parent Infant Early Childhood Enhancement Program** serves primarily children five years of age and younger with play and art therapy, infant observation, Parent Child Interaction Therapies, and supporting parenting groups.
- **Alternatives to Court Experience (ACE) Diversion Program** is a juvenile justice diversion program that connects youth and families to a range of individually tailored support and behavioral health services in lieu of prosecution.
- **Child and Family Services Agency (CFSA) interventions** serve to protect child victims and those at risk of abuse and neglect and assist their families through four functions: taking and investigating reports of neglect and abuse, assisting and connecting families to services, providing safe out-of-home care, and re-establishing permanent homes.

Mental and Behavioral Health Disorders

- **ChAMPS (Child and Adolescent Mobile Psychiatric Service)** is an emergency response service for children, teenagers and adolescent adults who are having a mental health or behavioral health crisis. It is a free, 24-hour service for District residents that is designed to help children manage extreme emotional behavior and assist families providing in-home services or temporary out-of-home respite.
- **Healthy Futures Program** locates childhood mental health clinicians in Child Development and Head Start Centers across the District to screen for early identification of emotional concerns. It also provides consultations to program staff and family members to build their skills and capacity to promote social emotional development, prevent escalation of challenging behaviors, and increase appropriate referrals for additional assessments and services.
- **Primary Project** is a Department of Behavioral Health (DBH) administered evidence-based practice that provides screening and early intervention services to children with mild school

³⁸ <https://thrivebyfive.dc.gov/page/thrive-five-coordinating-council>

adjustment issues in pre-kindergarten through third grade in certain public schools and Child Development Centers.

- **Juvenile Behavioral Diversion Program** is a specialized behavioral health court that provides intensive case management to youth in the juvenile justice system who have serious mental health concerns.

Neighborhood Environment

- **Violence Interruption Initiatives** include the Office of Neighborhood Safety and Engagement's Violence Intervention and Prevention Program and the Office of the Attorney General's "Cure the Streets" Violence Interruption Program. Both programs use individuals with community credibility and relationships to help diffuse potential violent conflicts and support individuals affected or at-risk of being affected by violence.
- **Summer Crime Prevention Initiative (SCPI)** is an initiative during the summer months in which MPD identifies four to six neighborhoods experiencing a high density of violent crime and collaborates with local and federal agencies and organizations in a coordinated effort to eliminate violent crime, remove dangerous and illegal guns, and hold repeat violent offenders accountable. Strategies including focusing all available MPD resources (including additional patrol support teams, narcotics enforcement units, gun recovery units, and dedicated SCI detectives) in those neighborhoods, utilizing the latest crime-fighting technology, and conducting outreach and youth/family programs.
- **DC's Hospital-based Violence Intervention Program (HVIP)** provides services to individuals, and their families, who have experienced life-threatening intentional injury. The HVIP partners engage with victims and their families while they are in the hospital recovering to create a support system by connecting program participants with government and community-based services to promote healing, reduce revictimization, and prevent future violence.
- **Credible Messenger Initiative at DYRS** is a transformative, mentoring intervention program for justice-involved youth committed to the agency with a restorative justice mission for the youth in the community. Credible messengers are neighborhood leaders, experienced advocates, and individuals with relevant life experiences whose role is to help youth transform attitudes and behaviors around violence.
- **Balance and Restorative Justice (BARJ) Drop-In Centers** ran by Court Social Services Division (CSSD) for justice-involved youth who are under community supervision pre-trial or post-adjudication. The BARJs are multifaceted facilities that offer a variety of programming and services for youth and their families.

Service Needs

We asked service providers in the interviews and youth in the focus groups what preventative services would help youth avoid juvenile justice system involvement, and what barriers they observe in accessing services currently available in the District.

Interviewee Identified Needs. Interviewees consistently stressed the need for prevention-based, early intervention with a focus on supporting and building family capacity. Uniformly, interviewees stated that prevention efforts must target supporting and improving family capacity. They said that efforts to help youth are limited unless the efforts also address deficits in the youths' home environments. They explained that family and home environment have a tremendous impact on the development and behavior of young people, thus efforts to support youth are most effective when they address underlying challenges within their environment. As one service provider stated, "The kid is the key to the family. I always say this. Once I strengthen the family, I've got the whole -- I've got the kid and everybody else. If I strengthen the family, the outcomes for the kids are going to get so much better, if I can just strengthen the family unit. Don't care what the family unit looks like. You can be grandmother and mother. That's the family unit. Those are the caregivers in the family. If I can strengthen them, they have the resources to make sure the kids are going to perform well (RID 740)."

According to interview participants, efforts that seek to address youths' behavior without addressing the needs of their families are less efficacious and may be undermined when youth remain in the same, problematic environment. **"You can have treatment but put the child back into the home where there's conflict and chaos and violence, and then you're climbing up a really tall mountain as a treatment provider (RID 767)."** For instance, interviewees pointed out that schools are often looked to as a place to address youth challenges because they are often the places where problematic behavior most clearly manifests. However, progress made in the limited time schools have with youth can be undermined if the home life is counterproductive. One educator explained "We can do so much at school, but at the end of the day at school we send them home. And then that reverses our progress. We have to start all over again the next day. But then you have those weekends. You have the summer. And it's survival. They have to survive ... As a school, we always operate from a different lens ... we do what we do in spite of the parental obstacles that we are going to face. We know we are going to face them. We're not going to blame Johnny's mom for anything. We are going to do what we can for Johnny when he's in here in our care. We can't worry about what happens or what Johnny's mom is not doing for Johnny (RID 425)."

"I'm like these are people trying to save kids from their parents. They figure they spend as much time in the school and away from the home as possible, I say all it takes is 30 minutes to unravel all you taught them in 11 hours and however long you have access to them. They go home and one person, one person could unravel all of that so quick (RID 891)."

Individuals working with justice system involved youth similarly observed that it is difficult to make progress with youth when they are subject to the same environments that contributed to their involvement, and they highlighted the importance of building family capacity to help youth. As one interviewee who works with justice-involved youth explained, "... It makes no difference for us to work with these young people if we send them back to the broken homes that they are coming from, and so there's a component here that we are doing an all-out initiative to engage families and that once we identify those families, to be able to apply the resources to those families (RID 643)."

Interviewees also consistently stressed the importance of early intervention. They stated that youth and families need support from a very early age, including prenatal care. They explained that since there are many young families in the District where the parents may not have experienced healthy, stable family lives themselves, they need early support to learn positive parenting skills and access resources. Participants explained that children can display unhealthy behaviors by age 3- 5, and these behaviors are signals of underlying issues in their environment. One participant in the education sector described, "I have a kid who has a large trauma history ... the whole family has trauma. The kid is acting out. He's 3, it's his first time in school and he bites somebody ... then I look at the services available to the little one. Services for trauma in the city don't really start until 5. There's something wrong with this kid because at 3 and 4 he couldn't function in a classroom because there was so much happening at home or the family was homeless and they were bouncing around and he wasn't getting enough sleep or he wasn't getting enough to eat (RID 462)." Another explained, "there's a lot of things that are happening in that level that are traumatizing our kids, even down to a Pre-k-level ... I have seen incidents where parents are fighting in front of the school ... as they are bringing the kids in. So, this young 3 or 4-year-old kid has just watched his father or her father assault the mother and has to come in and learn. Or maybe hasn't eaten since lunchtime the day before (RID 386)."

Interventions at these early manifestations address problems when treatment is easier and interventions are more efficacious. Participants explained that throughout elementary-school ages youth behavior can signal that youth and their families need supports and services before it warrants formal system involvement. As youth go through middle-school and high-school, interventions become more difficult because youth are gaining independence and are more strongly influenced by their peer groups. Additionally, behaviors that were problematic at earlier ages can result in justice system involvement when a youth is older. An education service provider explained, "What we have seen is actually there is an incredibly strong return on our investment in the early grades. So, grades 3 through 6 we have pretty outstanding results. And in the secondary spaces, it can definitely be more challenging to see results on the same scale as younger grades because those students tend to be farther behind. They tend to have more going on, more independent responsibility taking care of a sibling or a sick

"I would say that the kids that I work for follow a pretty typical pattern of having been reportedly healthy, happy kids up until about the second grade, developing in-school behavior problems between second and fourth grade. And by ninth grade being largely unconnected from school and having -- not progressing educationally beyond that (RID 563)."

parent ... But in the elementary grades we see a lot of really immediate return on investment because we can catch them earlier (RID 581).” Another stated, “And by middle and high, it’s almost too late. You have so many needs at the elementary level when they are the most vulnerable because you get kids early on that aren’t afraid to take these risks and things of that sort. They need resources (RID 425).”

“[You] get [to high school], 9th grade and you’re reading on a 2nd grade level, that means -- what was the breakdown between 1st and 2nd grade? That your reading level stopped and then it never progressed (RID 654).”

Interview participants explained that prevention requires the ability to intervene without requiring legal system involvement. According to interviewees, by the time formal systems intervene, problems have escalated and, often times, intervention earlier could have prevented the escalation. However, they commented, many supports and resources are only available when youth are involved in a formal system such as the juvenile justice system. As a result, youth and families seeking support or assistance often find that they cannot access resources until behaviors worsen and they become system involved, or they are not able to access the same depth and breadth of resources. One service provider who works with justice involved youth explained that, “Now it’s like almost you’ve got to be in trouble to get services. And that’s when you’re deep into the system (RID 878).” Another said **“Parents will go and say I need help with my child” but that “until you become involved with the court system it’s when you get help. When you’re not involved with the court system, you don’t get that (RID 363).**” Additionally, services offered by way of justice system involvement often end when a case is closed even if the youth could still benefit, “The goal is to provide kids with services and oftentimes when the case ends the services end as well rather than to connect the kid with high quality services that is not system dependent which would then continue beyond any case closing. So, I think it is a fundamental kind of shift in approach that we would have to take from a system perspective. To be much more focused on connecting the young person in services that are integrated in their community that will continue and that the young person sees as a resource rather than creating services that necessarily serve [the justice involved] population in particular but tends to then also end when the young person’s case ends (RID 897).”

Both DYRS and CSSD have worked to provide resources to support families of justice-involved youth; however, someone in a family must touch the system to access their resources, thus the family necessarily experiences the trauma associated with court involvement. Youth and their families may benefit from similar services offered by those agencies without needing to go through the justice system.

Interviewee Identified Barriers to Services. Though services are important, interviewees expressed that creating and offering services is insufficient; participants need to be actively recruited by a trusted broker, and the services must be accessible and available when families are in need. Interviewees repeatedly remarked that having services available is insufficient; there must be proactive outreach efforts to connect people with services. Additionally, for many at-risk individuals, outreach efforts must

be repeated multiple times if the initial offer is rejected. One service provider for justice-involved youth observed that while preventative services are available in the District, **“You have to just do more than have the service. It has to engage them. Too many families say that this is the first time they had [a particular service]. Maybe they are available but if families don’t know or if they’re not reaching out to this particular bucket of population, or if folks don’t know they exist or if you’re not marketing [you’re not engaging them] (RID 32).”** To be able to connect people with services, the people who come into contact with families and recognize needs must possess knowledge of available services in order to make the connections. “Let’s just say there are resources out there. There is a parenting class or . . . someone that provides some kind of family support. It’s making sure whoever [identified the need] -- so let’s say the pediatrician who identifies it. Does the pediatrician know what to do with that information? Do they know who to call to get them linked to that kind of service? Does someone in a school know where they can find, you know, an after-school program that fits? There’s so much out there, but not everybody knows about people the same (RID 533).”

According to interviewees, people recruiting or connecting families and youth to services must be culturally competent and respectful to the people they are serving; ideally, they would be able to connect with their clients and establish trusting relationships they could leverage to make further connections. Participants explained that youth and families are often reluctant to ask for help and can be put off if they feel as if they are being demeaned or disparaged. One participant explained the importance of tone and interaction for building relationships with youth, **“... The very first interaction a person has ... it’s lasting (RID 856).”** Interview participants explained that once an individual is able to establish a relationship, families and youth are more likely to be willing to accept help, particularly because many at-risk families and youth have had negative experiences interacting with services and service providers or are generally skeptical about services. One participant remarked, “I think there’s also an enormous hurdle of mistrust of government and institutions and even programs. And so, you have to get over that through your personal relationship (RID 854).”

Interview participants recommended that for youth and families to utilize services, in addition having knowledge of them and being recruited, services must be easily accessible. They identified a number of logistical challenges that families routinely face that can serve as an impairment to obtaining services, such as difficulty traveling any significant distance, finding childcare, and being available during standard business hours. As such, for services to be most effective, participants suggested the services should be community-based, ideally hyper-localized or in-home, and offered at flexible and nonstandard hours to be available to people with varied employment schedules.

Interviewees also opined that services should have minimum bureaucratic requirements when possible, and families may need help navigating requirements. They explained that at-risk families tend to be overtaxed, under resourced, and may be in a trauma-state when they need services. Consequently, what may seem like small hurdles, such as providing birth certificates, can be overwhelming and cause families to give up. “There are so many constrains and regulations that all have a reason for being there. And they’re not irrational. But to the user, they seem more like roadblocks. I’m here, why do I need my birth certificate? No, I can’t start the process . . . So, we’re not even going to start the process now because you don’t have your stuff together. So, come back another day. Come back another day with the stuff and you may have to wait two hours and you have something else to do so you leave (RID 699).”

Additionally, interviewees talked about the value of having people who have the ability to forge relationships with youth and families work with them on an ongoing basis to overcome the logistical challenges and navigate bureaucratic barriers to access services, similar to a case manager or family navigator. One interviewee described what they called “A lack of . . . a pipeline to get kids into high quality seats [in programs]” in which “some of the best programs are the ones that are most structured, but that means is if you don’t have parents, other caregivers, other friends, or the capacity yourself to find out exactly when those programs are enrolling, how to get enrolled, what the paperwork entails, collect all the paperwork, etcetera, then you’re not able to take advantage of those programs. And there’s not . . . a lot of folks that help with the navigating that type of bureaucracy (RID 897).”

Some interviewees pointed to DYRS’s Credible Messenger Programs as an example of having individuals who are able to forge connections with their clients and help families access resources and navigate systems. **“[There are] Credible Messengers who partner with the family. They encourage, they bug, they badger, they support, they I’ll pick you up and take you. Just try it one time. I’ll go with you. You need to go to Social Security office? I’ll go with you. I’ll sit with you and help you fill out the paperwork. I think just the it’s a difference in telling somebody, you need to go down to the Medicaid office and fill out and enroll your son so that he can get the services he needs versus hand walking with them through the process. It could be a language barrier. It could be a literacy barrier. It could be just intimidating (RID 32).”** Another person described the program, “the Credible Messengers don’t seem to see themselves as law enforcement but problem solvers and allies and mentors and that kind of a thing, if it is with a trustworthy person that stays in the job for a long time, can be effective and I’ve seen it. Not very often (RID 563).”

Finally, interviewees emphasized the importance of taking a strength-based approach when offering and providing services because people are less likely to accept help when it is framed in terms of their deficits and viewed as something that is compulsory. They observed that people are more responsive to offers of help when they buy into the services and they are framed in terms of their assets. “We need to uplift people instead of always saying you’re bad, you’re wrong, you didn’t do that . . . [P]arenting is such a hard job anyway and to continually be told that you’re not doing it right, that you’re not doing what you should be doing for your kids . . . [W]e, especially in government, we tend to come with that approach. And so the question, how do we uplift our families? How do we uplift our communities so that everyone is invested in doing better? Everyone feels connected in a way that is supportive and encourages – that resiliency (RID 785)?”

Focus Group Identified Needs. Youth focus group participants identified different service needs than interview participants. Though they discussed how home lives can impact youth behavior, they did not identify building family capacity as a need. Instead, youth were primarily focused on needing opportunities to make money immediately; specifically, they repeatedly emphasized the need for youth under 16 to make an income and opportunities for vocational job training, particularly in schools. They said that there should be year-round programs where youth, including 14 and 15-year-olds, can earn an income because they need to make money to help their families and access the things they want, but there are no legal means available. Participants also felt that there needs to be more job training opportunities, particularly in schools and as extracurricular opportunities. They stated

that one of the reasons they thought that school was a waste of time was because they felt it does not prepare people for jobs they can get immediately after school. The youths specifically asked for culinary training, graphic design, barbering, and autobody classes, but more generally, they felt that people need to “put more stuff out there rather than just tell people to go to college” and “people need alternatives besides college to set them up for success.”

Youth participants identified value in the resources offered by DYRS and at the Court Social Services Division’s (CSSD) Balanced and Restorative Justice Centers (BARJ). There was general consensus among participants that youth had much greater access to resources after they were committed, such as help with rent and utilities, access to food, and gift cards for clothes. However, the participants expressed that these types of services should be offered to people before they become involved in the justice system; they should not “need to be locked up” before they receive support. Additionally, they expressed that the services should be offered with the expectation that the young people have the ability to succeed and with trust that they will make good decisions rather than with the assumption that they are going to cause trouble and misbehave. Some of the youth also explained that they felt, while there were many services available, the services were too hard to access, “don’t give people a chance,” and, while they were designed to help people, they do not provide enough time to work.

The youth who participated in the focus groups consistently expressed a sense of disempowerment. When the researchers asked them to participate in the study, each group of youth asked the researchers what it would accomplish and what power the researchers had to make changes. The youth expressed skepticism that anything they said would matter because no one listened to them. They stated that lots of people come to talk to them, but it does not matter because it does not lead to change.

Recommendations

Programs and Initiatives

Many of the programs and initiatives, such as those implemented by the Birth-to-Three legislation, are too new to determine their effectiveness; however, they are promising practices based on evidence-based models designed to address the challenges facing youth and their families. Such programs, as with most prevention programs, will not yield immediate effects on juvenile justice system involvement; however, these investments in supporting families and youth are designed to provide long-term, sustained improvements. The District should continue its commitment to these programs and, if evaluated and found effective, consider increasing investments and scaling up. In addition, we identify opportunities to expand on current programs or offer new programs to support youth with the goal of ensuring a continuum of wrap-around care for at-risk families with services connections through trusted brokers, and services for youth that provide mentoring, financial opportunities, and emotional and behavioral support.

Recommendation #1: Bring the Becoming a Man (BAM)³⁹ program to District schools. BAM is a trauma-informed school-based counseling, mentoring, and character development program for 7th – 12th grade males that uses elements of cognitive behavior therapy (CBT) in group and individual settings to help youth learn and practice impulse control, emotional self-regulation, and recognition of social cues and interpreting intentions of others. It involves once-per-week group meetings during class time for either one or two years, during which youth are guided by a counselor through various activities based in the BAM curriculum. Currently in Boston, Los Angeles, Chicago, and Seattle, BAM was evaluated by the Chicago Crime Lab using a randomized control trial and found to reduce violent crime arrests by 50% and total arrests by 35%. It was also found to improve school engagement and increase on-time graduation rates (Heller et al. 2016).

Recommendation #2: Pilot a community-based, cross-age peer mentoring program. Cross-age peer mentoring programs are structured programs in which high school students provide one-on-one or “family style” mentoring to elementary or middle school youth under the supervision of program staff. Rated as “promising practice” by CrimeSolutions.gov, they are evidence-based, developmental programs that promote psychosocial growth in both the mentors and mentees. They can also be tiered programs that allow elementary mentees to participate through high school, progressing from mentees in elementary, mentors-in-training in middle school, and mentors in high school. Programs also have a family engagement element where parents of mentees are invited to spend time with their children’s mentors and participate in activities such as field trips. Similar to Reach Inc.’s peer tutoring program in the District,⁴⁰ mentors are paid; thus, the program would be a year-round employment opportunity for youth. Empirical results suggest that cross-age peer mentoring programs increase school engagement and decrease behavioral problems (Karcher 2005; Karcher, Davis, and Powell 2002; Richards et al. 2017). Chicago’s Saving Lives & Inspiring Youth program was specifically designed to improve resilience and reduce aggression and other behavioral problems for

39 <https://www.youth-guidance.org/bam/>

40 <https://www.reachincorporated.org/after-school-tutoring>

disadvantaged youth residing in low-income, high-violence communities and could serve as a model for a pilot in the District.

Recommendation #3: Create a year-round employment program for youth ages 14 – 18 that incentivizes school attendance. For instance, DC could offer vocational courses, such as carpentry, painting, culinary services, computer networking, for which students would receive paid work experience as part of their daily curriculum and could earn licenses and certifications. Such a program would provide youth with needed financial resources, job training, and incentivize educational engagement.

Recommendation #4: Create universal ACEs screening for youth, and increase funding for, and information dissemination around, age-appropriate and alternative trauma-informed treatment services. While the Birth-to-Three legislation includes requirements that HealthySteps© providers have a plan to screen infants and toddlers and their families for ACEs, and DBH has a variety of early intervention programs that screen youth, these initiatives do not reach all youth. The District should consider an initiative similar to the recently-launched ACEs Aware Initiative in California.⁴¹ The initiative provides funding to train pediatricians to screen for ACEs and Medicaid reimbursement for screenings. Universal ACEs screening must be accompanied by increased availability of age-appropriate and alternative trauma-informed services, such as play therapy or art therapy, as well as increased information dissemination about services currently offered. If pediatricians conduct ACEs screenings, they must have knowledge of services where they can refer screened patients, and those services must have the capacity to handle an increased number of referrals that would likely result from increased screening.

Recommendation #5: Expand capacity to provide ongoing, community-based case management services to families who are not involved with the legal system. Families could be connected through the HealthySteps© or home visitation programs when they age out, thereby ensuring a continuity of support. Providing families with intensive case management services prior to court involvement, similar to those offered by the District of Columbia Collaboratives, would provide families with support to prevent challenges from escalating into problems. Additionally, it allows families to be voluntarily involved in such services.

Recommendation #6: Provide stable, long-term funding for HealthySteps© Specialists and Birth-to-Three “community navigation service” coordinators to encourage stability in service providers and staff retention. The HealthySteps© program is rooted in pediatric primary care, in part, because it is the only system with a consistent and positive connection to families, youth, and their communities. HealthySteps© Specialists and “community navigation service” coordinators are expected to build ongoing relationships with families and community service providers; this requires stable staff in these roles. Staff or service provider turnover can serve as barrier to establishing and maintaining relationships and thus reduce the effectiveness of the program. Thus, steps should be taken to ensure stability and continuity in service providers including stable and consistent funding.

41 <https://www.acesaware.org/>

Recommendation #7: Create a process to facilitate a warm handoff between HealthySteps© providers and home visiting services for families at need. Voluntary home visiting programs where trained professionals, such as nurses or early childhood educators, conduct home visits to provide support, build strong, positive relationships, and connect to services have been found effective at promoting positive youth development and reducing negative outcomes such as childhood maltreatment (HRSA 2020). However, families may be wary of allowing people into their homes, especially if they have had previous negative interactions or are distrustful of services. HealthySteps© providers, having established relationships with families, may serve as trusted brokers and encourage families to engage with home visit providers. A warm handoff would put families in direct connection with home visiting providers, thereby eliminating the need for families to reach out on their own and providing transference of trust.

Recommendation #8: Ensure the HealthySteps© Program is implemented with fidelity to the model and targeted towards at-risk families. HealthySteps© is a nationally-recognized, empirically-evaluated health model demonstrated to produce positive outcomes for child development through supporting families, thus ensuring faithful implementation is vital for the program success. Additionally, HealthySteps© services should be accessible to at-risk families, particularly in under-resourced communities. In accordance with the legislation, we emphasized the importance of having providers that service the Medicaid-eligible population.

COVID-19: CJCC recognizes that, until such a time that a treatment or vaccination for COVID-19 is widely available, implementation or adoption of the above recommendations must be done in accordance with social distancing best practices and phase-specific requirements. These may include social service providers conducting video-conferencing visits or in-person visits with a 6' separation between providers and clients; doctors conducting diagnoses and referrals via telemedicine; hospital-based service providers utilizing appropriate social distancing protocols and personal protective equipment; and school or community-based programs ensuring that gatherings are limited to the maximum allowed by law and ensuring a 6' separation between participants.

Future Analyses

Based on the findings in this report, we propose the following analyses for subsequent reports in accordance with the CYJAA:

2022: Conduct an analysis to identify the extent to which the relationship between educational experiences and juvenile justice system involvement is driven by underlying explanatory factors such as family environment, economic resources, and mental health needs.

2024: Conduct an analysis that identifies what types of school-based incidents led to a law enforcement referral and/or arrest, and whether factors such as economic resources, race, IEP eligibility, mental health conditions, school location, and SRO assignment statistically affect the likelihood of referrals/arrests.

OR

2024: Conduct a representative survey of District youth on self-reported delinquent behavior and potential explanatory factors such as exposure to ACEs.

Research Questions

In addition to the proposed future analyses, we identified research questions generated from this analysis that would provide further understanding of the systemic issues and help identify additional policies and practices that would improve outcomes for youth at risk for juvenile justice system involvement:

Research Question #1: Are there differences in arrests resulting from calls-for-service or police-initiated stops? To what extent are observed racial disparities in juvenile justice system involvement driven by either?

Research Question #2: Do runaway and throwaway youth experiencing homelessness have a different probability of juvenile justice system involvement than youth who are experiencing family homelessness?

Research Question #3: How does the establishment of IEPs affect youth with internalizing-externalizing comorbidity? Does the nature of the intervention or timing of the establishment mitigate the impact? Does the effect of an IEP differ from the effect of a 504 plan?⁴²

Research Question #4: Does early identification and treatment of ACEs exposure and mental health disorders mitigate the impact on juvenile justice system involvement?

Research Question #5: What are the ecological factors in the top-35 hot blocks for gun violence that are affecting juvenile justice system involvement?

⁴² Similar to an IEP, a 504 plan is a formal educational plan that provides accommodations for students with disabilities under the Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 701) rather than the IDEA. A 504 provides for accommodations under a broader definition of disabilities and, unlike an IEP, is not special education but is a disability accommodation.

“ I’m incredibly, constantly inspired by the resilience of our clients. And the resilience of the young people I work with. The fact that they have been through so much and they are getting so little support. Often from a host of people in their lives including the system themselves. And they are still finding a way to try and keep one foot in front of the other and strive for what it is their goals are and their dreams are.

It’s pretty inspiring. ”

Interview Participant Research ID 897

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APPENDIX A

ADMINISTRATIVE DATA

Sample Selection

Sample and Time Frame

To examine the statistical effect of the hypothesized explanatory factors on youth crime, we drew a representative sample of youth who were born between June 1, 1999 and June 1, 2006 and enrolled in 6 – 12th grade in District of Columbia public schools (DCPS) or public charter schools (PCS) in the 2016 – 2017 school year.

We limited our sample to youth born between June 1, 1999 and June 1, 2006 to ensure that all youth in the analysis were eligible for juvenile justice-system involvement at some point between May 31, 2017 and July 31, 2018, meaning they were under 18 for at least one day and over 10.5 years old at the start of the period of observation. While it is legally possible for youth under 10 to be arrested and charged in the District, it is exceptionally rare in practice, and no youth under the age of 11 was arrested during the time period of examination. The justice-involvement dates were selected to allow the explanatory factors to temporally precede justice system involvement.

Our sample is further limited to individuals enrolled in DCPS or PCS because it was drawn from enrollment census data provided by the Office of the State Superintendent (OSSE), which is the state education agency for the District of Columbia. Using OSSE enrollment information as the sampling frame excludes youth enrolled in private schools from being included in the sample. However, it is not possible to include youth who are enrolled in private schools in the sampling frame because there is no centralized listing of all such youth in the District, and private schools do not report enrollment or individual-level education data to a central agency. Therefore, it would also not be possible to obtain educational data on private school youth. OSSE's enrollment list is, therefore, the most exhaustive listing of school age youth. The census provided by OSSE contained 29,441 youth born between June 1, 1999 and June 1, 2006. Based on population estimates (DC Office of Planning), this constituted an estimated 70% of youth between ages 10 – 17 as of July 1, 2017, thus approximately 12,000 youth are not included in the sampling frame. Approximately 4,200 youth are enrolled in DC private schools;¹ the rest of the youth may be enrolled in private schools outside of DC² or not enrolled in school in spite of DC's compulsory school attendance law.³

The OSSE sampling frame was supplemented by two sampling frames used to ensure adequate inclusion of juvenile justice-involved youth: a list of youth arrested by MPD from June 1, 2017 – July 31, 2018, and a list of youth with at least one case petitioned during the same time period.⁴ The youth who were arrested and/or petitioned were matched to the OSSE sampling frame using the CDC's Link Plus linkage program version 3 (2015),⁵ and youth who were arrested and/or petitioned but not

1 In SY19-20, according to OSSE, approximately 4,700 District residents in 6 – 12th grade were enrolled in private schools in the District of Columbia, which comprises approximately 13% of youth.

2 OSSE does not track the number of DC residents enrolled in private schools outside of the District of Columbia.

3 3 D.C. Code §§ 38-201 – 38-213.

4 July 31, 2018 end date was selected as it was the last completed month when data requests were made to relevant partners.

5 Probabilistic matching was performed using first name, last name, and date of birth with a cutoff score of 4. We used the New York State Identification and Intelligence System (NYSIIS) phonetic algorithm. We then manually checked nonperfect matches with a match score under 14 using gender and address.

matched were excluded from the sampling frame. In total 1,262 out of 1624 (77.7%) justice-involved youth were matched to OSSE's sampling frame.⁶ Of the matched youth, 612 (48.7%) were arrested but not petitioned during the period of observation while 646 (51.4%) were petitioned. Of the youth who were not matched, 95 (5.8% of justice-involved youth) had home addresses in their arrest or petition data that were outside of the District; 268 (16.5%) had no address listed or home addresses located within the District. Thus, up to 15.3% of justice-involved youth were not enrolled in DCPS or PCS the year preceding their arrest or petitioning.

In total, 4.3% of youth in the sampling frame were justice-system involved. Because this constitutes such a small proportion of the population, we used a stratified random sampling method with oversampling for justice-involved youth and analytical post-stratification weights. We used three mutually exclusive stratum: (1) youth who did not become justice involved (95.73%); (2) youth who were arrested but not petitioned (2.08%); and (3) youth who were petitioned (2.19%), and drew random samples within each stratum. Using SPSS's random sampling function (IBM), we drew a sample of 7.5% of non-justice-involved youth (N = 2128), and 80% of each stratum of justice-involved youth (N = 1006) for a total sample size of 3134.⁷

The weighted sample is representative with regard to race, gender, age, school grade, school sector with no statistically significant differences between the sampling frame proportions and the sample proportions at the .05-level.⁸

One-Sample T-Test of Sample Proportions Compared to Sampling Frame

	% Difference	P-value
Race/Ethnicity		
Asian	-0.07	0.762
Black	0.36	0.712
White	0.03	0.964
American Indian	-0.07	0.086
Hawaiian/Pacific Islander	0.13	0.111
Two +	0.21	0.371
Hispanic or Latino (any race)	-0.59	0.371
Gender		
Female	0.91	0.319
Age^a		
11	0.07	0.396
12	-0.17	0.784
13	0.24	0.312
14	0.33	0.573
15	-0.03	0.933
16	-0.36	0.570

6 Some of the the justice-involved youth were older than the age cutoff and thus excluded. These youth were petitioned after they turned 18 for incidents that occurred when they were juveniles.

7 Sample sizes selected for a 2.5% margin of error at a 95% confidence interval.

8 However, reaching near statistical significance, American Indians were underrepresented, while DCPS students and twelfth-graders were overrepresented ($p = .086, .061, \text{ and } .089$, respectively).

17	-0.31	0.647
18	0.22	0.678
School Type		
DCPS	1.66	0.061
Grade^b		
6	0.07	0.838
7	-0.17	0.759
8	0.24	0.372
9	0.33	0.453
10	-0.03	0.874
11	-0.36	0.136
12	-0.31	0.089
a Age as of 06/01/2017 rounded to the nearest integer.		
b Grade in SY2016-2017.		

Data and Measurements

Dependent Variable

Juvenile Justice System Involvement. Juvenile justice system involvement is a dichotomous variable (0/1) with 1 indicating that an individual had been arrested⁹ or petitioned¹⁰ for one or more delinquent offense between June 1, 2017 and July 31, 2018.¹¹ Arrests exclude youth who were pre-arrest diverted and youth who had interactions with police that did not result in arrest. Youth who are petitioned have had a charging document filed in juvenile court by the state alleging that the juvenile is delinquent and describing the alleged offenses committed by that child. A petition is comparable to a charging document in criminal court.

Though commonly used, being arrested or petitioned is not a perfect measure of whether an individual has committed a crime; rather, it is a measure of whether an individual was, at one point, suspected of committing a crime and processed by the juvenile justice system. The individual may not have committed the crime for which they were accused. Additionally, formal justice-system involvement under-reports individuals who engage in delinquency as many people never come to the attention of the justice system, and those who do are not always processed.¹² Moreover, if individuals who engage in delinquency are systematically treated differently by the juvenile justice system, then the measure will be biased in accordance with those systematic differences.

An alternative measure of youth criminality would be anonymous youth self-reports (Thornberry and Krohn 2000). Unlike measures based on arrests or even police reports, self-reported data captures behaviors that are not detected by formal institutions, and anonymous reports allow respondents to be more candid and, thus, more likely to accurately report their behavior. However, collecting self-

⁹ Authorized by the Metropolitan Police Department on September 11, 2018.

¹⁰ Provided by the District of Columbia Superior Court Strategic Management Division in accordance with Administrative Order # 18-16.

¹¹ There were no substantive differences in the multivariate model looking only at youth who had been arrested during the specified time period.

¹² Youth who were pre-arrest diverted are not included in the arrest data.

reported crime data on a representative sample of youth was logistically and cost prohibitive, and anonymous data collection would preclude incorporating administrative information into the analysis. Thus, while the criminal behavior data might have been more accurate using self-reported data, the analysis would be less rich with regard to the explanatory factors.

Additionally, though juvenile justice system involvement under identifies youth who engage in delinquent behavior, it identifies those youth whose suspected behavior faces the greatest consequences. Therefore, it is important to understand the subsection of youth who engage in or are suspected of engaging in delinquent behavior and come to the attention of the justice system as these are the youth most likely to be negatively impacted.

Violent Crime Involvement. In addition to examining crime in general, we modeled whether or not the youth had been arrested for a violent crime. Crime categories classified as violent are Assault with a Deadly Weapon, Aggravated Assault, Assault on a Police Officer, Homicide, Kidnapping, and Robbery.¹³

Independent Variables

Data Process. In addition to the education data and juvenile justice data provided by OSSE, MPD, and DCSC, we received identified data from the Department of Human Services (DHS), the Child and Family Services Agency (CFSA), and the Department of Health Care Finance (DHCF). Because identifying information on youth in the sample could not be shared with DHS, CFSA, or DHCF due to the Family Educational Rights and Privacy Act (FERPA), these agencies provided us requested information on youth born between January 1, 1999 and January 1, 2006. Specifically, CFSA provided us data on all youth born within that date range who had a Family Assessment case or a substantiated or inconclusive Investigation case. DHS provided us data on all youth born within that date range who received TANF benefits between May 31, 2016 and June 1, 2017. DHCF provided us beneficiary data on youth born within those dates who were Medicaid beneficiaries from June 1, 2010 to June 1, 2017 and claims data on youth born within those dates who had mental health or substance abuse diagnoses¹⁴ or mental health or substance abuse treatment between June 1, 2010 and June 1, 2017. We then matched the DHS, CFSA, and DHCF data to the sampled youth based on first and last name and date of birth using the Link Plus program (CDC 2015) and deleted information on youth not included in the OSSE sample.

Demographics. Age, gender, and race were derived from OSSE's enrollment data. Age was calculated from OSSE's recorded date of birth.

	Minimum	Mean	Maximum
Age (on May 31, 2017)	10.9	14.8	17.9

¹³ Sexual offenses were not included in violent crime because they are frequently treated differently in research literature. Additionally, there were so few sexual offenses during the time period under review including them would have resulted in no substantive differences in the statistical findings.

¹⁴ ICD-9 codes 290 – 312, V40 and ICD-10-CM codes F06 – F99.

OSSE collects two categories of gender: male and female. Males were coded “0” and females were coded “1.” Race and ethnicity are captured together in seven categories: Hispanic/Latino of any race, Black/African American (non-Hispanic), White (non-Hispanic), Asian, Two-or-more races, Native American/Alaskan, and Pacific Islander/Native Hawaiian. For the purposes of analysis, we collapsed Native American/Alaskan, Pacific Islander/Native Hawaiian, Asian, and Two or More races into one racial category: “Other.” Together the four categories constitute less than 4% of census, and the numbers of some categories are unreportable due to privacy concerns. Thus, we include four race/ethnicity categories for analysis: Black/African American, White, Hispanic/Latino, Other.

	Coding	Percentage	Source
Gender			
Female	0/1	51.1%	OSSE
Male	0/1	48.9%	OSSE
Race/Ethnicity			
Black/African American (non-Hispanic)	0/1	72.4%	OSSE
White (non-Hispanic)	0/1	7.8%	OSSE
Hispanic/Latino of any race	0/1	16.4%	OSSE
Other	0/1	3.4%	OSSE

Economic Resources. We measured a youth’s economic resources using three variables: 1) whether the youth’s household received Temporary Assistance to Needy Families (TANF) benefits, 2) whether the youth was Medicaid income-eligible, and 3) whether the youth was reported as experiencing homelessness.

We include two proxy measures to identify youth in low-income households. First, we identified the youth in the sample who received TANF benefits between May 31, 2016 to June 1, 2017 from data provided by DHS, and we coded them “1.” All other youth were coded “0.” TANF is a state-administered, assistance program offered to families with dependent children with low or very low incomes. The income threshold is lower than other government benefits like the Supplemental Nutrition Assistance Program (SNAP) and Medicaid and requires beneficiaries to go through an application process as well as meet other requirements. Additionally, until 2018, families could only receive TANF for a cumulative 60 months (DHS N.d). This measure, thus, identifies those youth who were a small subsection of the lowest income individuals during the year preceding potential juvenile justice system involvement.

Second, we identified youth in the sample who had been income-eligible¹⁵ for Medicaid for a cumulative 365 days or more during the SY2016 – 17 or the preceding five years (between May 31, 2011 – June 1, 2017) and coded them as “1.” All other youth were coded as “0.” Under Medicaid and the Children’s Health Insurance Program (CHIP), income-eligible, youth Medicaid beneficiaries must have incomes at or less than 319% of the federal poverty line (FPL) to income qualify. Thus, this measure indicates that a youth’s household made at or less than 319% FPL for at least a cumulative year during the school year or preceding five years.¹⁶ This allows us to identify youth

¹⁵ Excludes beneficiaries who were not income-eligible or were eligible under the Immigrant Children’s Program. Includes beneficiaries who are wards of the state.

¹⁶ We tested the model using a 0/1 for whether a youth was ever Medicaid income-eligible from June 1, 2010 – June 1, 2017 and count

whose households were lower-income for a substantial period of time prior to the observation period for justice system involvement. The structure of the data did not allow us to distinguish between those youth who were below the FPL and those who were above.

Together, the TANF and Medicaid indicators identify two groups of low-income youth and thus are useful indicators of economic resources; however, these measures are imperfect and likely under identify youth. The measures are only capturing youth who receive government benefits, and not all low-income youth apply for government benefits. Additionally, these measures fail to capture potentially important variation within income-levels. Youth at 109% or 216% the FPL have substantially different resources than youth at 319% the FPL. Finally, TANF and Medicaid eligibility are significantly correlated ($p < .001$) with 97.4% of youth in the sample receiving TANF benefits also being Medicaid eligible for at least 365 days.¹⁷

Homelessness is a 0/1 indicator of whether a youth was verified as homeless in accordance with the McKinney-Vento (MKV) Assistance Act in the 2016 – 2017 school year using data collected by OSSE as validated by the LEAs.

	Coding	Percentage	Source
TANF	0/1	17%	DHS
Medicaid Eligible for > 365 days	0/1	64.1%	DHCF
Homelessness	0/1	4.8%	OSSE

Childhood Maltreatment. We obtained childhood maltreatment information from CFSA on whether youth had reported histories of neglect, abuse, and/or out-of-home placement. CFSA, the public child welfare agency in DC, is responsible for receiving reports of known or suspected child abuse and neglect. When CFSA receives a referral for someone who is suspected to be a victim of abuse, they screen the referrals to determine whether the reported concerns reach the threshold required for a response. If the threshold is met, CFSA opens a case; if not, the referral is “screened out.”

Prior to 2011, all opened cases were sent to the Investigation unit. From 2011 to 2019, an opened case could be referred to either the Investigation unit (CPS-I) or the Family Assessment unit (CPS- FA), which was a differential response unit (CFSA N.d.).¹⁸ Cases were sent to the CPS-I when there was an immediate or present danger, while cases could be sent to the Family Assessment unit when there were no immediate safety concerns. The CPS-FA was designed for less severe allegations that indicate a struggling family could benefit from support and services. Cases referred for an investigation could result in one of three outcomes: “substantiated,” “inconclusive,” or “unfounded.”

A finding of substantiated means that there was convincing proof of abuse or neglect. Inconclusive means that they could not prove or disprove the report, and unfounded means that the investigation showed that the report was untrue (CFSA 2010).

CFSA provided us information on all investigation referrals that were inconclusive or substantiated, as well as all referrals for Family Assessments. Based on the recommendation of CFSA, because

for the number of days that a youth was Medicaid income-eligible during that time period, and the results did not change substantively.

17 Because of the collinearity between TANF and Medicaid, we tested the model excluding TANF and found no substantive differences.

18 DC Code Section 4-1301.04. CFSA ended the Family Assessment practice in April 2019.

we are interested in childhood experiences, we included inconclusive investigation cases and Family Assessment cases, in addition to substantiated cases, as all are indicative that a youth has experienced some level of childhood maltreatment, even if there was not sufficient evidence to meet the legal threshold for substantiation. Because using system involvement as the threshold already under identifies maltreatment experiences, we opted for the more inclusive measure.

Based on this data, we created two dichotomous variables: one for neglect and one for abuse. We used CFSA’s categorization of allegations as abuse or neglect, which is consistent with federal reporting requirements.¹⁹ Youth were coded a “1” for neglect if they had a substantiated, inconclusive, or family assessment case for neglect,²⁰ and “1” for abuse if they had a substantiated, inconclusive, or family assessment case for abuse. We opted for a 0/1 coding as opposed to a count of the number of referrals because the referral counts are not necessarily an accurate reflection of the number of incidents and, thus, are not a meaningful measure. We tested measuring the number of abuse/neglect subtypes rather than a 0/1; however, they performed weakly in comparison.

In addition to abuse and neglect, we included a dichotomous variable coded “1” if CFSA documented the outcome of any referral as the youth being removed from their home due to maltreatment; “0” if there was no report of removal.

	Coding	Percentage	Source
Removed	0/1	3.8%	CFSA
Childhood Abuse	0/1	6.8%	CFSA
Childhood Neglect	0/1	20.2%	CFSA

Educational Experience. We included multiple variables to examine the impact of a youths’ educational experience on justice system involvement: attendance, discipline, special education eligibility, grade-level retention, and enrollment stability.

To measure student attendance, we included a count of the number of excused absences and a count of the number of unexcused absences. We included separate measures for excused and unexcused absences because they conceptually reflect different levels of engagement, though both represent days missed. Excused absences are days a youth missed for a valid, documented reason, while unexcused absences are either for reasons that are not valid or for which neither the parent nor the child provided valid documentation. For modeling purposes, we log-transformed both variables to correct for outliers.

To measure student discipline, we included a count of the number of times a youth was suspended and the number of days a student was excluded for disciplinary reasons. We included both variables to test the impact of both the number of disciplinary incidents and the number of days of school missed due to exclusion. As with absences, we log-transformed both variables.

¹⁹ We tested the model looking only at investigations and looking at investigations separately from family assessment but these models did not perform as well as the combination measure.

²⁰ We tested the models looking only at physical neglect, omitting educational, medical, and domestic violence neglect and the results were substantively similar.

	Minimum	Mean	Maximum	Source
Excused Absences	0	6.6	181	OSSE
Unexcused Absences	0	13.6	173	OSSE
Number of Suspensions	0	1.7	17	OSSE
Number of Days Excluded (if suspended)	1	6.1	95	OSSE

As a measure of school performance, we included a variable indicating whether a youth had been grade retained the previous year and thus was enrolled in the same grade in SY2016-2017 as they were in SY2015 – 2016. Being grade retained indicates that a youth did not meet the requirements necessary to advance in grade, thus not making the minimum performance requirement. Other potential measures of performance such as standardize test scores or grade point average (GPA) did not work for this analysis. Standardized test scores are the most uniform measure of academic achievement; however, they are not administered in all grades in the District, thus they could not be used across the entire sample. GPA is a volatile measure that depends on the academic standards within each school, and thus is not a reliable measure across schools. Grade retention is coded “1” if a youth is repeating the same grade and “0” otherwise.

As a measure of school enrollment stability, we included a measure of whether youth changed schools during the SY2016 – 2017. Youth were coded “1” if they had an educational record in more than one DC public school or public charter school during the year and “0” otherwise.

	Coding	Percentage	Source
Grade Retained	0/1	4.2	OSSE
Changed Schools	0/1	4.5	OSSE

Mental Health Diagnoses. We obtained Medicaid claims data from DHCF on youth born in the specified date range (January 1, 1999 and January 1, 2006) where there was a mental, behavioral, and neurodevelopmental disorder diagnosis²¹ or mental health or substance abuse treatment. DHCF’s claim-level diagnoses data provide us with the ability to identify youth in the sample with mental, behavior, or neurodevelopmental diagnoses who received medical treatment billed through Medicaid. The data included all International Classification of Diseases (ICD) diagnoses codes associated with each claim. ICD is the official system of assigning codes to diagnoses and procedures associated with medical treatment used for billing in the United States, thus ICD diagnoses codes associated with an individual’s medical claims can be used to identify the conditions with which an individual has been diagnosed. The data do not allow us to identify medical diagnoses of youth who received treatment under private insurance or treatment that was not billed to Medicaid, nor does it allow us to identify youth with undiagnosed mental health or substance abuse disorders. The data, therefore, likely underestimate the prevalence and effects of mental health and substance abuse disorders in the study population.

Using this data, in alignment with the psychology and criminology research literature, we included indicators for five disorder categories/domains: internalizing disorders, externalizing disorders, internalizing-externalizing comorbidity, psychiatric disorders, specific development learning disorders, and specific developmental motor disorders. The literature discusses other mental health disorders

²¹ ICD-10-CM category codes F06 – F99.

beyond the ones included; however, we could not include any disorder for which the prevalence among both justice-involved and non-justice-involved youth was less than 5% because the lack of variation precluded statistical analysis in light of our sample size and methodology.²²

We based our disorder indicators on ICD-10-CM diagnoses categories and codes; however, the diagnosis data included both ICD-9 and ICD-10-CM codes.²³ To standardize the diagnoses and coding, we cross-walked the ICD-9 codes using the CDC's FY 2016 General Equivalence Mappings.

Overall, we include three variables to measure whether youth have disorders in the internalizing and externalizing domains. Specifically, youth are coded as having internalizing-externalizing comorbidity "1" if they have both internalizing and externalizing disorders or Disruptive Mood Dysregulation Disorder (DMDD); "0" if else. Youth are coded as being internalizing-only "1" if they only have one or more internalizing disorder and no externalizing disorders. They are coded as externalizing-only "1" if they have one or more externalizing disorder and no internalizing disorders.

The internalizing domain represent disorders with prominent anxiety, depressive, and somatic symptoms (Achenbach et al. 2016). For our measurement, we included as internalizing disorders the following diagnoses general categories: major depressive disorders (F32 and F33), persistent and unspecified mood disorders (F34 and F39) with the exception of disruptive mood dysregulation disorder (F34.81) (DMDD), phobic and other anxiety disorders (F40 and F41), obsessive-compulsive disorder (F42), reaction to severe stress and adjustment disorders (F43), dissociative and conversion disorders (F44), somatoform disorders (F45), eating disorders (F50), emotional disorders with onset specific to childhood (F93), manic episode (F30), and bipolar disorder (F31). These general categories subsume the common stress-related disorders and mood disorders subcategories consistently found to be internalizing such as generalized anxiety disorder, somatic disorders, panic disorder, separation anxiety disorder, and dysthymia. Consistent with emerging research, the internalizing disorder indicators also includes post-traumatic stress disorder.²⁴

The externalizing domain represent disorders with prominent impulsive, disruptive conduct, and substance use symptoms (Achenbach et al. 2016). For our measurement, we included as externalizing disorders impulse disorders (F63), attention-deficit hyperactivity disorders (F90) (ADHD), conduct disorders (F91), and substance use disorders (F10 – F19).²⁵ These general categories subsume the commonly found externalizing disorder subcategories including oppositional defiant disorder and intermittent explosive disorder. Consistent with Kimonis and Frick (2015), we also include ADHD as an externalizing disorder.

Internalizing-externalizing comorbidity (Comorbid) occurs when individuals have disorders in both the internalizing and externalizing domains (Achenbach et al. 2016) We therefore coded youth with both internalizing and externalizing disorders as comorbid. We also coded youth with DMDD as comorbid as DMDD is associated with both internalizing and externalizing disorders.

22 Speech and language disorders were excluded because .9% of the sample had a diagnosis, 1.4% of justice-involved youth and .9% non-justice involved.

23 The United States switched from ICD-9 to ICD-10 October 1, 2015.

24 ⁵⁹ E.g. Slade 2017.

25 Antisocial Personality Disorder (F60.2) is regularly included as an externalizing disorder; however, no youth in our sample was diagnosed with it.

We also included a dichotomous variable to measure whether a youth has a psychotic disorder, which includes schizophrenia (F20), schizotypal disorders (F21), delusional disorders (F22), brief psychotic disorders (F23), shared psychotic disorders (F25), schizoaffective disorders (F25), and other and unspecified non-organic psychotic disorders (F28 and F29). Youth with a psychotic disorder were coded “1” while all other were coded “0.”

We include two dichotomous variables to measure whether a youth as a specific developmental learning disorder (F81)²⁶ or whether a youth has a specific developmental motor disorders (F82).²⁷ Specific learning disorders include specific reading disorder (F81.0) and mathematics disorder (F81.2). Specific motor disorders include developmental coordination disorder, stereotypic movement disorder, and tic disorders. For each variable, youth with the disorder were coded “1” while all others were coded “0.”²⁸

Individualized Education Program (IEP). We included a dichotomous variable to measure whether a youth had an Individualized Education Program (IEP) in place during the SY2016 – 2017. An IEP is a legal document that specifies special education accommodations for youth who qualify under the Individuals with Disabilities Education Improvement Act of 2004 (IDEA). Students can qualify for an IEP if they have mental, physical, behavioral, or emotional disabilities. Specifically, the IDEA defines a “child with a disability” as a child with “intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance . . . , orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities.” Our data do not distinguish between IEP reasons; for example, individuals with orthopedic impairments are indistinguishable from those with emotional disturbance disorders. All individuals with IEPs were coded “1” while all other were coded “0.”

Mental Health Diagnosis and IEP Interaction. Because IEPs are put into place to provide services to youth with legally defined disorders, including the disorders in this analysis, when they impair educational performance, we include interaction variables between IEP and each included diagnosis category to examine whether the effect of IEPs is conditioned on particular types of diagnoses. This allows us to begin disentangling the effect of IEPs in light of different mental health conditions.

	Coding	Percentage	Source
Internalizing Only	0/1	9.1	DHCF
Externalizing Only	0/1	5.5	DHCF
Comorbid	0/1	9.3	DHCF
Psychotic Disorder	0/1	1.4	DHCF
Specific Learning Disorder	0/1	7.1	DHCF
Specific Motor Disorder	0/1	1.7	DHCF
IEP Eligible	0/1	17.2	OSSE

26 ICD-10-CM refers to this category as “Specific developmental disorder of scholastic skills.”

27 ICD-10-CM refers to this category as “Specific developmental disorder of motor function.”

28 We tested the model with broadly-defined, unspecified emotional and behavior disorders included (F93, F94, F98); however, the variable was insignificant, the model remained substantively unchanged, and the classification of disorders was too broad to provide substantive value to the analysis.

Proximity to Crime. We included three variables measuring a youth’s proximity to crime based on their residential address according to OSSE records: violent crime, property crime, and violent gun-crime hot blocks. The violent crime and property crime variables are counts of the number of violent and property crimes, respectively, that occurred within a quarter-mile radius of a youth’s address between June 1, 2016 and May 31, 2017.²⁹

	Minimum	Mean	Maximum	Source
Proximity to Violent Crime	0	33.3	117	MPD
Proximity to Property Crime	0	147.4	975	MPD

In addition to proximity to crime incidents, we included a measure of whether a youth’s residence is on a block with a high rate of gun violence, a “hot block.” We identified the 35 blocks³⁰ with the most violent gun crime incidents³¹ and created a dichotomous variable coded “1” if the youth’s residence was on one of the blocks and “0” otherwise.

	Coding	Percentage	Source
Residence on a Hot Block	0/1	5.5%	MPD

29 Crime incident data pulled from publicly available MPD crime data (MPD Crime Cards 2019). MPD Crime Cards. <https://dcatlas.dcgis.dc.gov/crimecards/> downloaded August 13, 2019.

30 The top-35 blocks were selected based on a natural break in the data and includes continuous blocks where appropriate.

31 Violent gun crime incidents include Robbery, Assault with a Dangerous Weapon, Homicide, Burglary, and Sexual Assault where a gun was indicated. MPD Crime Cards: <https://dcatlas.dcgis.dc.gov/crimecards/> downloaded February 26, 2020.

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APPENDIX B

MULTIVARIATE MODELS

Model Estimation

Using STATA/IC 16, we estimated a logistic regression multi-variate model to identify the factors statistically associated with juvenile justice system involvement. We used logistic regression because of the dichotomous nature of the dependent variable. Because we used a stratified sampling method and oversampled justice-involved youth, we used STATA's svyset function to assign probability weights and calculate a linearized variance estimator. We used STATA's margins function to estimate the average marginal effects and average predicted probabilities. For our estimations, we held variables at their observed values.

Model Results

Table B.1. presents the results for the logistic model where the dependent variable is being arrested or petitioned for one or more delinquent offense. Table B.2. presents the results for the logistic model of justice system involvement for one or more violent offense.

Table B.1. Logit Model of Juvenile Justice System Involvement

	Coefficient	Standard Error
Demographics		
Female	-.880*	.120
Black¹	.770*	.368
Hispanic of any race ¹	.293	.385
Other ¹	.044	.570
Age	5.495*	.721
Age-squared	-.178*	.0238
Economic Resources		
TANF	.100	.145
Medicaid ≥ 365 Days	.238	.160
Homelessness	.462*	.201
Childhood Maltreatment		
Removed	.119	.248
Childhood Abuse	.374*	.178
Childhood Neglect	.291*	.138
Educational Experience		
Excused Absences (log-transformed)	-.067	.066
Unexcused Absences (log-transformed)	.495*	.058
Suspensions (log-transformed)	.796*	.280
Days Excluded (log-transformed)	.197	.154
Grade Retained	.735*	.194
Changed Schools	.751*	.188
Mental Health Diagnosis and IEP status		
Internalizing Only	.240	.214
Externalizing Only	.717*	.257
Comorbid	.487*	.231
Psychotic Disorder	.438	.374
Specific Learning Disorder	.148	.753
Specific Motor Disorder	.555	1.051
IEP	.290	.205

Interactions			
	Internalizing*IEP	.342	.423
	Externalizing*IEP	.299	.399
	Comorbid*IEP	.932*	.329
	Psychotic Disorder*IEP	-.374	.642
	Learning Disorder*IEP	-.850	.789
	Motor Disorder*IEP	-.918	1.113
Proximity to Crime			
	Violent Crimes within a Quarter Mile	-.004	.004
	Property Crimes within a Quarter Mile	.001	.001
	Gun Violence Hot Block	.412*	.196
Constant		-47.568	5.428
Number of Observations		3,134	
F		23.44	
Prob>F		.000	
¹ White as the Baseline * p < .05, two-tailed test			

Table B.2. Logit Model of Juvenile Justice System Involvement for Violent Crime

	Coefficient	Standard Error
Demographics		
	Female	-1.239*
	Black ¹	1.273 ⁺
	Hispanic of any race ¹	.785
	Other ¹	.316
	Age	5.640*
	Age-squared	-.185*
Economic Resources		
	TANF	.248
	Medicaid ≥ 365 Days	.338
	Homelessness	.453 ⁺
Childhood Maltreatment		
	Removed	.051
	Childhood Abuse	.388 ⁺
	Childhood Neglect	.112
Educational Experience		
	Excused Absences (log-transformed)	-.128
	Unexcused Absences (log-transformed)	.402*
	Suspensions (log-transformed)	1.204*
	Days Excluded (log-transformed)	.026
	Grade Retained	.382 ⁺
	Changed Schools	.536*
Mental Health Diagnosis and IEP status		
	Internalizing Only	.167
	Externalizing Only	.439
	Comorbid	.578*
	Psychotic Disorder	-.422
	Specific Learning Disorder	.412
	IEP	.446 ⁺

Interactions			
	Internalizing*IEP	.088	.560
	Externalizing*IEP	.398	.458
	Comorbid*IEP	.318	.378
	Psychotic Disorder*IEP	.683	.736
	Learning Disorder*IEP	-1.237	.780
Proximity to Crime			
	Violent Crimes within a Quarter Mile	-.001	.004
	Property Crimes withing a Quarter Mile	.000	.000
	Gun Violence Hot Block	.536*	.226
Constant		-49.396*	6.487
Number of Observations		3,134	
F		21.68	
Prob>F		.000	
¹ White as the Baseline			
* p < .05, two-tailed test			
+ p < .05, one-tailed test			

Violent Crime Model

The base probability of becoming involved for a violent crime among all youth is 1.7% while the probability for high-risk youth, those in the 4th quartile of risk, is 5.7%. Similar to the all-crime model, the model finds statistically significant effects on the likelihood of becoming justice involved for a violent crime of gender, age, race, unexcused absences, suspension, changing schools, being diagnosed with internalizing-externalizing comorbidity, and living on a hot block. Unlike the all-crime model, we find race, homelessness, childhood abuse, childhood neglect, being grade retained, and externalizing disorders do not reach statistical significance with a two-tailed test; however, race, homelessness, childhood abuse, grade retention, and IEP status nearly reach statistical significance and would reach statistical significance with a one-tailed test.

Because of the limitations of the data, we are unable to conclude whether the factors that reach significance with a one-tailed test have an effect; the results suggest that these factors may have been statistically significant if the model was more sensitive. The violent-crime model has limited statistical power due to the model including multiple interactions and the dependent variable being a rare-event, thus having limited variance. As a result, there is an increased risk of Type-II errors, or falsely failing to reject the null hypotheses of the factors being unrelated. As a result, we cannot draw conclusions about whether the factors have no statistically significant effect on justice system involvement for violent crime or whether the model lacks the sensitivity necessary to discern the effects.

The findings suggest that the probability of involvement peaks at a lower age for violent crime than all crime, 15.2 and 15.4 years old respectively. Similar to the all-crime model, males are more likely to become justice system involved for violent crime than females; however, the effect of being male is larger for violent crime than all crime, with males 3 times more likely to become justice involved for violent crimes than females as opposed to 2 times more likely for all crime.

Of the factors that reached statistical significance with a one-tailed test, excluding demographic factors, unexcused absences have the largest substantive impact, with the likelihood of justice system involvement increasing 2.64 times among fourth-quarter youth if a youth has the average number of unexcused absences as compared to no unexcused absences. Changing schools has the next largest effect, increasing the likelihood by 2.21 times, followed by suspensions in which one suspension increases the likelihood by 2.11 times. Having internalizing-externalizing comorbid disorders and living on a hot block also statistically affect the likelihood of justice system involvement for violent crimes. The relative size of the effect of unexcused absences and comorbid disorders is larger for all crimes than for violent crimes, while the relative size of the effect of changing school, suspensions, and living on a hot block is larger for violent crimes than all crimes.

Of the non-demographic factors that fail to reach significance with a one-tailed test but are significant with a two-tailed test, IEP status has the largest magnitude of effect; however, IEP status did not have a statistically significant, independent effect in the all-crime model. Rather, in the all-crime model, the effect of IEP was conditioned on comorbid disorders.

The findings suggest that similar factors may be affecting justice system involvement for violent crime as all crime; however, there may be some substantive difference in factors such as IEP status and childhood neglect, and there may be differences in the relative magnitude of effects. Thus, while we cannot confidently draw conclusions, the findings are suggestive that comparing the factors that affect violent crime versus all crime might be a fruitful avenue of future research.

Change in Probability of Violent Crime Justice Involvement Among Youth in the 4th Risk Quartile

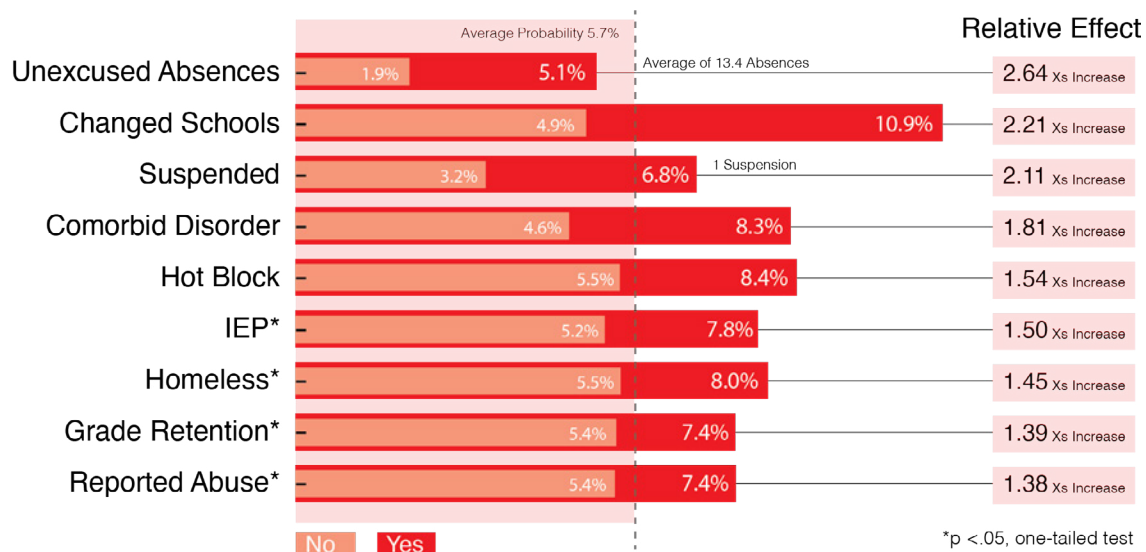


Figure 23.

APPENDIX C
**INTERVIEW
METHODOLOGY**

To obtain the perspective of service providers on what factors contribute to youth engaging in delinquency and becoming involved in the juvenile justice system, we conducted in-depth, semi-structured interviews with government agencies and non-profit organizations working with youth in the District of Columbia. Individuals with first-hand experience working with justice-involved and at-risk youth provide insight into the youth that administrative data cannot, and, because they observe multiple youth, their observations are generalizable across multiple youth. The interviews were structured around three questions, though the guide was open-ended and allowed for probing questions:

1. What common factors do you see in youth that become involved in the juvenile justice system?
2. How do these factors affect whether youth become involved in the juvenile justice system?
3. What services do youth need to prevent delinquency and justice system involvement?

To recruit respondents, we conducted direct outreach to juvenile justice, social service, and education-sector government agencies, and nonprofits contracted with those agencies to provide services to youth. We then employed a snowball sampling method to obtain recommendations for other agencies and individuals who provide direct services to justice-involved or at-risk youth. Of the 59 interviews conducted, 25 respondents (42.4%) were employed by government agencies and 34 (57.6%) worked for nonprofit organizations. Twenty-six interviewees (44.1%) work with youth through the juvenile justice system while the other 33 (55.9%) are connected to youth outside of the justice system, though some of their youth are or become juvenile justice system involved.

Interviews ranged between 20 minutes to over 1.5 hours, with the average length being approximately 1 hour. All but four interviews were conducted in-person, and all but two were audio-recorded and professionally transcribed. The interviews were voluntary and conducted at the interviewees preferred location, most often in the private offices or conference rooms of the interviewees. All interviewees were offered confidentiality.

Interviews were analyzed using an inductive, thematic approach for which the researcher read all transcripts, or notes where applicable, to generate initial codes. Next, the researcher conducted a detailed coding of each transcript using an open-coding approach, identifying relevant passages and modifying codes throughout the process. For reliability purposes, an intern was trained and coded a subset of transcripts. After all transcripts were coded, the codes were exported to Excel for analysis.

APPENDIX D

**SURVEY AND FOCUS
GROUP METHODOLOGY**

In order to obtain the perspective of justice-involved youth on what factors contribute to youth engaging in delinquency, and in accordance with the requirements of the Comprehensive Youth Justice Amendment Act, we administered surveys to and held focus groups with justice-involved youth in the fall of 2018. Youth involved in the justice system provide unique insight and perspectives into why youth engage in delinquency.

Sample Eligibility

We drew our sample for the surveys and focus groups from two populations: 1) individuals under 21 years of age incarcerated at the Department of Corrections (DOC), and 2) individuals committed to the Department of Youth Rehabilitation Services (DYRS).¹ Sample eligibility was limited to individuals under the age of 21 committed to DYRS and community-placed or placed at New Beginnings, and individuals under the age of 21 at DOC who had been adjudicated, disposed, and sentenced to DOC. The diverse nature of the populations with regards to placement and adjudication statuses necessitated different approaches to determine eligibility.

All individuals incarcerated at the DOC are held securely, under 24-hour surveillance, in one of two facilities located in the District of Columbia. By contrast, individuals committed to DYRS may be placed in local secure facilities, in out-of-state facilities, or in the community. Community-placed youth may be housed with their parents, approved guardians, or in community-based residential facilities including foster care, shelter care, or group homes.

DOC and DYRS populations also differ in their adjudication statuses. All DYRS committed youth, community-based and securely held, have been adjudicated and disposed, whereas DOC-incarcerated individuals can be in all stages of the judicial process as DOC incarcerates pre-trial offenders, sentenced misdemeanants, convicted felons awaiting transfer to the Federal Bureau of Prisons, and other individuals being transferred in the custody of the United States Marshalls. Thus, individuals incarcerated at DOC have not necessarily been adjudicated and sentenced.

We limited our sample of individuals in secure facilities (DOC and DYRS) to those who were adjudicated, disposed/sentenced, and placed at CTF, CDF, or New Beginnings. Limiting the eligibility to individuals who had been adjudicated and disposed/sentenced served two purposes. First, it ensured comparability between the DOC and DYRS samples with regards to the extent to which they were justice-involved by requiring all to have gone through all steps of the judicial process. Second, it reduced the perception that participation could impact individuals' cases. Though we stressed in the consent process that we were taking steps to ensure that no information provided could be tied to an individual and that participation could in no way affect their case, limiting participation to individuals whose cases had been completed added an extra layer of assurance. We, additionally, required individuals to be placed rather than awaiting placement or transportation for logistical purposes as the population of placed individuals is more stable and thus easier to recruit over the extended time period of data collection.

¹ The survey population was set by D.C. Code §22-4234.

Due to resource and logistical requirements, for DYRS securely committed youth, we elected to conduct the survey and focus groups in facilities with 5 or more placed youth and within one day's travel from the District. This resulted in only one DYRS facility being included: New Beginnings, which is the primary secure placement location for committed youth. Because both of DOC's facilities are located within the District, we included both.

Because all community-placed youth committed to DYRS have been adjudicated, disposed, and placed, all were eligible for inclusion in the sample.

Recruitment

The recruitment approach was developed in consultation with administrators at DYRS and DOC to maximize voluntary participation within secure facilities and community placements while accounting for differences within the populations. We utilized different recruitment approaches for individuals placed in DOC, New Beginnings, and in the community due to administrative and logical requirements.

DYRS Community-based. We sampled community-based youth through their Credible Messenger Mentoring Groups. Credible Messenger Groups are part of DYRS's Credible Messenger Initiative, which is a transformative, mentoring intervention program for committed youth (DYRS N.d.). Through the Credible Messenger Initiative, all committed youth are assigned a Credible Messenger, an individual from their community with relevant life experiences who serve the needs of the youth through an expanded mentoring approach. Credible Messengers are assigned through contracted non-profit organizations who serve 20 – 30 youth. Part of the Credible Messenger Initiative includes twice-weekly group convenings by each non-profit of the committed youth they are serving and their mentors called Credible Messenger Groups (Group). In total, at the time of the data collection, there were six non-profit organizations holding Group meetings biweekly in different parts of the District.² All committed community-placed youth are invited, and expected, to attend their assigned group meetings; however, attendance is voluntary in that there are no penalties for non-participation. Since all community-based youth are eligible to attend Group, sampling through the Groups allowed for the possible inclusion of all youth. Additionally, working with the Groups logistically provided the best way to connect with community-based youth as they are the only semi-frequent, regular convenings of this population.

We utilized a two-stage recruitment strategy for community-based youth. First, the two CJCC staff members who would be conducting the surveys and focus groups met with the Credible Messengers to explain the study, provide copies of all material (including the assent forms, surveys, and focus group protocol), provided information the Messengers could disseminate to the youth, and answered any questions so that the Credible Messengers understood the nature and scope of the study. The initial meetings served to provide the Credible Messengers sufficient familiarity with the study that they could inform their youth what would be taking place and answer questions so that the youth were well-informed, and it allowed the Messengers to maintain credibility with their youth. The meetings also enabled the researchers to build rapport with the Credible Messengers so the Messengers felt comfortable permitting the researchers to interact with the youth.

² At the time of the data collection, the groups were administered by Inner City Collaborate, East of the River Family Strengthening Collaborate, Life Deeds, East of the River Police Community Partnership, Sasha Bruce, and GoodProjects.

Second, the same two staff members attended two Group meetings to observe, participate, and interact with the youth without collecting any data. This step was useful to build rapport with the youth as well as to provide them with information about the study in advance of any data collection and allow them to ask questions. In each meeting attended, the researchers informed the youth of why they were there, the nature of the study, and when they would be collecting data.

New Beginnings. To recruit youth in New Beginnings, we held initial meetings with administrative staff at the facility, answered questions, and provided relevant material including information about the study for them to disseminate and use to inform their youth as permitted by the facility. On the day of data collection, we informed the youth of why we were in the facility and then held an initial meeting with the committed youth who wished to attend in order to provide them with information and answer questions about the study. We then gave them the option of participating in the study.³

Department of Corrections. As with New Beginnings, we held initial meetings with administrative staff at the facility, answered questions, and provided relevant material including information about the study for them to disseminate and use to inform their youth as permitted by the facility. The day prior to the focus groups and survey administration, the researchers held townhall meetings in each of the facilities to which interested, eligible youth were invited to attend and learn more about the study. DOC identified and invited eligible youth and transported them to a central meeting location routinely used for group gatherings. During the townhall meeting, the researchers presented the purpose and procedures of the study, provided information including the consent documents, and answered questions. Participants were informed that if they wished to participate in the study the following day, they would have the opportunity to be transported. DOC arranged transportation.

Incentives. On the recommendation of DYRS, DYRS youth were provided \$10 Visa gift cards to be used at Chipotle, or a similar restaurant, if they participated in the survey or focus group. Youth received a gift card for each part of the study in which they participated. The gift cards were similar to other incentives or rewards regularly provided by DYRS. In accordance with DOC policy, no incentives were provided for participation.

Informed Consent and Privacy Protections

Since the study included minors and adults, different levels of consent/assent were required. Adults were able to provide legal consent to participate. DYRS granted in loco parentis consent for all committed youth. In addition to legal consent, minors provided informed assent to participate in the study.

³ After the initial meeting, the youth openly discussed whether or not to participate and 40% opted to not participate; therefore, we do not believe that having the informational session on the same day as the data collection created a coercive environment.

Prior to the start of the survey and, separately the start of the focus group, researchers provided participants with a copy of the consent/assent forms, allowed time for them to read the forms, and then reviewed each section verbally to ensure comprehension. The consent forms included information on the:

- Name of the study and study goals;
- Voluntary nature of participation, and the option to skip any questions or stop at any time;
- Overview of the survey procedures;
- Confidentiality of the responses;
- Mandated reporting requirements (if required);
- Availability of counseling services;
- Freedom to contact counsel; and
- The risks and benefits of participation.

Surveys were administered anonymously with no identifying information collected on survey forms that would permit linking the survey responses with the consent forms. Additionally, the surveys were randomly numbered such that it was not possible to link survey responses to specific groups. The focus groups were confidential with no identifying information collected; no audio or video recordings were taken. Consent forms were maintained in such a way that it is not possible to determine which youth participated in which focus groups.

Participation

In total, 49 people completed the survey and 50 participated in the focus groups across the three secure facilities and six Community Messenger groups. 71 unique persons participated in either the focus groups, surveys, or both. Though 49 people completed the survey, only 36 surveys were useable as 13 surveys were incomplete or clearly the product of random responses, a form respondent falsification, in-total or in-part and thus were thrown out.

DOC. On the days we conducted townhall meetings at DOC, 27 individuals (26 males, 1 female) were eligible to participate across the two facilities.⁴ DOC identified, notified, and arranged transport to eligible individuals who desired to attend the townhall. Of those eligible, 10 (37%) attended the townhall meetings, and 6 (22.2% of total; 60% of townhall attendees) participated in the study, 5 males and 1 female. Because the facility is gender-segregated and there was only one female, we were unable to include the female participant in the focus groups. All males who opted to participate participated in both the survey and the focus groups.

New Beginnings. On the day we conducted surveys and focus groups at New Beginnings, 10 youth were committed and placed at the facility. 6 youth (60%) participated in the study. New Beginnings allows gender mixing for activities within the facility, so we were able to hold one focus group session with all participants.

⁴ Because the surveys and focus groups were held the day after the townhall, there could have been a small change in the number of eligible people between the two days.

Community-based. Because we administered the surveys and conducted the focus groups across a three-month period and the committed population and placements fluctuate, we cannot get a fixed number of eligible community-placed youth during our data collection period. However, on a representative day, 139 youth were on community-based status and placed within the District of Columbia. 39 youth (28.1%) participated in the focus groups, and 37 youth (26.7%) participated in the surveys.

Data Collection

The surveys and focus groups were held in rooms provided by DOC, New Beginnings, and the Credible Messenger Groups. In DOC and the Credible Messenger Groups, only the researchers and participants were permitted in the room during the data collection. Staff members and Credible Messengers were not able to see or hear participants during the data collection. For security purposes, at New Beginnings, a staff member was required to be present at all times; however, they remained on the far side of the room out of aural range during the focus groups.

On DYRS's recommendation, the surveys and focus groups were administered in two separate sessions with a sufficient break between the two. For community-based youth, the sessions occurred in two different Group meetings, thus a minimum of two days apart. For youth at New Beginnings, the sessions occurred before and after lunch with lunch breaking the survey and the focus group administration. Participants were given the option of not returning after lunch if they did not wish to participate in the second session.

On DOC's recommendation, the surveys and focus groups were administered in one session with the option of a short break and renewal of consent in-between. Participants expressed no fatigue and, in one instance, requested no break between sessions.

Focus Group

The focus groups were semi-structured and designed around asking participants their opinions of how and why young people became justice involved. One of the two researchers served as the facilitator while the other served as notetaker. The focus groups lasted on average 45 minutes with a maximum of 60 minutes. Group-size ranged from 2– 11 participants. Participants were instructed to provide their opinions but not to reveal personal information about themselves and were reminded about the mandated reporting requirements in order to avoid personal disclosures that could be harmful for the youth or inappropriate in a group setting.

The focus group protocol was flexible, permitting probing and follow-up questions, but revolved around three themes:

1. What are the experiences of youth that become justice involved?
2. What behaviors or decisions resulted in justice system involvement?
3. What could help young people so they don't become involved in the system?

Surveys

For the surveys, participants were given one of three self-administered questionnaires, depending on their placement status.⁵ In addition to basic demographic questions, youth were asked about a range of topics included adverse childhood experiences, basic needs fulfillment, experiencing bias, social support structure, personal attachment, normlessness, risk taking, parent attachment, opportunities to get ahead, and future expectations. The questions were derived from validated instruments or followed best practices.

Demographics. Youth were asked standard demographic questions on age, race, ethnicity, gender identity, sexual orientation, and race. For the gender identity and sexual orientation questions, respondents were given the option of writing in an answer if none of the answers best classified them or not responding. The racial classifications align with the Department of Education standards that OSSE follows except that race and ethnicity were separated permitting people to identify as both ethnically Hispanic/Latino and a racial classification.

Demographics	
Question	Answer Choices
Birth Year	Fill In
Gender Identity: How do you identify yourself? ⁶	Male; Female; Trans male/Trans man; Trans female/Trans woman; Genderqueer/Gender non-conforming; Different identify (please state); prefer not to say.
Sexual Orientation: Which of the following best represents how you think of yourself? ⁷	Heterosexual or straight; Gay or lesbian; Bisexual; Prefer to self-describe; Prefer not to say
Ethnicity: Are you Hispanic or Latino?	Yes; No
How would you describe yourself? ⁸	American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White; Other

To understand the experiences of youth, we asked participants questions about their family living arrangement, exposure to adverse childhood experiences (ACEs), and basic needs fulfillment. To minimize risk of traumatization, some ACEs questions were omitted for minor participants. The ACEs questions that were included for all participants were derived from instruments regularly and intended to be administered to minors: National Survey of Children’s Health (HHS 2018), Youth Risk Behavior Survey (OSSE 2018), and Child Food Security Survey (Connell et al. 2004). Thus, they presented no

⁵ The survey instrument was field tested on 10 volunteers who were either committed or previously committed to DYRS. Of the 10 volunteers, two did not complete the survey: one because they found the survey to be too long and the other because they had a meeting to attend. Those who completed the survey took 10 – 30 minutes to complete, and all but one disagreed with the statement “the survey was too long.” All individuals who completed the survey stated they “would do the survey again knowing what is on it.” Of those who completed the survey, all disagreed or strongly disagreed with the statement “some of the questions made me upset” and the statement “some of the questions were hard to understand.” One youth wrote, “I feel as though [sic] the questions were mostly down to earth not too harsh.” The instrument was also tested for readability using the Flesch Kincaid Reading Ease scale and tested at a 10-year-old reading level.

⁶ Questions created using best practices for asking question to identify gender identity (GenIUSS 2014).

⁷ Modified from the National Health Interview Survey (CDC 2016).

⁸ Questions in alignment with Department of Education data collection requirements (Department of Education 2007).

higher risk than regularly administered national and school-based surveys. One important component of ACEs is whether an individual has experienced or witnessed abuse or interpersonal violence. Despite the value of obtaining this information, such questions were omitted from the questionnaires administered to youth committed to DYRS to minimize the risk of trauma to minors. However, these questions were administered to adults at the DOC because of the decreased risk of trauma when dealing with adults; moreover, the questions included were derived from an optional adverse childhood experiences module of the Behavioral Risk Factor Surveillance System (CDC 2015) that was administered to adults in the District in 2010 (DC Health 2010).

To further minimize the risk of traumatization, questions about adverse childhood experiences, including basic needs fulfillment, were presented on a separate page with a separate warning that the questions “may make you feel sad or uncomfortable” and that participants “may skip these questions,” thus reaffirming the voluntary nature of participation. The approach of having different questionnaires for minors and adults balances the value of gathering information on ACEs while minimizing the risk of trauma for participants. Moreover, the distress warning immediately preceding the questions and the survey design separating questions about ACEs from the rest of the survey questions further minimizes risk of harm by providing participants ample opportunities to avoid uncomfortable or triggering questions.

Youth Experiences. As indicated in the tables below, some of the ACEs questions were yes/no questions while others, including the basic needs fulfillment questions, asked youth to identify the frequency with which they had these experiences on a five-point scale: Never, Once, a Few Times, Many Times, Frequently.

Adverse Childhood Experience Questions (ALL PARTICIPANTS)	
Question	Answer Choices
Are your parents or guardians divorced or separated?	Yes/No
Has one or both of your parents or guardians died?	Yes/No
Have one or both of your parents or guardians been in prison or jail?	Yes/No
Has anyone that you lived with served time in jail?	Yes/No
Have you ever lived with someone who used drugs (including marijuana) or alcohol frequently?	Yes/No
I was bullied on school property. (Bullying is when 1 or more person tease, threaten, spread rumors about, hit, shove, or hurt you over and over again.)	Never, Once, A few times, Many times, Frequently
I was bullied off school property.	Never, Once, A few times, Many times, Frequently
I was bullied online or electronically? (Count being bullied through texting, email, Instagram, Snapchat, Facebook, or other social media or internet messaging.)	Never, Once, A few times, Many times, Frequently
I saw or heard someone being beaten up, stabbed, or shot in my neighborhood?	Never, Once, A few times, Many times, Frequently
I was in foster care.	Never, Once, A few times, Many times, Frequently

Adverse Childhood Experience Questions (DOC ONLY)

Question	Answer Choices
I saw or heard my parent, step parent, or another adult who was helping to raise me being yelled at, screamed at, sworn at, insulted or humiliated.	Never, Once, A few times, Many times, Frequently
I saw or heard my parent, step parent, or another adult who was helping to raise me being hit or cut with an object such as a stick or cane, bottle, club, knife or gun.	Never, Once, A few times, Many times, Frequently
A parent, step parent, or another adult who was helping to raise me swore at you, insulted me, or put you down.	Never, Once, A few times, Many times, Frequently
A parent, step parent, or another adult who was helping to raise me swore at you, insulted me, or put me down.	Never, Once, A few times, Many times, Frequently
A parent, step parent, or another adult who was helping to raise me pushed, grabbed, shoved, or slapped me.	Never, Once, A few times, Many times, Frequently
A parent, step parent, or another adult who was helping to raise me hit me so hard that I had marks or were injured.	Never, Once, A few times, Many times, Frequently
A parent, step parent, or another adult who was helping to raise me acted in a way that made me afraid that I would be physically hurt.	Never, Once, A few times, Many times, Frequently

Basic Needs Fulfillment⁹

Question	Answer Choices
<i>Food Insecurity</i>	
I was hungry but did not eat because there wasn't enough food.	Never, Once, A few times, Many times, Frequently
I had to skip meals because my family didn't have enough money for food.	Never, Once, A few times, Many times, Frequently
I worried that we would run out of food at home before my family got money to buy more.	Never, Once, A few times, Many times, Frequently
I ate less because my family didn't have enough money to buy food.	Never, Once, A few times, Many times, Frequently
<i>Housing Insecurity</i>	
My home had electricity and heat when I needed it.	Never, Once, A few times, Many times, Frequently
I worried about not having a place to stay at night.	Never, Once, A few times, Many times, Frequently
I had to stay with friends or relatives because I had nowhere else to stay.	Never, Once, A few times, Many times, Frequently
I had to sleep outdoors in a public space because I had nowhere else to go.	Never, Once, A few times, Many times, Frequently
I stayed in a housing shelter.	Never, Once, A few times, Many times, Frequently
<i>Material Goods</i>	
I was embarrassed by my clothes.	Never, Once, A few times, Many times, Frequently
I had clothes that fit.	Never, Once, A few times, Many times, Frequently
I had a cell phone.	Never, Once, A few times, Many times, Frequently
I had a computer at home.	Never, Once, A few times, Many times, Frequently

⁹ Modified from the Child Food Security Survey (Connell et al. 2004).

Basic Needs Fulfillment ⁹	
Question	Answer Choices
Hygiene	
I had access to what I needed to take a shower or bath.	Never, Once, A few times, Many times, Frequently
I had access to what I needed to brush my teeth.	Never, Once, A few times, Many times, Frequently
[Females] I had access to tampons or pads when I needed them.	Never, Once, A few times, Many times, Frequently
I had access to deodorant.	Never, Once, A few times, Many times, Frequently
I had clean clothes to wear.	Never, Once, A few times, Many times, Frequently
General	
I did not have access to basic things that everyone else had.	Never, Once, A few times, Many times, Frequently

To determine youth perceptions of having been discriminated against, we added questions from the Perceptions of Racism in Children and Youth Questionnaire (Patcher et al. 2010). The questions present a series of situations and ask youth to “think about whether you have ever been discriminated against because of the color of your skin, language or accent, or because of your country of origin” and indicate yes or no.

Experiences with Discrimination	
Question	Answer Choices
Food Insecurity	
Been watched closely or followed around by security guards or store clerks at a store or mall?	Yes/No
Gotten poor or slow service at a restaurant or food store or mall?	Yes/No
Gotten poor or slow service at a store?	Yes/No
Been accused of something you didn't do at school?	Yes/No
Been treated badly or unfairly by a teacher?	Yes/No
Had the feeling that someone was afraid of you?	Yes/No
Been called an insulting name?	Yes/No
Had someone make a bad or insulting remark about your race, ethnicity, or language?	Yes/No
Had someone be rude to you?	Yes/No
Had people assume you're not smart or intelligent. Seen your parents or other family members treated unfairly or badly because of the color of their skin, language, accent, or because they came from a different country or culture?	Yes/No

To understand whether youth have protective factors in their lives, we asked questions to evaluate the extent to which they have positive a social support structures and whether they have strong parental attachments. Specifically, we provided a series of statements and asked the youth to indicate how strongly they agree with the statement on a five-point scale ranging from strongly disagree to strongly agree.

Social Support Structure¹⁰	
Question	Answer Choices
I have people close to me who motivate and encourage me.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have close family members who want to help me.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have good friends.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have people close to me who can always be trusted.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have people close to me who understand my situation and problems.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have people close to me who expected me to make positive changes in my life.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have people close to me who helped me develop confidence in myself.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I have people close to me who respect me and my efforts.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I feel safe walking around my neighborhood.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
People in my neighborhood look out for one another.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
<i>Parental Attachment¹¹</i>	
I enjoy talking things over with my parents.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I tell personal things to my parents.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
My parents don't understand my problems.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
My parents make I feel trusted.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
My parents are always picking on me (reverse)	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I can go to my parents for advice and guidance	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
My parents praise me when I do something well.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I would like to be the kind of person my mother is.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I would like to be the kind of person my father is.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

Youth Perceptions. The last part of the survey was concerned with understanding how youth think concerning societal expectations and their own future expectations (Agnew 1992). We limited our focus to four areas: belief in normlessness (or the extent to which they justify rule breaking), risk taking beliefs, perception of opportunities, and expectations for the future. As with the social support and parental attachment questions, we provided a series of statements and asked the youth to indicate how strongly they agree with the statement on a five-point scale ranging from strongly disagree to strongly agree. We randomized the question ordering to obscure thematic question groupings and avoid cuing youth into responses.

¹⁰ Modified from the Texas Christian University Adolescent Assessment (Institute of Behavioral Research 2005).

¹¹ Modified from the Denver Youth Study (Huizinga 2016).

Normlessness¹²

Question	Answer Choices
Sometimes it is necessary to lie to teachers.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
You can make it in school without having to cheat on tests.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
It is important to do your own work.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
It's sometimes necessary to play dirty to win.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Making a good impression is more important than telling truth to teachers.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Making a good impression is more important than telling truth to friends.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
It's okay to break the rules to be popular.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
To gain respect, it's sometimes necessary to beat up on others.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
It's okay to lie to protect friends.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Making a good impression is more important than telling truth to parents.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
You should always be honest with your parents.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Sometimes it is necessary to lie to keep your parents' trust.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
It might be necessary to break parents' rules to keep their trust.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
<i>Risk Taking¹³</i>	
I only do things that feel safe.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I avoid anything dangerous.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I am very careful and cautious.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I like to do things that are strange or exciting.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I like to take chances.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I like the "fast" life.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I like friends who are wild.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
<i>Opportunities to Get Ahead¹⁴</i>	
A person like me has a pretty good chance of going to college.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Most people are better off than I am.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I'll never have as much opportunity to succeed as people from other neighborhoods.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I am as well off as most people.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
The world is usually good to people like me.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Unless my family can afford to move out of my neighborhood, I won't get ahead very fast.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I won't be able to finish high school because my family will want me to get a job.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

¹² Modified from the Denver Youth Study (Huizinga 2016).

¹³ Modified from the Perceptions of Racism in Children and Youth Questionnaire (Patcher et al. 2010).

¹⁴ Modified from the Denver Youth Study (Huizinga 2016).

Normlessness¹²

Question	Answer Choices
There is a good chance that some of my friends will have lots of money.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
My family can't give me the opportunities that most young people have.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I'll never have enough money to go to college.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
There isn't much chance that a young person from my neighborhood will ever get ahead.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
If a person like me works hard (he/she) can get ahead.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
Most successful people probably used illegal means to become successful.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
When things are going badly, I know they won't be bad all the time.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
All I see ahead are bad things not good things.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
As I get older, things will be better.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I never get what I want so it's dumb to want anything.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will have more good times than bad times.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
<i>Future Expectations¹⁵</i>	
I will become a parent sometime between now and the time I turn 21.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will be the victim of violent crime at least once in the next two years.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will be arrested, whether rightly or wrongly, at least once in the next two years.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will receive a high school diploma by the time I turn 21.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will have a four-year college degree by the time I turn 30.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will serve time in jail or prison between now and when I turn 21.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will travel outside of the DMV region.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will travel outside of the East Coast.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will travel outside of the United States.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will die (from any cause) before I turn 25.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will have a better life than my parents.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
I will make more money than my parents.	Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

¹⁵ Modified from the National Longitudinal Study of Youth (Bureau of Labor Statistics 2012).

Limitations

The sample is not a random sample and thus the survey are not representative of the target population; rather, it is biased towards the youth committed to DYRS and incarcerated at DOC who are most engaged, trusting of government, and have the greatest sense of efficacy. Because of the voluntary nature of participation, the sample is comprised of those individuals who are most willing to engage with government representatives and see value in participating, thus we would expect participants to have a lower level of distrust in the government and higher sense of efficacy than those who did not participate. Because the recruitment approach for community-placed youth took place during Credible Messenger Group meeting, our sample is biased towards youth that are more engaged with DYRS programming. In particular, we would expect youth who attend Credible Messenger Groups systematically differ from those who do not attend group with regards expectations for the future, bonds with caring adults, and engagement with other pro-social settings as a direct product of their engagement with the groups and mentorship through the program. Individuals who are not engaged with DYRS credible messengers, not willing to cooperate with any government agency, or see no value in sharing their insights would not be included in the sample.

Even among those who chose to participate, and despite being given anonymity, there was a high proportion of DYRS respondents (25.6%) who failed to complete the survey or falsified responses. This brings into question the reliability of the survey responses. Though we tested and received feedback on the survey from youth in the population target, the length of the survey likely contributed to the non-completion rate. The survey was 4.5 pages long and consisted of a series of declarative statements with instructions for the respondent to indicate their level of agreement. Attrition was most common after the 2nd page, thus future surveys may have greater response validity if they are limited to 2 pages, even at the cost of gathering less information.

The focus groups proved to be more valuable than the surveys in obtaining youth insight; however, it took a significant amount of preparation and exposure to get the youth, particularly DYRS youth, comfortable talking with the researchers, and, even then, engagement-level varied across youth. Youth uniformly expressed reservations about the value of participation saying that, from their experience, speaking with representatives of the government failed to produce useful change, and they were concerned about whether the researchers had power we to improve their situations. The youth also questioned why the researchers, not high-ranking members of the government, were the ones coming to speak with them and expressed skepticism about whether people genuinely cared. Thus, the focus groups demonstrated that the youth have valuable and important voices that they desire to be heard; however, their feelings of a disempowerment and invisibility made them skeptical about participation. Giving youth avenues to express themselves and showing them a direct line between their activities and outcomes that improve their lives might give them a greater sense of empowerment.

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APPENDIX E

**JUVENILE SOCIAL FILE
METHODOLOGY**

Overview of Juvenile Social Files

To supplement the information provided in the youth survey, we reviewed the Juvenile Social Files (JSF) of a randomly-selected sample of 50 committed youth drawn from a census of all youth under commitment on a single day in 2018.¹ JSFs are comprised of documents that pertain to a youth's family life, education, and mental health created by various agencies throughout the process for court proceedings, including delinquency proceedings, and for placement decisions (D.C. Code §16-2332). These files can contain information on the backgrounds of justice-involved youth with regard to ACEs. A variety of documents may be found in JSFs, such as predisposition studies and examination reports; however, not all youth receive the same studies or evaluations. Rather, the content of JSFs depend on what assessments the Court ordered or relevant agencies, such as the Court Social Services Division (CSSD) or DYRS, deemed necessary for each individual youth. Thus, while the files may provide some insight, they are neither exhaustive nor are they necessarily comparable across youth.

Based on conversations with representatives from the Family Court, CSSD, and DYRS, we identified three main documents as potentially providing relevant information on youths' ACEs: Social Study, Psycho-educational Evaluation, and Psychiatric Evaluation. Though not all youths' files contained all of these documents, all of the youth sampled had at least one of these reports. The Social Study² document is created by a CSSD probation officer and consists of information about the youth and a running record of the youth's supervision history. The Social Study can include information on a youth's social, health, substance abuse, and family history. To complete the Social Study, probation officers may interview the youth and their family members, conduct a school visit and obtain school records, review CFSA history, review drug test results, and review prior assessments of the youth. The content and quality of the Social Studies varies based upon the probation officer who is compiling the information and the level of access and receptivity they receive from relevant individuals. Thus, Social Studies can be very rich with information if probation officers review a sufficient amount of information and the youth and their family were accessible and willing to answer questions candidly. However, if probation officers do not review much information and/or are unable to get knowledgeable individuals to speak with them, the Social Studies are less useful. While the variation affects what we can glean about the youth, it does not reflect differences in the youth.

The Psycho-educational Evaluation is conducted by psychologists in the Child Guidance Clinic Division (CGC) of CSSD, which is responsible for providing comprehensive clinical and forensic psychological evaluations, among other responsibilities. Psycho-educational Evaluations are conducted only upon court order. An evaluation involves a clinical interview with the youth as well as the administration of a series of tests. The evaluation report includes background information on the youth such as their educational, family and social, and substance use history, test results, and Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnoses based up on the evaluation. The background information is derived from multiple sources including interviews with the youth and relevant family. Because these evaluations are only done under specific circumstances, fewer youth have them completed.

1 The month and date the sample was selected is being withheld to protect the privacy of young the youth sampled.

2 This document is not necessarily the same as a full social study, which can be ordered by the court.

Psychiatric Evaluations are similarly only conducted upon court order and are performed by a psychiatrist contracted by DBH. As part of the psychiatric evaluation, the evaluator may interview the youth and family and can examine the documents in the youth's court record including the Psycho-educational Evaluation and Social Study. As a result, some of the information in the Psychiatric Evaluation will be duplicative of the other reports; however, the independent interviews can provide additional information not contained in other reports. Additionally, the psychiatric evaluation includes an evaluation of whether the youth meets DSM-5 disorder criteria.

As with the social study, the breadth and quality of information in the Psychiatric and Psycho-educational Evaluations will depend upon the availability of information and the level of candor and cooperation received from the youth and their family. The nature of the youth and the settings in which this information is collected does not necessarily lend itself to information gathering. Thus, the information in the JSFs is incomplete and unexhaustive. However, it contains important information that can further our understanding of delinquent youth, especially in conjunction with the other data collected for this report.

Data Collection and Measurement

Based on a preliminary reading of a sample of de-identified Social Studies, Psycho-educational, and Psychiatric Evaluations, we identified information that could be found within the JSFs. Specifically, JSFs contained the following information on whether:

- There is a reported family history of mental illness or emotional problems among the youth's parents, nonparent, or unspecified individual.
- There is a reported history of alcohol abuse³ among the youth's parent, nonparent, or unspecified individual.
- There is reported history of substance abuse,⁴ not including alcoholism, among the youth's parent, nonparent, or unspecified individual.
- The youth has a family member who is/was incarcerated, including member of the family with whom the youth does not primarily reside.
- The youth's parents⁵ are separated or divorced.⁶
- There is a reported history of physical conflict between the youth's family members, not directed towards the youth.
- The youth was the victim of physical abuse.
- The youth was the victim of emotional abuse.
- The youth was a victim of sexual abuse.
- The youth had ever been placed in foster care.
- The youth reports feeling unsafe in their community or daily environment, including school.

3 Identified as "abuse" or "excessive use."

4 Identified as "abuse" or "excessive use."

5 As identified by the youth and not limited to biological.

6 14% of youth specified that their parents had never been together.

- The youth reported witnessing nonviolent crime.
- The youth reported witnessing violent crime.
- The youth was reported to have experienced non-housing related physical neglect including a lack of food or clean clothes.
- The youth had experienced homelessness.
- The youth had experienced inadequate housing.⁷
- The youth experienced the death of a close friend or family member by natural or unnatural causes.
- The youth reports their custodial parent(s) not caring about them, not wanting them around, or not liking them.
- The youth has a reported history of drug or alcohol use.
- The youth displays symptoms consistent with a DSM V diagnosable disorder.
- The youth reported having a close relationship with an adult role model.⁸

The files were independently reviewed and coded by two researchers. Initial coding had a high rate of agreement, and any discrepancies in coding were reviewed and reconciled by both researchers to ensure coding reliability. The coders reviewed the documents in the social files and if any document indicated that a youth had experienced the coded condition, the youth was coded as “yes,” if the documents indicated that a youth had not experienced the coded condition or did not indicate either way, the youth was coded “no.” If the documents had conflicting reports between the youth and family members, the youth’s report was coded. If the documents indicated that the youth reported no experience, but there is official documentation to the contrary, then the youth was coded “yes.” For instance, if a youth says they never experienced physical violence, but a CFSA report states that the youth was removed from their household due to physical violence, the youth was coded “yes.”

Due to the coding procedures, a coding of “no” is not an indication that the youth did not experience the condition; rather, it is an indication that the JSF do not indicate that a youth had the experience.

⁷ Includes not having hot and cold or running water, flush toilets, adequate heating or electricity in accordance with the American Housing Survey’s definition of physical adequacy for severely inadequate housing (Eggers and Moumen 2013).

⁸ This is a potential protective factor for juvenile delinquency (Brown and Shillington 2017).

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