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National Institute of Justice

DIRECTOR'S MESSAGE

Rigorous science is at the core of everything NIJ does. Our mission is to provide objective and independent knowledge on the complex issues facing our justice systems and the people who work to protect and improve public safety. We do this by funding research from across the social and behavioral sciences, forensic sciences, physical sciences, and technology. We then disseminate the research findings so that criminal justice stakeholders can make evidence-based decisions on what works best in preventing and reducing crime.

Three years ago, the scope of our work expanded in important ways. In October 2018, the juvenile justice research function that had been part of the Office of Juvenile Justice and Delinquency Prevention (OJJDP) moved to NIJ. This move allowed OJJDP, also a part of the Office of Justice Programs (OJP), to focus on providing national leadership, coordination, and resources to prevent and respond to juvenile delinquency and victimization. The move consolidated all of OJP's research activities under a single agency to improve efficiency and coordination and to take advantage of NIJ's infrastructure, processes, and experience managing justice system research grants and intramural projects.

Over the past three years, we have continued the critical research, evaluation, and statistical data collection projects started under OJJDP. We have also sought opportunities to expand and elevate juvenile justice research at OJP and develop a more comprehensive, coordinated, and complete juvenile justice and delinquency prevention research agenda. This issue of the *NIJ Journal* reflects the confluence of this important work.

The articles in this issue span projects funded by both OJJDP and NIJ. They examine what works and what doesn't when it comes to juvenile justice and child protection programming. For example, one article explores the potential of mentoring programs for preventing negative outcomes and promoting resilience among at-risk youth. Another examines the types of interventions needed to address the complex needs of "dual system youth," youth who have experienced both the child welfare and juvenile justice systems. A third article looks at the pathways from violence exposure and trauma during childhood to involvement in the justice system.

The articles in this issue also reflect the shared vision of OJJDP and NIJ: a nation where children are free from crime and violence. In support of that vision, one article examines how schools can gather tips and better respond to safety threats. A second discusses using science to differentiate between abuse and accidental trauma in children. Another article looks at how to better understand female genital mutilation and mount an effective and coordinated response.

Finally, this issue highlights our agencies' joint commitment to high-quality data. For years, OJJDP has sponsored statistical collections to gather information from residential placement facilities that hold juveniles who are charged with, or adjudicated for, law violations. These collections are now managed by NIJ, but our two agencies are collaborating to review and redesign them to ensure they generate the most useful, timely, and reliable statistics available. One article discusses this ongoing work.

I am thrilled to present this latest issue of the *NIJ Journal* and showcase our continued partnership with OJJDP and our efforts to create a comprehensive criminal and juvenile justice research agenda. We remain steadfast in our commitment to using rigorous science to inform and advance evidence-based policies and practices across the country — for both the adult criminal justice system and the juvenile justice system.

Jennifer Scherer, Ph.D.
Acting Director, National Institute of Justice

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NIJ BULLETIN

Publications in Brief

The Impact of NIJ Forensic Science Research and Development

NIJ is a global leader in funding forensic science research and development. Every year, the Institute invests millions of dollars in developing new applications of physics, chemistry, biology, computer science, and engineering to help bring those committing crimes to justice and prevent the innocent from going to prison. This funding program, known as Research and Development in Forensic Science for Criminal Justice Purposes, draws its priorities directly from the practitioners, policymakers, and scientists who will use the new technologies to advance public safety and the administration of justice.

A new publication details the types of forensic science research supported by NIJ, the history of this funding, and the impact that NIJ investment has had on the field. It also highlights a range of NIJ-sponsored research projects that in recent years have broken new ground in the forensic sciences.

Read the publication at https://www.ojp.gov/ncjrs/virtual-library/abstracts/impact-nij-forensic-science-research-and-development.

The Hunt for New Drugs of Abuse and NPS Discovery

Novel psychoactive substances (NPS) are emerging drugs that are chemically similar to well-known drugs. Despite this similarity, they may behave very differently inside the body. It is difficult for laboratories to identify and classify NPS using existing technologies.

NPS Discovery is an open-access drug characterization and tracking database that helps laboratories identify unknown NPS. This article by NIJ physical scientist Frances Scott highlights the work of NIJ-funded scientists whose efforts led to the creation of NPS Discovery.

Read the article, originally published by the American Association for Clinical Chemistry, at https://nij.ojp.gov/library/publications/nps-discovery-and-hunt-new-drugs-abuse.

Advancing Knowledge To Reduce Gangs and Gang Violence

On May 12, 2020, NIJ held a virtual meeting on the state of knowledge about gangs and gang violence, bringing together researchers and practitioners to discuss the most significant gaps in our knowledge. This input from the field will guide NIJ's future investments in research on gangs and gang violence.

The goal of the meeting was twofold: first, to inform the development of evidence-based programs, policies, and practices to address problems associated with gangs and gang violence; and second, to advise NIJ on the use of robust research and evaluation methods to address problems associated with gangs and gang violence.

Read a summary of the meeting's discussions at https://nij.ojp.gov/library/publications/advancing-knowledge-reduce-gangs-and-gang-violence-perspectives-researchers.

News & Events

NIJ Forensic Science Research and Development Symposium

During the annual meeting of the American Academy of Forensic Sciences, NIJ hosted its yearly Forensic Science Research and Development Symposium. Organized with the Forensic Technology Center of Excellence, the symposium brings together practitioners and researchers to enhance information-sharing with the goal of moving research from theory to practice. The symposium's guiding principle is that advancements within forensic science necessitate a forum to spread information and awareness.

This year's symposium, held on February 16, 2021, was an all-virtual event. To watch a recording and read the proceedings, visit https://forensiccoe.org/2021-nij-forensic-science-rd-symposium/.

United Nations Congress on Crime Prevention and Criminal Justice

Twice each decade since 1955, the United Nations has convened a Congress on Crime Prevention and Criminal Justice. These congresses are the largest international gathering of policymakers, practitioners, and researchers for exchanging knowledge and experience in criminal justice and related fields. At the intersection of research, law, policy, and civil society, the congresses offer a venue for sharing views from around the world and tracking emerging issues in crime and justice that affect the entire international community.

At the 14th annual congress held in March 2021 in Kyoto, Japan, NIJ was represented by Phelan Wyrick, director of NIJ's Research and Evaluation Division, and Marie Garcia, senior social science analyst in NIJ's Office of the Director.

Wyrick gave a workshop on "Current Crime Trends, Recent Developments, and Emerging Solutions" related to combating crime with new technologies. Garcia's presentation, "Encouraging Innovation in Corrections: Lessons Learned From the U.S.," is available as a recording on the congress's website at http://www.un-congress.org/Session/View/12e66fbc-0385-4adb-9fd7-a07e700bb093.

Recent Webinars From the Forensic Technology Center of Excellence

NIJ's Forensic Technology Center of Excellence (FTCoE) supports the implementation of new forensic technology and best practices. As part of its mission to share knowledge and bridge the gap between the scientific and justice communities, the FTCoE hosts frequent webinars as an educational resource for the field. Recent FTCoE webinar topics include:

- Utility of Microbes in Forensic Science

- Preemptive Approach to Combating and Characterizing Emerging Synthetic Opioids

- Novel Synthetic Opioids in Oral Fluid: Analytical Methods and Prevalence

- Structural Characterization of Emerging Synthetic Drugs by Mass Spectrometry

- American Society of Crime Laboratory Directors Emerging Issues: COVID-19

- Stability and Persistence of Touch DNA for Forensic Analysis

- Advancing Fire Scene Investigations With Field Portable Technologies

- Post-Mortem Computed Tomography Webinar Series

- Lessons Learned From Proficiency Test Results in Bloodstain Pattern Analysis

- A Comprehensive Look at LatentSleuth

- Microhaplotypes: A Comprehensive Forensic DNA Marker

Access the webinars at https://forensiccoe.org/all-webinars.

Multimedia

Virtual Conference on School Safety

On February 16-18, 2021, NIJ hosted the "Virtual Conference on School Safety: Bridging Research to Practice To Safeguard Our Schools." The conference brought together researchers, educators, law enforcement, and mental health professionals working at the federal, state, and local levels to disseminate key findings, provide firsthand accounts of implementing research in the field, and discuss bridging research and practice.

The conference included discussion of projects addressing violence and victimization, student discipline, information gathering on threats, bullying, school climate, student trauma and mental health challenges, and the role of school resource officers, among other topics. The presentations highlighted what the field has learned about the effectiveness of various school safety programs, successes and challenges faced during program implementation, and the causes and consequences of school violence.

The conference presentations are available on YouTube at https://youtu.be/-X7Y_iNMy9A.

Recent Research Findings

Estimating the Financial Costs of Crime Victimization

The full cost of crime to individuals and communities is unknown, but estimates are in the range of hundreds of billions of dollars. A more precise understanding of the financial costs of crime victimization could improve victim services; with that in mind, a team sponsored by NIJ has identified the research needed to underpin better cost estimates in the future.

The team recommended studying repeat victimization, hard-to-reach victim populations, and ways of measuring uncertainty in victimization cost estimates. The goal is for practitioners to have reliable cost estimates on which to base policy and practice decisions. This study is also an important first step for new NIJ-sponsored research on tools to enhance support for victims of crime.

Read a detailed breakdown of the study's methods and results at https://nij.ojp.gov/topics/articles/estimating-financial-costs-crime-victimization-study-delineates-research-needs.

Database Provides a Foundation for Product Counterfeiting Research

Counterfeit products not only cause financial damages, they also threaten public health and safety. Without reliable data, however, it is difficult to understand the full scope of counterfeiting crimes and to formulate anti-counterfeiting strategies.

To address this information deficiency, NIJ funded the creation of a database of pharmaceutical, electronic, and food counterfeiting crimes based on open-source online information. The database covers the characteristics of counterfeit schemes, victims, and the individuals and businesses who committed these crimes in the United States from 2000 to 2015. Ultimately, the database could help law enforcement agencies improve their efforts at preventing, detecting, investigating, and responding to product counterfeiting.

Read more about the database at https://nij.ojp.gov/topics/articles/database-provides-foundation-product-counterfeiting-research.

The Importance of Addressing Organizational Stress Among Corrections Officers

Corrections officers have demanding jobs, and interactions with people who are incarcerated may often cause workplace stress. Too often, however, the difficulty of the job is compounded by organizational stress arising from interpersonal conflicts, dysfunctional relationships within the corrections agency, and an unhealthy overall professional climate.

NIJ seeks to provide assistance for both understanding the impact of these stressors and developing solutions to them. In 2020, NIJ funded a group of research projects focused on identifying the prevalence of organizational stressors in police and corrections agencies, as well as developing strategies to mitigate them. These projects touch on topics such as officers' perceptions of stress, differentiating organizational stress from work-related stress, sources of resiliency, and the particular stresses associated with working in restrictive housing.

Explore the new research in more detail at https://nij.ojp.gov/topics/articles/importance-addressing-organizational-stress-among-corrections-officers.

New NIJ.ojp.gov Pages

Field Sobriety Tests and THC Levels Unreliable Indicators of Marijuana Intoxication

Methods for measuring blood alcohol content have existed for decades, providing a crucial tool for the justice system to combat drunk driving. As state-level legalization of marijuana becomes more widespread, however, improving our understanding of marijuana intoxication and how best to measure it for law enforcement purposes has become increasingly urgent.

With the ultimate goal of improving marijuana intoxication legislation, NIJ-supported researchers studied how specific cannabis doses and administration methods affect levels of THC in the body (THC is the main psychoactive substance in marijuana) and how those levels correlate with performance on impairment tests. Results showed that THC levels in subjects' biofluids, along with the timing of maximum impairment for each dose, varied depending on the dose and administration method. Because of this variability, the research team concluded that THC levels in biofluids were not reliable indicators of marijuana intoxication in the study.

Read more about the study's methods and results at https://nij.ojp.gov/topics/articles/field-sobriety-tests-and-thc-levels-unreliable-indicators-marijuana-intoxication.

For Human Trafficking Survivors, Justice Is More About Healing and Preventing Future Trafficking

Although the U.S. criminal justice system is committed to prosecuting and punishing those who illicitly traffic in human beings, incarceration is not the only form of justice sought by victims and survivors of human trafficking. NIJ-supported research based on interviews with survivors of human trafficking, as well as with stakeholders in the justice and social service systems, has found that most survivors favor prevention and victim healing.

Recasting justice in terms of what would be most helpful to survivors and their recovery, the researchers learned that stopping traffickers from harming others is the priority for many survivors. The researchers concluded that alternative models of justice — whether procedural, restorative, or transitional — have the potential to improve survivor perceptions of justice and reform the system in ways that better accommodate the rights and needs of victims.

Read more about the study and its recommendations at https://nij.ojp.gov/topics/articles/human-trafficking-survivors-justice-more-about-healing-and-preventing-future.

New Method for Measuring Human Decomposition Could Significantly Impact Medicolegal Death Investigations

In a criminal trial that involves a death, it often is critical to know when the person died. Law enforcement agencies and medical examiners need more accurate and standardized methods, with known error rates, to estimate time since death. To help move the field closer to those standards, NIJ-supported researchers designed and demonstrated a new method for estimating time since death (i.e., post-mortem interval) that builds on a commonly used method for measuring human decomposition.

Learn more about the method and its potential impact on medicolegal death investigations at https://nij.ojp.gov/topics/articles/new-method-measuring-human-decomposition-could-impact-medicolegal-death-investigations.

Cyberbullying in Schools: Meta-Analysis Finds That Tailored Programming Protects Students

Cyberbullying is bullying in electronic form. Multiple interventions have emerged to target cyberbullying, but until recently there had been no systematic review incorporating all available cyberbullying literature with the broader field of school violence studies. A comprehensive new study sponsored by NIJ aimed to fill that gap, synthesizing the findings of evaluations of a broad range of bullying interventions and programs to understand their effects. The study, a meta-analysis, covered 56 research reports from 90 independent studies.

The researchers found that cyberbullying programs impacted all the bullying outcomes measured. Programs specifically designed to prevent or curb cyberbullying were better at reducing cyberbullying than general anti-bullying programs.

Read more about the study's results at https://nij.ojp.gov/topics/articles/ cyberbullying-schools-meta-analysis-finds-tailored-programming-protects-students.

Female Reentry and Gender-Responsive Programming

Reentry remains one of the most significant challenges facing the criminal justice system, as correctional facilities in the United States release approximately 600,000 individuals back into communities each year. About 78,000 of those individuals are women, equating to more than 200 every day. Historically, however, most reentry interventions have been aimed at men who are incarcerated, with little attention to gender-specific factors.

Although men in reentry significantly outnumber women, the challenges confronting women returning from incarceration are complex: employment, addiction, mental illness, housing, transportation, family reunification, child care, parenting, and poor physical health, among others. Gender-responsive programming is designed to account for the unique challenges faced by women who are incarcerated while capitalizing on some of the characteristics that make women more amenable to rehabilitation.

Read a detailed overview of the current state of female reentry at https://nij.ojp.gov/topics/ articles/female-reentry-and-gender-responsive-programming.

Sharing Data To Improve Science

Secondary data analysis allows researchers to build on existing findings, replicate results, and conduct new analyses. Through NIJ's Data Resources Program, data collected as part of NIJ research are archived in the National Archive of Criminal Justice Data and made available to support new research aimed at reproducing original findings, replicating results, and testing new hypotheses.

- Learn about NIJ's Data Resources Program at https://nij.ojp.gov/funding/opportunities/ nij-2016-9052.

Recent datasets updated or added to the National Archive include the following:

- Situational Factors and the Victim-Offender Overlap, Pennsylvania, 2013-2014

- Reducing Youth Access to Firearms Through the Healthcare Setting, Denver, Colorado, 2018-2019

- Jurors' Judgments About Forensic Identification Evidence, Arizona, 2011-2014

- Survey of Prison Inmates, United States, 2016

- Capturing Human Trafficking Victimization Through Crime Reporting, United States, 2013-2016

- Information Sharing and the Role of Sex Offender Registration and Notification, United States, 2009-2017

- Outcomes of DNA "Cold Hits": Social Science Research in Forensic Science, United States, 2000-2013

- National Initiative for Building Community Trust and Justice, 6 United States cities, 2011-2018

- A Randomized Impact Evaluation of Capturing Kids' Hearts, South Carolina, 2016-2018

- Census of Juveniles in Residential Placement, 2017 [United States]

Want to stay informed about the latest research and publications from NIJ? Subscribe for updates at https://nij.ojp.gov/subscribe.

CHILD ABUSE OR ACCIDENT? BRINGING SCIENCE TO PEDIATRIC EMERGENCY DEPARTMENTS AND FORENSIC INVESTIGATIONS

BY **JIM DAWSON**
NIJ-funded researchers are developing a probability model to predict child head injuries in falls.

For physician Mary Clyde Pierce, it was a question asked in her first days as a pediatrician that "triggered the fire" in her. A detective working a case of an abused baby boy asked her how much force it would take to cause the bone fracture the infant had suffered.

"I couldn't answer it," said Pierce, now a professor of pediatrics at Northwestern University and an emergency medicine pediatrician at Lurie Children's Hospital of Chicago. "I thought it was just a hole in my medical education, so I started to read, and I couldn't find any answers."

She also became aware that while she was at the bedsides of injured and dying child abuse victims, other medical personnel were shying away from her. "They would just stick their heads in the sand because it is too ugly to deal with," she said. "That made me determined to change this story."

In one of the "ugly" cases she was handling, Pierce turned to Gina Bertocci, a professor of bioengineering at the University of Louisville, and asked a question similar to the one the detective had asked her. Bertocci remembers the call, and the question. "She contacted me to see if I could help her answer the question of how much force it would take for someone to fracture a child's femur," Bertocci said. That question, asked 23 years ago, "was the foundational question of our collaboration," she said. Together they established the Injury Risk Assessment and Prevention (iRAP) Laboratory at the University of Louisville.

The pediatrician and the bioengineer have been working together ever since, supported in part by a series of research grants from the National Institute of Justice (NIJ) dating back to a 2008 project to develop a system for detecting tell-tale bruising in infants.[1] Then there was their research into classic metaphyseal lesions, a fracture type commonly associated with abuse in infants,[2] and more recently, the biomechanical characterization of short-distance falls in children.[3] Currently Bertocci and Pierce, with mechanical engineers Angela Thompson and Raymond Dsouza of the iRAP Laboratory, are developing an injury risk curve that will help predict the likelihood of head injuries in pediatric falls.

The researchers' overarching goal has remained the same for more than two decades: using science to differentiate between abuse and accidental trauma in children.

Understanding Injuries

The need for their work is reflected in the high number of children brought into emergency departments in the United States each year and the difficulty doctors and nurses face in sorting the accidents from the abuse cases. As Bertocci and Pierce noted in a description of their current head injuries project, approximately 2.8 million children are brought to emergency departments for fall-related injuries annually.[4] "Although injuries from accidental falls in children are common," they wrote, the "history of a fall is the most commonly stated false scenario provided by caregivers to conceal physical abuse."[5]

Like the overall accident numbers, those that define the scope of the abuse problem are daunting. About 3.5 million children were reported to social services for abuse and neglect in 2017, and 670,000 of them were eventually identified as victims of child abuse.[6] Of those abuse victims, 1,720 died, making child abuse the leading cause of trauma-related deaths in children (see sidebar, "NIJ's Investment in Research on Pediatric Cause of Death"). More than 70% of the fatalities were younger than 3 years old.

The researchers' overarching goal has remained the same for more than two decades: using science to differentiate between abuse and accidental trauma. That differentiation "challenges clinicians, social workers, law enforcement personnel, biomechanics experts, and the judicial system on a daily basis," the researchers wrote.[7] By bringing the science of biomechanics to the world of pediatric medical assessment, Bertocci and Pierce are attempting to meet that challenge.

For the biomechanics experts, a key challenge is the lack of data on injury thresholds in children. The data that do exist, and that are often used in courts, come primarily from experiments that are based on primates and adults, then extrapolated to very young children. "Injury thresholds are largely based on scaled human adult thresholds and/or primate models," the researchers wrote. "Using head injury thresholds that are scaled from adults or primates can lead to inaccurate conclusions regarding whether or not a fall can generate serious or fatal head injury in a child. Since biomechanical analysis is a critical component in cases involving a fall history, these inaccuracies may translate into failure to prosecute a guilty perpetrator or failure to acquit an innocent suspect."[8]

Bertocci said her goal is to bring the concept of determining biomechanical compatibility between the stated history and the presenting injuries to the forensic assessment. "This allows more objective evaluation of children to determine if injuries are due to accident or abuse."

Predicting Head Injuries

After years of gathering data on the dynamics of children falling, as well as bruising and fracture patterns, the researchers are focusing on developing a probability model to predict head injuries in falls. Their work aims to describe which head injuries are characteristic of various types of pediatric falls. They began that research with a 2017 NIJ grant that involved using instrumented headbands on children in childcare centers and observing their activities using video surveillance.[9] Over many months, they recorded data on more than 3,000 falls. About a third of the falls were on playgrounds, while the others were indoors.[10] The researchers are currently analyzing the data from these falls and plan to create a website that includes a searchable repository of video-recorded falls based on their childcare center study.

The study measured such things as the dynamics of the falls (forward, rearward, feet- or head-first) and what part of the body made first impact (e.g., head, shoulder, hands). For falls that involved the head, the researchers then looked at which part of the head

NIJ's Investment in Research on Pediatric Cause of Death

By **Danielle McLeod-Henning**

Research into the cause and manner of death in infants and children has been a high-priority research need of NIJ's Forensic Science Research and Development Technology Working Group.[1] NIJ has invested more than $9.7 million in research to further understand and determine intentional versus accidental trauma, or natural nontraumatic causes of death in infants and children. NIJ's first investment in this area was in 2007, with an award to Michigan State University titled "A Forensic Pathology Tool To Predict Pediatric Skull Fracture Patterns."[2] Since then, NIJ has made nearly 20 awards to academic institutions and medical examiners' offices, with studies focusing on finite element modeling of skull fractures, using advanced imaging technologies to capture minute injuries from suspected head trauma, and testing genetic markers that may lead to a sudden unexpected death, among other studies.[3]

About the Author

Danielle McLeod-Henning, M.F.S., is a program manager and physical scientist in NIJ's Office of Investigative and Forensic Sciences.

Notes

1. National Institute of Justice, "Forensic Science Research and Development Technology Working Group: Operational Requirements," https://nij.ojp.gov/topics/articles/forensic-science-research-and-development-technology-working-group-operational.

2. Brian J. Powell et al., "A Forensic Pathology Tool To Predict Pediatric Skull Fracture Patterns," Final report to the National Institute of Justice, award number 2007-DN-BX-K196, December 2012, NCJ 240683, https://www.ncjrs.gov/pdffiles1/nij/grants/240683.pdf.

3. National Institute of Justice, "Awards: Listing of Funded Projects," https://nij.ojp.gov/funding/awards/list?field_award_status_value=All&state=All&subtopic=12901,11361&field_fiscal_year_value=&combine_awards=&awardee=&city=&sort_by=field_fiscal_year_value&sort_order=DESC.

was impacted. For almost 40% of the falls, it was the face, with a slightly smaller percentage involving the occipital bone at the back of the head.[11] They also measured the height of each fall and cross-referenced the findings with the age and weight of the children.

Their key finding was that "across 3,256 falls, no children sustained moderate or severe head injuries."[12] Indeed, in all of the falls there were no serious injuries to any part of the body, they said. The researchers noted that the majority of the falls

in the childcare center were ground-based falls occurring in a forward direction without head impact. This large collection of video-recorded falls is critical to understanding that common short-distance falls typically do not cause serious injuries in children.

As part of their effort to develop a probability model, the researchers are categorizing the injuries that are likely from a variety of falls, including information on head acceleration, force, and of critical importance, the height of the fall. "It's not as simple as saying a

whole category of falls cause significant injury," said Thompson, an associate professor of engineering fundamentals at the University of Louisville. "As engineers, we really want to understand how children are injured based on what they fall into [such as the corner of a table], what type of surface they fall onto, and if they are running or are pushed by another child."

Their probability model will combine video fall data from the childcare center with data gathered from children brought into the Lurie Children's Hospital Emergency Department with head injuries resulting from falls. The hospital study will involve about 95 children injured in accidental falls; working with the parents or other caregivers, the research team will reconstruct the events surrounding each fall using computer simulation. The researchers will conduct virtual interviews with the caregivers to ensure accurate descriptions of the falls and will aid caregivers in collecting in-home measurements of fall heights when applicable.

Although the emergency department injury portion of the research was on hold as of July 2020 because of COVID-19 issues, Pierce said she was not concerned about recruiting parents to report the details of how injuries to their children occurred. "Parents actually love to be in these studies," she said. "It's so different than it was 20 years ago, probably because of Google and the ability of people to understand research so much better than they used to."

Bruising, a Tell-Tale Sign

In addition to the video data and injury information from a hospital, the probability model will include 3D human child computer models. Thompson and Dsouza, working with Bertocci, will create virtual models of 18- and 36-month-old children that will be used in simulating falls and measuring associated biomechanical data such as head acceleration.

The team has developed and validated numerous 3D computer models simulating pediatric falls and other injurious events. One model developed by Dsouza allows them to predict potential bruising patterns in children, whether from abuse or an accident. "Bruising is the earliest sign of physical abuse," the researchers wrote.[13] The custom 3D model incorporates 132 virtual sensors to enable the prediction of bruising patterns and level of force applied.

The bruising model is important, Pierce said in an interview, because her research has shown that "the most common thing that is misinterpreted prior to a child having a more serious injury, like a fracture or brain injury, is just bruising." In addition to being a warning sign of the early stages of abuse, bruising combined with other injuries can point to abuse. "We are used to bruises not being serious, so if you have, for example, an ear bruise and a fracture, nobody notices the ear bruise. But that is the tell-tale sign. That is the actual difference between an accidental injury and abuse," she said.

Pierce explained that a small bruise on an ear could indicate that a child was struck on the side of the head. "If you're struck on the side of the head generating an ear bruise and you fly across the room, versus just running and you fall and don't have an ear bruise. It is putting the combination of injuries together that is important. You don't think anything about it because bruises are boring and as a physician you don't have to do anything to a bruise."

Many times in her career, she has talked to experienced physicians who said they examined a child and did not find any bruises, Pierce said. However, when she examines the same child, she may find a dozen bruises that the other doctor missed. "Maybe there is one on the ear, or inside the mouth. It's interesting to teach people to think about the little details that we've been taught don't matter, so it's really a big shift in thinking, and that's why I started collaborating with engineers."

Pierce and Bertocci are developing an app for medical personnel that helps them find bruises in children, as well as other tools to allow them to evaluate injuries more objectively and to answer the fundamental question the detective asked Pierce years ago: Was the infant's bone fracture caused by an accident or abuse?

"That's why I'm so passionate about developing a more science-based way to understand whether a caregiver's history [regarding the cause of injury] is plausible given presenting injuries," she said. "That's where implicit bias can really play a role, and it has to do with how to conduct a good physical exam and pay attention to the marks on the body or understand the fracture biomechanics. But physicians are not trained in this, so we're trying to develop tools that can help them think in a more sophisticated way."

The researchers are optimistic that they can develop tools to help physicians delineate injuries due to physical child abuse versus those due to accidents. "There is a whole area of implementation science," Pierce said, "and once we have the tools ready, we'll start doing implementation studies, which is the best way to affect clinical practice."

The research underscores the critical importance of multidisciplinary collaborative science, they noted — building a multidisciplinary team of engineers and physicians has advanced the understanding of pediatric injuries and how they occur, through objective science. Their research, Bertocci said, has the potential to influence clinical and forensic investigations in distinguishing between accidental and abusive causes of pediatric injuries.

About the Author

Jim Dawson is a forensic science writer and contractor with Leidos supporting the National Institute of Justice.

This article discusses the following awards:

- "Development of a Surrogate Bruising Detection System To Describe Bruising Patterns Associated with Common Childhood Falls," award number 2008-DD-BX-K311

- "Development of Scientific and Objective Methods To Detect Physical Child Abuse," award number 2009-DD-BX-0086

- "Utility of Postmortem X-Ray Computed Tomography (CT) in Supplanting or Supplementing Medicolegal Autopsies," award number 2010-DN-BX-K205

- Development of a Computer Simulation Model To Predict Potential Bruising Patterns Associated With Common Childhood Falls," award number 2014-DN-BX-K006

- "Biomechanical Investigation of the Effect of Bone Disorders on Pediatric Femur Fracture Potential," award number 2015-DN-BX-K018

- "Biomechanical Characterization of Video Recorded Short Distance Falls in Children," award number 2017-DN-BX-0158

- "Development of a Probability Model To Predict Head Injury Risk in Pediatric Falls," award number 2019-DU-BX-0029

Notes

1. Gina Bertocci and Raymond Dsouza, "Development of a Surrogate Bruising Detection System To Describe Bruising Patterns Associated With Common Childhood Falls," Final report to the National Institute of Justice, award number 2008-DD-BX-K311, April 2013, NCJ 242018, https://www.ncjrs.gov/pdffiles1/nij/grants/242018.pdf.

2. Office of Juvenile Justice and Delinquency Prevention funding award description, "Development of Scientific and Objective Methods To Detect Physical Child Abuse," at the University of Louisville Research Foundation, award number 2009-DD-BX-0086, https://ojjdp.ojp.gov/funding/awards/2009-dd-bx-0086.

3. National Institute of Justice funding award description, "Biomechanical Characterization of Video Recorded Short Distance Falls in Children," at the University of Louisville Research Foundation, award number 2017-DN-BX-0158, https://nij.ojp.gov/funding/awards/2017-dn-bx-0158. Additional related NIJ awards are "Development of a Computer Simulation Model To Predict Potential Bruising Patterns Associated With Common Childhood Falls," at the University of Louisville Research Foundation, award number 2014-DN-BX-K006, https://nij.ojp.gov/funding/awards/2014-dn-bx-k006; "Biomechanical Investigation of the Effect of Bone Disorders on Pediatric Femur Fracture Potential," at the University of Louisville Research Foundation, award number 2015-DN-BX-K018, https://nij.ojp.gov/funding/awards/2015-dn-bx-k018; and "Development of a Probability Model To Predict Head Injury Risk in Pediatric Falls," at the University of Louisville Research Foundation, award number 2019-DU-BX-0029, https://nij.ojp.gov/funding/awards/2019-du-bx-0029.

4. National Institute of Justice funding award description, "Development of a Probability Model To Predict Head Injury Risk in Pediatric Falls."

5. National Institute of Justice funding award description, "Development of a Probability Model To Predict Head Injury Risk in Pediatric Falls."

6. All data in this paragraph are from Children's Bureau, Administration on Children, Youth and Families, *Child Maltreatment 2017,* Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, January 2019, https://www.acf.hhs.gov/cb/resource/child-maltreatment-2017.

7. National Institute of Justice funding award description, "Development of a Probability Model To Predict Head Injury Risk in Pediatric Falls."

8. National Institute of Justice funding award description, "Development of a Probability Model To Predict Head Injury Risk in Pediatric Falls."

9. National Institute of Justice funding award description, "Biomechanical Characterization of Video Recorded Short Distance Falls in Children."

10. Gina Bertocci, Angela Thompson, and Karen Bertocci, "Biomechanical Characterization of Video Recorded Short Distance Falls in Children," semiannual progress report (July-December 2019) submitted for NIJ award number 2017-DN-BX-0158.

11. Bertocci, Thompson, and Bertocci, "Biomechanical Characterization of Video Recorded Short Distance Falls in Children."

12. All data in this paragraph are from Bertocci, Thompson, and Bertocci, "Biomechanical Characterization of Video Recorded Short Distance Falls in Children."

13. National Institute of Justice funding award description, "Development of a Computer Simulation Model To Predict Potential Bruising Patterns Associated With Common Childhood Falls."

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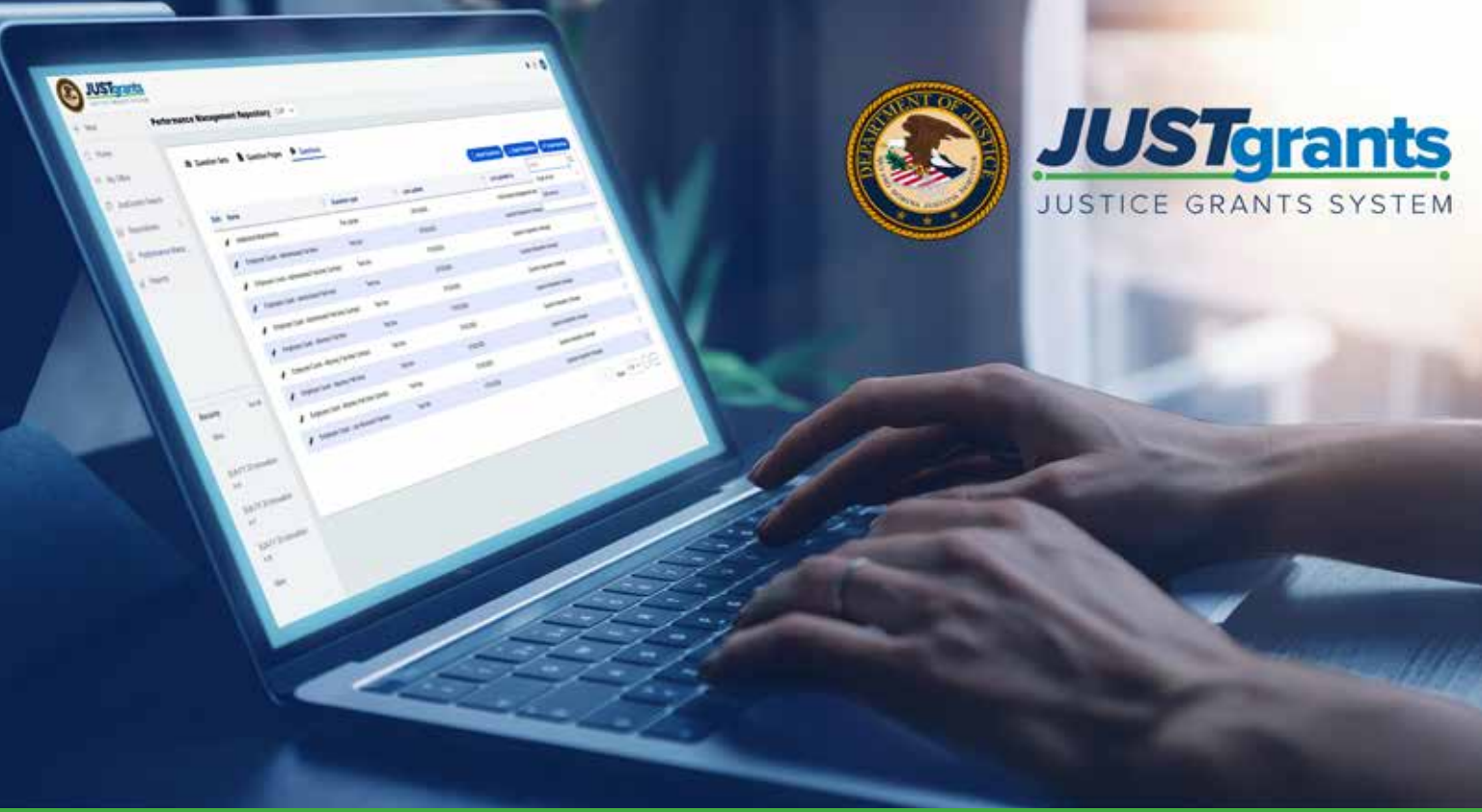
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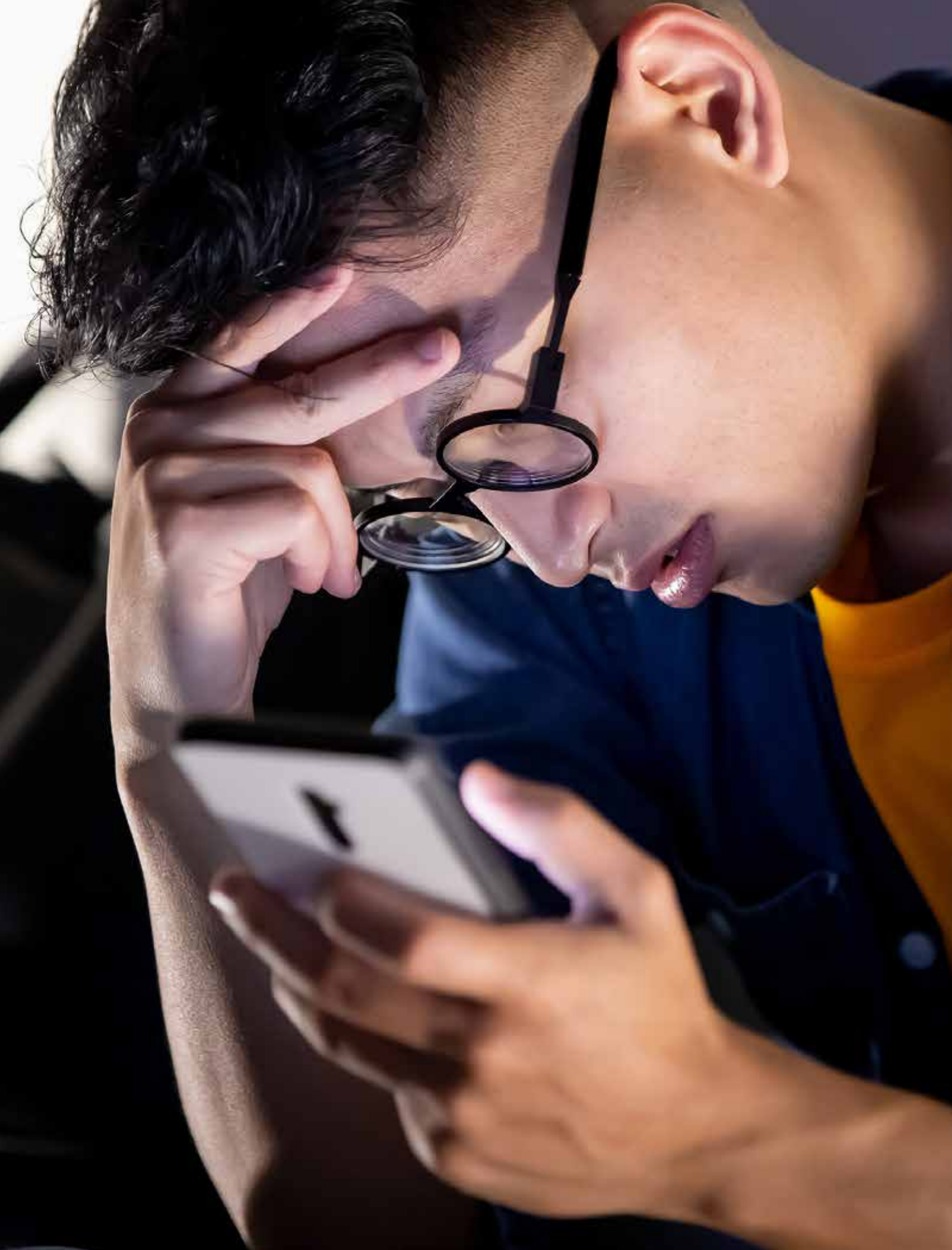
SCHOOL SAFETY: RESEARCH ON GATHERING TIPS AND ADDRESSING THREATS

BY **MARY POULIN CARLTON**

A new area of research suggests that schools should have a systematic and coordinated approach in place to gather and process information on threats, respond appropriately, and document the response.

A warning that someone is planning a school shooting can save lives if it is received and acted upon in a timely manner. Research has shown that individuals who plan to conduct a school attack typically share that information with someone else. These are often peers, such as friends or other students at school.[1] Schools that use planned, systematic techniques for gathering information on threats may be well-positioned to receive tips on planned attacks and respond appropriately.

This notion that a warning can save lives is arguably the central premise for developing school safety tip lines and likely one of the key drivers behind a surge in new tip lines within the past few years. By the end of the 2018-2019 school year, about half (51%) of public middle and high schools in the United States had a tip line.[2] Most schools (about 60%) reported having tip lines for three years or less.[3]

Tip lines — designed in many different ways — offer one mechanism for gathering information on a threat to student or school safety. Tip lines collect information via phone, text message, app, email, or a website; they may involve live interaction, or information may be retrieved following submission. They often, but not always, offer anonymity or confidentiality to the submitter. School administrators, law enforcement, or others may operate tip lines at the state or local level.

Schools may also obtain information through more traditional sources, such as student discussions with trusted teachers or social media monitoring. But what is the most effective way to gather information on threats?

From 2014 to 2017, the National Institute of Justice (NIJ) funded several studies through its Comprehensive School Safety Initiative[4] that address a wide range of questions about identifying and reporting threats, and school response strategies. Many studies are ongoing, but the research is starting to indicate that although tip lines may be useful violence prevention tools, not all of them are likely to be equally successful. Tip lines should be coupled with efforts to facilitate an informed and coordinated

response to the tip. In addition, the research shows that approaches to collecting tips — through a tip line or other method — should be accompanied by investments in technology, training, and engagement, as well as reliance on expertise by a variety of individuals and a systematic approach to responding to tips.

Gathering Information

Colorado is generally credited with starting the first school safety tip line, Safe2Tell. Following the 1999 Columbine High School shooting, a review found that students and others had knowledge of the shooters' intent, but that the school's culture kept students from reporting their plans.[5] The Safe2Tell tip line — which guarantees anonymity to users — was created to help break this code of silence among students. There are also training and education components to Safe2Tell that may help increase knowledge of and trust in the tip line.[6]

This raises a critical point: It is not enough to build the technological infrastructure for a tip line. Planning and implementing tip lines should also include engagement with stakeholders, training, and awareness campaigns to ensure buy-in and use.[7] Previous research demonstrates that tip lines without an engagement component are underused.[8]

Lack of awareness is a key reason for underutilization, but there are other reasons as well. With or without a tip line, students may choose not to report a threat because they are concerned about what will be done with the information they provide (e.g., no response by the school, perception that the threat is not serious, or fear of retaliation against the reporting student) or because of a school culture that encourages a student code of silence.[9] In addition, certain features of a tip line — for example, accepting only phone calls — may limit usage.[10] Although research evidence is limited, making tip lines anonymous may help break the student code of silence and encourage students to use the tip line.[11] Ensuring that sufficient resources are available, including well-trained individuals who receive the information and respond to tips, is important as well.[12]

Tip lines can help identify school safety problems beyond the potential for serious physical violence. Preliminary evidence indicates that reports of bullying, self-harm, and suicide threats are among the most common types of tips received.[13] Even if schools do not intend to collect information on these concerns, they should be ready to respond to reports of these issues.

Early data also suggest that schools should be prepared to receive a large volume of tips. In its first 22 months of operation, a statewide school tip line in Oregon received 2,578 tips. Of these, 898 were related to bullying or harassment, 250 were tips on suicides others were planning, and 139 were tips related to threats of a planned school attack.[14] One Pennsylvania tip line received more than 23,000 tips in its first six months.[15]

In addition to tip lines, schools can encourage students to report school violence threats in other ways. As part of a larger NIJ-funded study on threat assessment by the University of Virginia,[16] researchers tested an online training program that aims to educate students about threat assessment and increase their willingness to report threats to school authorities.[17] The program emphasizes that students can report threats by talking to a school administrator. Results from this study indicate that the training program increased students' knowledge of how to report threats of violence and their willingness to do so.

After a Tip Is Received

Receiving a tip is just the first step in preventing a violent act or other negative outcome. A tip line should be coupled with a systematic approach to processing the information received, responding appropriately, and documenting the response. Unfortunately, many tip lines do not have formal written guidance on how to process tips. A 2019 national survey of tip lines found that only 35% had a formal, written policy in place for how to respond to tips.[18]

This is a concern for a few key reasons. First, it leaves room for the possibility that there will be no response to the tip or that there will be multiple, conflicting, or

uncoordinated responses from different individuals. It may also result in an inappropriate response (e.g., overreaction or underreaction). Further, tip lines are likely to receive information on various types of threats, tips may or may not represent imminent concerns, and tip lines can expect to receive some false tips. Having a formal strategy and guidance in place — along with a team of individuals from various backgrounds, including educators, law enforcement, and mental health professionals — may allow schools to appropriately respond to tips and assess threats.[19]

Using a systematic approach to assess a student's threat to cause harm, such as behavioral threat assessment, can help determine the seriousness of the threat and inform an appropriate response.[20] In a school setting, behavioral threat assessment generally refers to a methodical approach to evaluating the likelihood that a student will carry out a violent act given an explicit threat or behavior indicative of a threat. There is evidence that at least one threat assessment approach, the Comprehensive School Threat Assessment Guidelines, can resolve threats without violence and lead to other positive outcomes for the school and the student making the threat.[21] Research on the effectiveness of other approaches is ongoing.

A recently completed study at the University of Virginia[22] examined whether threat assessment could prevent school violence and reduce the use of school suspension. The NIJ-funded study demonstrated a number of positive findings. For example, school threat assessment teams were able to resolve threats with few violent incidents. In addition, students making threats were most often referred for mental health services, less than half were suspended, and few were expelled from school. Threat assessment outcomes did not vary for students by race or ethnicity.[23]

Although useful, threat assessment can also prove challenging.[24] Schools must substantiate information and be prepared to respond to a dynamic environment in which new information will likely change the response. In addition, behavioral threat assessment will not be sufficient for assessing all tips. School

safety threats posed by nonstudents or other types of tips (e.g., interpersonal conflicts, alcohol abuse, or theft) will require different responses. As the number of tip lines increases, better information will be available about the types of tips schools may receive, which can help inform appropriate responses.

Additional NIJ Research on Tips and Threats

Given the nascency of approaches to gathering tips and responding to threats, there are many outstanding questions about their effectiveness. From 2014 to 2017, NIJ funded several studies via the Comprehensive School Safety Initiative to try to fill the gaps in our knowledge and provide information that schools and other stakeholders can use when developing or refining their own approaches. Many of these studies are ongoing.

For example, we are learning a great deal about the prevalence and characteristics of tip lines across the United States from the NIJ-funded study "Assessment of National and State Tip Line Technology as a Strategy for Identifying Threats to School Safety."[25] We have shared a number of findings from this ongoing study (conducted by RTI) throughout this article.

Several studies are examining approaches to collecting tips. For instance, researchers at the University of Michigan are evaluating the Say Something Anonymous Reporting System (SS-ARS) in Miami, Florida. SS-ARS is a Sandy Hook Promise Foundation program that allows both youth and adults to submit anonymous safety concerns online or by phone; a crisis center then reviews and shares the tip so that schools or law enforcement agencies can respond to prevent a negative outcome. The NIJ-funded study is examining whether SS-ARS improves the recognition of antecedents to violent and risky behavior and decreases the conduct of such behavior.[26]

A statewide experiment in Nevada is focused on whether the dual approaches of SafeVoice — an anonymous tip line coupled with multidisciplinary response teams — help improve school climate,

address problem behavior in students, and result in appropriate responses by school staff and law enforcement. In addition, the NIJ-supported experiment is exploring how tip line implementation influences outcomes.[27]

ADVOCATR is a cellphone app that students can use to share confidential information on issues that negatively affect their safety, as well as positive issues that make them feel safe. A study of this app is being conducted as part of a larger evaluation of the Student Ownership, Accountability, and Responsibility for School Safety (SOARS) program. SOARS involves trainings and interventions designed to increase students' resilience to victimization.[28] This NIJ-funded study will help us understand the impact of a tip line in combination with other approaches to improving school safety.

NIJ has funded additional studies to help inform the development and use of other approaches to identify and respond to school violence threats. For example, Chicago Public Schools and researchers at the University of Chicago Crime Lab studied the use of social media monitoring to identify online behavior that suggests pending violence by students and then intervene quickly.[29] The results of the study,[30] as well as concerns arising from the implications of monitoring students' posts on social media,[31] suggest that more research on social media monitoring to prevent school violence is worthy of future consideration.

In Colorado, NIJ-supported researchers are exploring the impact of the Safe Communities Safe Schools approach, which incorporates an information-gathering system (including, but not limited to, the Safe2Tell tip line), a multitiered system of support for students, and multidisciplinary school team and community partners. Early findings offer evidence of how schools can implement comprehensive school safety approaches; when the project concludes, information on the approach's overall effectiveness will be available.[32] The results of this and other studies examining comprehensive approaches will be particularly valuable given available evidence that singular strategies to address school safety are insufficient for tackling the range of safety challenges facing schools.

Outstanding Questions

The field is starting to learn how to collect tips and how to respond to school violence threats. Research indicates that to be successful, these approaches require technological investments, training, trust building, and expertise by individuals across a variety of topics — as well as a systematic approach to assessing threats and responding to tips.

However, a number of critical questions remain. We need to improve our knowledge on the most effective — and, perhaps, least costly — approaches for learning about, assessing, and responding to threats. We must identify how to best incorporate these approaches with comprehensive strategies on school safety. In addition, we must learn how to implement strategies in a context where resources are strained and information is dynamic, limited, or shared across a variety of individuals or systems. Further, systems typically track incidents rather than students. This limits our knowledge on, for example, how helpful these strategies are for students who pose ongoing behavioral risks.

Finally, we do not have a strong understanding about which characteristics of the existing strategies for collecting tips and responding to threats are the most important in preventing undesirable outcomes, including school shootings and other violent acts. As school administrators and other stakeholders discuss what policies and practices to adopt so they can gather tips and respond to school safety threats, they should consider the research but also be prepared to make adjustments as knowledge grows and circumstances change.

About the Author

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For More Information

Watch recorded sessions from the NIJ Virtual Conference on School Safety at https://nij.ojp.gov/ events/nij-virtual-conference-school-safety.

This article discusses the following awards:

- "Student Threat Assessment as a Safe and Supportive Prevention Strategy," award number 2014-CK-BX-0004

- "Evaluating the Effectiveness of the Say Something Anonymous Reporting System To Improve School Safety," award number 2017-CK-BX-0002

- "Research on the Effects of an Anonymous Tip Line and Multidisciplinary Response Teams in Schools Across the State of Nevada," award number 2016-CK-BX-0007

- "Project SOARS (Student Ownership, Accountability, and Responsibility for School Safety)," award number 2015-MU-MU-K003

- "Chicago Public Schools's Connect and Redirect to Respect (CRR) Program To Use Social Media Monitoring To Identify and Connect Youth to Behavioral Interventions," award number 2014-CK-BX-0002

- "Assessment of National and State Tip Line Technology as a Strategy for Identifying Threats to School Safety," award number 2017-CK-BX-0004

- "A Roadmap to Evidence-Based School Safety: Safe Communities Safe Schools," award number 2015-CK-BX-K002

Notes

1. Bryan Vossekuil et al., *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States,* Washington, DC: U.S. Secret Service and U.S. Department of Education, 2004, https://www2.ed.gov/admins/lead/ safety/preventingattacksreport.pdf; and National Threat Assessment Center, *Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence,* Washington, DC: U.S. Department of Homeland Security, U.S. Secret Service, 2019, https://www.secretservice.gov/ data/protection/ntac/usss-analysis-of-targeted-school-violence.pdf.

2. Michael Planty et al., *Tip Lines for School Safety: A National Portrait of Tip Line Use,* Research Triangle Park, NC: RTI International, 2020, https://www.rti.org/publication/tip-lines-school-safety/fulltext.pdf.

3. Planty et al., *Tip Lines for School Safety.*

4. For more information about NIJ's Comprehensive School Safety Initiative, please see https://nij.ojp.gov/topics/articles/ nijs-comprehensive-school-safety-initiative.

5. Susan R.T. Payne and Delbert S. Elliott, "Safe2Tell®: An Anonymous, 24/7 Reporting System for Preventing School Violence," *New Directions for Youth Development* 2011 no. 129 (2011): 103-111, https://doi.org/10.1002/yd.390.

6. Payne and Elliott, "Safe2Tell®."

7. Michael Planty et al., *School Tip Line Toolkit: A Blueprint for Implementation and Sustainability,* Research Triangle Park, NC: RTI International, 2018, https://www.ncjrs.gov/pdffiles1/ nij/grants/252537.pdf.

8. Planty et al., *Tip Lines for School Safety.*

9. Payne and Elliott, "Safe2Tell®"; and Erin K. Nekvasil and Dewey G. Cornell, "Student Reports of Peer Threats of Violence: Prevalence and Outcomes," *Journal of School Violence* 11 no. 4 (2012): 357-375, https://doi.org/10.1080 /15388220.2012.706764.

10. Heather L. Schwartz et al., *The Role of Technology in Improving K-12 School Safety,* Santa Monica, CA: RAND Corporation, 2016, https://doi.org/10.7249/RR1488.

11. Payne and Elliott, "Safe2Tell®."

12. Schwartz et al., *The Role of Technology in Improving K-12 School Safety;* and Planty et al., *Tip Lines for School Safety.*

13. Commonwealth of Pennsylvania, Office of Attorney General, *Safe2Say Something: Annual Report 2018-2019 School Year,* Harrisburg, PA: Commonwealth of Pennsylvania, Office of Attorney General, 2019, https://www.safe2saypa. org/wp-content/uploads/2019/08/S2SS-Annual-Report-FINAL-28129.pdf; and Oregon Task Force on School Safety, *2019 Report to the Legislature,* Salem, OR: Oregon Task Force on School Safety, 2019, https://www.oregon.gov/osp/ docs/2019-Legislative-Report-OTFSS.pdf.

14. Oregon Task Force on School Safety, *2019 Report to the Legislature.*

15. Commonwealth of Pennsylvania, Office of Attorney General, *Safe2Say Something.*

16. National Institute of Justice funding award description, "Student Threat Assessment as a Safe and Supportive Prevention Strategy," at The Rector & Visitors of the University of Virginia, award number 2014-CK-BX-0004, https://nij.ojp.gov/funding/awards/2014-ck-bx-0004.

17. Shelby L. Stohlman and Dewey G. Cornell, "An Online Educational Program To Increase Student Understanding of Threat Assessment," *Journal of School Health* 89 no. 11 (2019): 899-906, https://doi.org/10.1111/josh.12827.

18. Planty et al., *Tip Lines for School Safety.*

19. Planty et al., *School Tip Line Toolkit.*

20. Dewey G. Cornell, "Threat Assessment as a School Violence Prevention Strategy," *Criminology & Public Policy* 19 no. 1 (2020): 235-252, https://doi.org/10.1111/1745-9133.12471.

21. Cornell, "Threat Assessment as a School Violence Prevention Strategy."

22. National Institute of Justice funding award description, "Student Threat Assessment as a Safe and Supportive Prevention Strategy."

23. Dewey Cornell et al., "Racial/Ethnic Parity in Disciplinary Consequences Using Student Threat Assessment," *School Psychology Review* 47 no. 2 (2018): 183-195, https://doi.org/10.17105/SPR-2017-0030.V47-2.

24. Sarah Goodrum et al., "Learning From a Failure in Threat Assessment: 11 Questions and Not Enough Answers," *Behavioral Sciences & the Law* 37 no. 4 (2019): 353-371, https://doi.org/10.1002/bsl.2399.

25. National Institute of Justice funding award description, "Student Threat Assessment as a Safe and Supportive Prevention Strategy"; and Planty et al., *Tip Lines for School Safety.*

26. National Institute of Justice funding award description, "Evaluating the Effectiveness of the Say Something Anonymous Reporting System To Improve School Safety," at the Regents of the University of Michigan, award number 2017-CK-BX-0002, https://nij.ojp.gov/funding/awards/2017-ck-bx-0002.

27. National Institute of Justice funding award description, "Research on the Effects of an Anonymous Tip Line and Multidisciplinary Response Teams in Schools Across the State of Nevada," at the Pacific Institute for Research and Evaluation, award number 2016-CK-BX-0007, https://nij.ojp.gov/funding/awards/2016-ck-bx-0007.

28. National Institute of Justice funding award description, "Project SOARS (Student Ownership, Accountability, and Responsibility for School Safety)," at IRIS Media, Inc., dba IRIS Educational Media, award number 2015-MU-MU-K003, https://nij.ojp.gov/funding/awards/2015-mu-mu-k003.

29. National Institute of Justice funding award description, "Evaluating the Effectiveness of the Say Something Anonymous Reporting System To Improve School Safety."

30. The University of Chicago Crime Lab, *Connect & Redirect to Respect: Final Report,* Chicago, IL: The University of Chicago Crime Lab, 2019, https://www.ncjrs.gov/pdffiles1/nij/grants/252718.pdf.

31. Alice Haston, "Keeping It Off the Record: Student Social Media Monitoring and the Need for Updated Student Records Laws," *Vanderbilt Journal of Entertainment and Technology Law* 22 no. 1 (2020): 155-180, https://scholarship.law.vanderbilt.edu/jetlaw/vol22/iss1/7.

32. Beverly Kingston et al., "Building Schools' Readiness To Implement a Comprehensive Approach to School Safety," *Clinical Child and Family Psychology Review* 21 (2018): 433-449, https://doi.org/10.1007/s10567-018-0264-7.

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EXAMINING THE RELATIONSHIP BETWEEN CHILDHOOD TRAUMA AND INVOLVEMENT IN THE JUSTICE SYSTEM

BY **PHELAN WYRICK** AND **KADEE ATKINSON**

A collection of studies finds that children and youth who witness or are direct victims of violence are at risk for later offending and justice system involvement.

A dangerous or life-threatening experience may become a traumatic event for a child. The child may see the event as an intense threat to his or her safety and will typically experience a high level of fear or helplessness.[1] Trauma may result from a wide range of events, including accidents and natural disasters. Of great priority to those in the public safety and justice fields, traumatic experiences may be caused by exposure — as a victim or a witness — to community violence, domestic violence, sexual abuse, or terrorist attacks.

Trauma experienced during childhood may result in profound and long-lasting negative effects that extend well into adulthood. The direct effects may be psychological, behavioral, social, and even biological.[2] These effects are associated with longer-term consequences, including risk for further victimization,[3] delinquency and adult criminality,[4] substance abuse,[5] poor school performance,[6] depression,[7] and chronic disease.[8]

The National Institute of Justice (NIJ) has supported many studies over the years to help increase our understanding of the complex dynamics of childhood exposure to violence.[9] The Office of Juvenile Justice and Delinquency Prevention (OJJDP) has also supported research, programs, and training to better understand and improve responses to children exposed to violence and childhood trauma.[10] Together, these efforts help inform the development and enhancement of programs, practices, and policies designed to prevent violence, reduce the impact of violence on children and youth, and improve the capacity of the criminal and juvenile justice systems.

In 2016, OJJDP funded seven research projects in response to a competitive solicitation titled Studies Program on Trauma and Justice-Involved Youth (see exhibit 1).[11] These studies — now managed by NIJ[12] — look at trauma and justice system involvement from multiple perspectives to provide a better understanding of the pathways from violence exposure and trauma to involvement in the justice system. They also explore possible protective factors that reduce the likelihood of delinquency as a negative consequence of trauma, as well as the effectiveness of trauma-focused interventions for youth. This article

discusses findings from this collection of studies and their implications for the field.

Exposure to Trauma Among Juvenile Offenders

Five studies examined the relationship between childhood trauma and juvenile justice system involvement. Three of these studies drew on existing longitudinal research on justice-involved or high-risk youth. Another study analyzed linked administrative datasets from multiple systems in Chicago. The final study involved primary data collection from justice-involved youth in a Minnesota county.

Exposure to Trauma and Trauma Trajectories

Researchers at the University of Maryland used data that were originally collected for the Pathways to Desistance study, which analyzed multiple waves of interview data gathered between 2000 and 2010 from 1,354 justice-involved male and female participants. Participants in the Pathways to Desistance study were serious youth offenders in Philadelphia County, Pennsylvania, and Maricopa County (Phoenix), Arizona,

Study	Project Title	Research Grant Recipient	Area of Focus
	Exhibit 1. Trauma and Justice Involved Youth Project Descriptions		
1	A Longitudinal Investigation of Trauma Exposure, Retraumatization, and Post-Traumatic Stress of Justice-Involved Adolescents	University of Maryland	The evolution of exposure to violence and psychological distress among justice-involved adolescents who are serious offenders
2	Violence Exposure, Continuous Trauma, and Repeat Offending in Female and Male Serious Adolescent Offenders	Loyola University Chicago	The prevalence and longitudinal patterns of continuous trauma exposure (during and after justice involvement) in serious adolescent offenders
3	Exposure to Violence, Trauma, and Juvenile Court Involvement: A Longitudinal Analysis of Mobile Youth and Poverty Study Data (1998-2011)	The University of Alabama	Whether traumatic events increase the risk of juvenile justice system involvement for vulnerable adolescents
4	Trauma Exposure, Ecological Factors, and Child Welfare Involvement as Predictors of Youth Crossover Into the Juvenile Justice System	University of Chicago, Chapin Hall Center for Children	Pathways from trauma exposure to juvenile justice involvement for children and youth who have been involved in the child welfare system
5	To Understand the Role of Trauma, Exposure to Violence, and Retraumatization for Justice-Involved Youth, Particularly for Clients Who Identify as LGBTQI or GNC	Hennepin County	Trauma and violence experienced by justice-involved lesbian, gay, bisexual, transgender, questioning/unsure, asexual, and gender nonconforming youth
6	Maltreatment and Delinquency Associations Across Development: Assessing Difference Among Historically Understudied Groups and Potential Protective Factors	Child Trends Incorporated	Potential protective factors at the peer, family, school, and neighborhood levels that disrupt the relationship between childhood maltreatment and later offending
7	Trauma-Informed Interventions for Justice-Involved Youth: A Meta-Analysis	George Mason University	Review of available research on trauma-focused interventions for justice-involved youth and at-risk youth who experienced some form of trauma in their lives

who were between the ages of 14 and 17 at the time of their offense.[13]

Using the Pathways to Desistance data, the University of Maryland researchers examined the prevalence and patterns of trauma exposure, as well as the most strongly associated psychological symptoms. They also identified and described trajectories of trauma exposure and trauma symptoms from adolescence into early adulthood (i.e., ages 16 to 23).[14]

These justice-involved youth witnessed and experienced high levels of violence likely to cause trauma. For example, almost one-half (49%) witnessed someone being shot, and 30% witnessed someone being killed. The symptoms most strongly associated with exposure to violence were hostility and paranoid ideation.

The researchers categorized participants into four groups:

- Minimally exposed to violence.
- Witnessed gun and non-gun-related violence.
- Exposed to non-gun-related violence.
- Exposed to gun and non-gun-related violence.

These groups differed in important ways. For instance, in comparison to those minimally exposed to violence, all other groups had significantly higher scores on depression, hostility, paranoid ideation, and psychoticism.

Across all study participants, the average level of exposure to violence and psychological distress decreased slightly over time. However, this pattern was not uniform across participants. For example, white and Hispanic youth experienced a significant decrease in exposure to violence that was not experienced by African American youth.

Facility Exposure and Continuous Exposure to Violence

Researchers at Loyola University Chicago also analyzed data from the Pathways to Desistance study to examine issues related to exposure to violence within correctional and residential facilities, as well as continuous exposure to community violence.[15] Seventy-five percent of study participants reported witnessing violent encounters between other residents in correctional and residential facilities, and 17% reported being victimized by other residents. Almost two-thirds of participants witnessed violence between staff and residents, and almost 10% reported being victimized by staff, with 5% reporting being beaten by staff.

To better understand the effects of multiple traumatic experiences, the researchers focused on a series of six interviews that occurred at six-month intervals over a three-year period. They used the term "continuous exposure to violence" to characterize the experiences of those who reported witnessing violence or being victimized in more than one interview during this period. Of the 1,354 study participants, 83% witnessed community violence at more than one time point, and 43% were direct victims of violence in the community at more than one time point.

Exposure to violence in the community during adolescence significantly increased the risk for rearrest. Similarly, the researchers found that continuous exposure to community violence during adolescence predicted higher levels of self-reported reoffending during early adulthood. This relationship was particularly pronounced for those who displayed callous unemotional traits. That is, adult reoffending was more likely to occur for adolescent offenders who experienced continuous exposure to trauma and exhibited a lack of emotion or who learned emotional detachment as a method of self-protection from trauma.

Exposure to Violence and Juvenile Court Involvement

Researchers at the University of Alabama examined exposure to violence and juvenile court involvement among African American adolescents living in extreme poverty.[16] They performed a secondary analysis of 9,215 adolescents between ages 9 and 17 living in Mobile, Alabama, who participated in the Mobile Youth

Researchers found that adolescents who witnessed violence or were victimized by violence were more likely to be charged with a crime against a person at a later time.

and Poverty Study. Data sources included annual surveys of youth, school records, and juvenile court records from 1998 to 2011.

The researchers found that adolescents who witnessed violence or were victimized by violence were more likely to be charged with a crime against a person at a later time. Court outcome severity was higher for this group — that is, youth exposed to violence in this sample experienced more adjudication, were more likely to be assigned to residential placement, and were more likely to be put on probation. The researchers included statistical controls for previous levels of crime and court outcome severity, which, together with the temporal quality of the research, increases confidence in the primary finding that exposure to community violence is associated with changes that lead toward more court involvement and more severe court outcomes.

The researchers also identified factors that influence the strength of the relationship between exposure to violence and juvenile court involvement. They found that academic progress reduces the strength of the relationship between exposure to violence and juvenile court involvement, while psychological symptoms of hopelessness as a result of exposure to violence strengthen the likelihood of court involvement.

Trauma and Crossover From the Child Welfare System to the Juvenile Justice System

Researchers from Chapin Hall at the University of Chicago examined how exposure to trauma may be related to later involvement in the juvenile justice system.[17] The study focused on 1,633 Chicago youth born between 1996 and 2002 who had one or more

out-of-home foster care placements, had completed an intake assessment that included measures of traumatic experiences, and had no prior juvenile justice involvement at the time of intake. Using linked administrative data from multiple state and local agencies (Illinois Department of Children and Family Services, Chicago Police Department, Cook County Juvenile Probation and Court Services Department, and Illinois Department of Juvenile Justice) available through 2017, the researchers conducted survival analyses[18] to identify the timing of, and factors related to, initial justice involvement.

The researchers found evidence to suggest that some specific types of traumatic experiences may increase the risk for juvenile justice involvement for those who are involved in the child welfare system. Specifically, when youth experienced violence in the community and at school, their likelihood of crossing over into juvenile justice system involvement increased. However, this study did not find evidence to support the broader hypothesis that greater total trauma exposure is related to increased probability of justice system involvement among youth in the child welfare system. In this sample, trauma exposure as a whole showed no significant relationship with arrest, detention, court filing, probation, or juvenile corrections when controlling for other factors such as youth characteristics, child welfare history, community characteristics, and individual risks and strengths.

Trauma Exposure for Justice-Involved LGBTQA and GNC Youth

Researchers at the Department of Community Corrections and Rehabilitation in Hennepin County (Minneapolis), Minnesota, examined the role of trauma and violence exposure on justice-involved lesbian, gay, bisexual, transgender, questioning/ unsure, and asexual (LGBTQA) youth and gender nonconforming (GNC) youth.[19] A total of 150 surveys and 60 in-person interviews were completed by youth ages 14 to 20 who were involved in Hennepin County corrections.[20] The researchers examined findings for two groups: one that included only LGBTQA and GNC youth, and another that included only heterosexual, cisgender youth.[21] Youth in both groups had similar levels of child welfare involvement, human services

placement stays, prior detention and correctional placements, and criminal history scores.

LGBTQA and GNC youth appear to have significantly more pronounced experiences of trauma and victimization than their heterosexual, cisgender peers. This group reported more cumulative trauma and victimization on a scale of adverse childhood experiences. LGBTQA and GNC youth were also more likely to report harassment by peers, verbal abuse by adults, and neglect by a caregiver. The largest differences were reported for exposure to sexual trauma and violence. LGBTQA and GNC youth were more likely to report having experienced forced intercourse, sexual assault by a known adult, and other forms of sexual assault.

Protective Factors and Treatment Programs

The remaining two studies focused on issues that may directly inform prevention and intervention efforts with youth who have been exposed to violence and other forms of trauma.

Factors That Reduce the Strength of the Relationship Between Maltreatment and Offending

Researchers at Child Trends, a nonprofit research organization that focuses on children's issues, carried out secondary analyses of data collected in the National Longitudinal Study of Adolescent to Adult Health (Add Health) to further examine the relationship between childhood maltreatment and delinquent and criminal behaviors. The researchers analyzed three waves of Add Health interview data for a sample of 10,613 respondents at different stages from adolescence to young adulthood. These waves of interviews occurred when respondents were 13 to 19 years old, then at 18 to 26 years old, and later at 24 to 30 years old.

The study found that a history of childhood maltreatment was associated with higher frequencies of overall violent and nonviolent offending.[22] Violent offending was nearly three times as high for those who experienced childhood maltreatment compared to those with no history of childhood maltreatment, and these differences continued from adolescence into adulthood. The relationship between maltreatment and offending did not differ by race, ethnicity, or sexual orientation. However, males with a history of childhood maltreatment were more likely to be involved in later delinquent and criminal behavior than females with a similar history.

The researchers identified a number of protective factors that reduced the likelihood of violent and nonviolent offending. In multiple cases, these protective factors had positive effects, regardless of whether the individual had experienced childhood maltreatment. Specifically, a strong connection to school, high-quality relationships with a mother or father figure, and high levels of neighborhood collective efficacy all had protective effects that reduced the likelihood of violent offenses, regardless of whether the individual experienced maltreatment during childhood. For nonviolent offenses, neighborhood collective efficacy had protective effects that did not vary by childhood maltreatment status. However, for those who experienced childhood maltreatment, a strong connection to school and high-quality relationships with a mother or father figure were especially protective in reducing the likelihood of nonviolent offenses. None of the protective effects varied by sex, race, ethnicity, or sexual orientation.

Effectiveness of Trauma-Informed Treatment Programs

Lastly, researchers at George Mason University carried out a meta-analysis to assess the effectiveness of trauma-informed treatment programs for justice-involved youth and youth at risk of justice system involvement who experienced some form of trauma in their lives.[23] Trauma-informed treatments include specialized interventions that focus on treating symptoms of trauma, such as post-traumatic stress disorder, depression, anxiety, and other affective disorders. The researchers set out to analyze data from a number of independent studies on the subject in an effort to examine overall trends. They searched 24 electronic databases and identified 29 publications that met the eligibility criteria. Eligible studies included evaluations of trauma-informed programs for youth

who were involved in the juvenile justice system. Also eligible were evaluations of trauma-informed programs for youth who were not involved in the juvenile justice system, but that included delinquency as an outcome, or that included an outcome highly associated with later delinquency (e.g., aggression, substance use, antisocial behavior). Both experimental (random assignment) and quasi-experimental studies that included a credible comparison group were eligible.

The 29 publications included 30 programs for analysis. Six of the programs focused specifically on justice-involved youth. The researchers found that the evidence base from these studies did not allow for any strong conclusions about the effectiveness of the trauma-informed programs for youth already involved in the justice system. The remaining 24 programs served at-risk children and youth who experienced trauma. Findings suggest that these programs as a whole can produce meaningful reductions in problem behaviors and may reduce future delinquency among youth with histories of trauma.

The researchers highlighted cognitive behavioral therapy (CBT) — specifically trauma-focused cognitive behavioral therapy (TF-CBT) — as an effective approach for reducing problem behaviors in youth with histories of trauma. But, they noted, the evidence base is insufficient to assess the effectiveness of CBT and TF-CBT for justice-involved youth.[24]

What We Have Learned

The seven OJJDP-funded studies further our understanding of the relationship between childhood trauma and juvenile justice system involvement. They provide strong evidence to support and further refine knowledge about the high levels of childhood trauma that justice-involved youth experience.

Within samples of justice-involved youth, the studies found high levels of previous trauma as well as ongoing exposure to trauma during and following justice system involvement. Researchers at Loyola University Chicago highlighted how continuous

exposure to violence was related to reoffending and rearrest in adulthood. Another study shed light on the differences in traumatic experiences for justice-involved youth who identify as LGBTQA or GNC.

Three studies started with broader samples of youth and examined how trauma was related to offending and juvenile justice system involvement. One found strong support for the relationship between trauma and justice system involvement, and another found support for the relationship between trauma and later offending. Researchers at the University of Chicago found more limited support for the relationship between specific forms of trauma (community-based and school-based) and justice system involvement with a sample of youth in the child welfare system.

Researchers identified several potential prevention or intervention points for youth exposed to violence and trauma. Researchers at Child Trends found that a strong connection to school, high-quality relationships with a mother or father figure, and high levels of neighborhood collective efficacy were protective factors that reduced the likelihood of later offending. Similarly, researchers at the University of Alabama found that academic progress was a protective factor, while psychological symptoms of hopelessness appeared to strengthen the relationship between trauma and court involvement. Another study highlighted that a lack of emotion or learned emotional detachment — which are coping methods resulting from trauma — were associated with higher levels of reoffending.

A study in Minnesota highlighted the importance of addressing potential exposure to sexual assault with youth who identify as LGBTQA or GNC. Finally, researchers at George Mason University found that trauma-informed practices as a whole produced positive results with at-risk youth who experienced trauma and highlighted CBT and TF-CBT as programs with particularly strong evidence of effectiveness with this group.

All of these findings underscore the importance of preventing child maltreatment and children's exposure to violence as victims or witnesses. One conclusion

that may be drawn from several of the studies is that it will likely require coordination across sectors, including, but not limited to, the justice system, to carry out effective strategies for mitigating the harm from childhood trauma and reducing the link to justice system involvement. Policymakers and practitioners can help by focusing on prevention, intervention, and treatment modalities across child-serving systems that address factors known to influence the relationship between childhood exposure to violence and later justice system involvement.

About the Authors

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For More Information

Learn more about NIJ's research on children exposed to violence at https://nij.ojp.gov/topics/articles/children-exposed-violence.

This article discusses the following awards:

- "A Longitudinal Investigation of Trauma Exposure, Retraumatization, and Post-Traumatic Stress of Justice-Involved Adolescents," award number 2016-MU-MU-0070
- "Violence Exposure, Continuous Trauma, and Repeat Offending in Female and Male Serious Adolescent Offenders," award number 2016-MU-MU-0067
- "Exposure to Violence, Trauma, and Juvenile Court Involvement: A Longitudinal Analysis of Mobile Youth and Poverty Study Data (1998-2011)," award number 2016-MU-MU-0068
- "Trauma Exposure, Ecological Factors, and Child Welfare Involvement as Predictors of Youth Crossover Into the Juvenile Justice System," award number 2016-MU-MU-0069

- "To Understand the Role of Trauma, Exposure to Violence, and Retraumatization for Justice-Involved Youth, Particularly for Clients Who Identify as LGBTQI or GNC," award number 2016-MU-MU-0066
- "Maltreatment and Delinquency Associations Across Development: Assessing Difference Among Historically Understudied Groups and Potential Protective Factors," award number 2016-MU-MU-0064
- "Trauma-Informed Interventions for Justice-Involved Youth: A Meta-Analysis," award number 2016-MU-MU-0065

Notes

1. The National Child Traumatic Stress Network, "About Child Trauma," https://www.nctsn.org/what-is-child-trauma/about-child-trauma.

2. Vincent J. Felitti et al., "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study," *American Journal of Preventive Medicine* 14 (1998): 245-258; and Emily M. Zarse et al., "The Adverse Childhood Experiences Questionnaire: Two Decades of Research on Childhood Trauma as a Primary Cause of Adult Mental Illness, Addiction, and Medical Diseases," *Cogent Medicine* 6 no. 1 (2019): 1-9.

3. Katie A. Ports, Derek. C. Ford, and Melissa T. Merrick, "Adverse Childhood Experiences and Sexual Victimization in Adulthood," *Child Abuse & Neglect* 51 (2016): 313-322, https://doi.org/10.1016/j.chiabu.2015.08.017.

4. Isaiah B. Pickens et al., "Victimization and Juvenile Offending," The National Child Traumatic Stress Network, https://www.nctsn.org/sites/default/files/resources//victimization_juvenile_offending.pdf; Heather A. Turner et al., "Polyvictimization and Youth Violence Exposure Across Contexts," *Journal of Adolescent Health* 58 no. 2 (2016): 208-214, https://doi.org/10.1016/j.jadohealth.2015.09.021; and Cecilia C. Lo et al., "From Childhood Victim to Adult Criminal: Racial/Ethnic Differences in Patterns of Victimization-Offending Among Americans in Early Adulthood," *Victims & Offenders* 15 no. 4 (2020): 430-456, https://doi.org/10.1080/15564886.2020.1750517.

5. Silvia C. Halpern et al., "Child Maltreatment and Illicit Substance Abuse: A Systematic Review and Meta-Analysis of Longitudinal Studies," *Child Abuse Review* 27 no. 5 (2018): 344-360, https://doi.org/10.1002/car.2534.

6. Elizabeth Crouch et al., "Challenges to School Success and the Role of Adverse Childhood Experiences," *Academic Pediatrics* 19 no. 8 (2019): 899-907, https://doi.org/10.1016/j.acap.2019.08.006.

7. Kathryn L. Humphreys et al., "Child Maltreatment and Depression: A Meta-Analysis of Studies Using the Childhood Trauma Questionnaire," *Child Abuse & Neglect* 102 (2020): 104361, https://doi.org/10.1016/j.chiabu.2020.104361.

8. Leah K. Gilbert et al., "Childhood Adversity and Adult Chronic Disease: An Update From Ten States and the District of Columbia, 2010," *American Journal of Preventive Medicine* 48 no. 3 (2015): 345-349, https://doi.org/10.1016/j.amepre.2014.09.006.

9. National Institute of Justice, *Compendium of Research on Children Exposed to Violence (CEV) 2010-2015,* Washington, DC: U.S. Department of Justice, National Institute of Justice, June 2016, https://www.ncjrs.gov/pdffiles1/nij/249940.pdf.

10. Office of Juvenile Justice and Delinquency Prevention, "Children Exposed to Violence," https://ojjdp.ojp.gov/programs/children-exposed-violence.

11. Office of Juvenile Justice and Delinquency Prevention funding opportunity, "OJJDP FY 2016 Studies Program on Trauma and Justice-Involved Youth," grants.gov announcement number OJJDP-2016-10040, posted May 9, 2016, https://ojjdp.ojp.gov/sites/g/files/xyckuh176/files/media/document/OJJDP-2016-10040.PDF.

12. In October 2018, the juvenile justice and delinquency prevention research, evaluation, and statistical functions of the Office of Justice Programs moved from the Office of Juvenile Justice and Delinquency Prevention to the National Institute of Justice.

13. Edward P. Mulvey, Carol A. Schubert, and Alex Piquero, "Pathways to Desistance — Final Technical Report," Final report to the National Institute of Justice, grant number 2008-IJ-CX-0023, January 2014, NCJ 244689, https://www.ojp.gov/pdffiles1/nij/grants/244689.pdf.

14. Unless otherwise noted, all data in this section come from Thomas A. Loughran and Joan Reid, "A Longitudinal Investigation of Trauma Exposure, Retraumatization, and Post-Traumatic Stress of Justice-Involved Adolescents," Final report to the National Institute of Justice, grant number 2016-MU-MU-0070, August 2018, NCJ 252015, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/252015.pdf.

15. Unless otherwise noted, all data in this section come from Noni Gaylord-Harden, "Violence Exposure, Continuous Trauma, and Repeat Offending in Female and Male Serious Adolescent Offenders," Final report to the National Institute of Justice, grant number 2016-MU-MU-0067, January 2020, NCJ 254493, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/254493.pdf.

16. Unless otherwise noted, all data in this section come from Anneliese Bolland and John Bolland, "Exposure to Violence, Trauma, and Juvenile Court Involvement: A Longitudinal Analysis of Mobile Youth and Poverty Study Data (1998-2011)," Final report to the National Institute of Justice, grant number 2016-MU-MU-0068, January 2020, NCJ 254496, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/254496.pdf.

17. Unless otherwise noted, all data in this section come from Leah Gjertson and Shannon Guiltinan, "Youth Trauma Experiences and the Path From Child Welfare to Juvenile Justice," Final report to the National Institute of Justice, grant number 2016-MU-MU-0069, December 2020, NCJ 255928, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/255928.pdf.

18. Survival analysis refers to a set of statistical approaches used to investigate the time it takes for an event of interest to occur. In this case, the event of interest is initial justice involvement (e.g., arrest).

19. Unless otherwise noted, all data in this section come from Andrea Hoffmann et al., "Understanding the Role of Trauma and Violence Exposure on Justice-Involved LGBTQA and GNC Youth in Hennepin County, MN," Final report to the National Institute of Justice, grant number 2016-MU-MU-0066, January 2020, NCJ 254495, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/254495.pdf.

20. Surveys were completed by youth at the Hennepin County Juvenile Detention Center and the County Home School, and in juvenile probation.

21. Cisgender is a term that applies to a person whose gender identity corresponds with the sex the person had or was identified as having at birth.

22. Unless otherwise noted, all data in this section come from Andra Wilkinson et al., "How School, Family, and Community Protective Factors Can Help Youth Who Have Experienced Maltreatment," Final report to the National Institute of Justice, grant number 2016-MU-MU-0064, December 2020, NCJ 255937, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/255937.pdf.

23. Unless otherwise noted, all data in this section come from David B. Wilson, Ajima Olaghere, and Catherine S. Kimbrell, "Trauma-Focused Interventions for Justice-Involved and At-Risk Youth: A Meta-Analysis," Final report to the National Institute of Justice, grant number 2016-MU-MU-0065, December 2020, NCJ 255936, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/255936.pdf.

24. More information about cognitive behavioral therapy and trauma-focused cognitive behavioral therapy is available on CrimeSolutions.ojp.gov.

NCJ 255645

Take a closer look at the human services side of reentry …

NIJ has released a series of three white papers on issues connected to reentry. When people leave prison or jail to return to their communities, the criminal justice system intersects with a wide variety of other services and needs. Three new papers examine those intersections, discussing:

- How reentering individuals can be safely employed to meet the growing needs of the health care sector.

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- How collaboration between service agencies and community corrections can help meet the needs of people on probation and parole.

To read more about reentry's links to human services, go to NIJ.ojp.gov/reentry-human-services.

MENTORING PROGRAMS FOR YOUTH: A PROMISING INTERVENTION FOR DELINQUENCY PREVENTION

BY **DAVID L. DUBOIS**

To realize the full potential of youth mentoring programs, it is critical to advance research on program effectiveness and population-level impact.

Mentoring programs are a prominent strategy in the United States for preventing negative outcomes and promoting resilience among at-risk youth.[1] Although diverse in their design and implementation, mentoring programs share a common aim of providing young people with structured support from older or more experienced people, such as adult volunteers or students at higher grade levels.

These programs date back to initiatives in the early 20th century that sought to engage men from local communities to be positive role models for boys from disadvantaged life circumstances and, in doing so, stem the tide of young males becoming involved in the justice system.[2] Today's mentoring programs serve a wide range of age groups — from young children to older adolescents — and populations with diverse needs and risk factors — from poverty and neighborhood disadvantage to specific vulnerabilities such as disability, mental health challenges, or experiences of commercial sexual exploitation. Current program models and approaches differ according to

the age of the mentor (e.g., older peers vs. adults), whether mentors are volunteers or paid staff, format (e.g., one-to-one vs. group), and location (e.g., school vs. community). Some programs focus on delinquency prevention while others promote mental health and academic achievement.

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) is the largest federal funder of mentoring programs and awarded nearly $1 billion in grants to mentoring organizations from fiscal year (FY) 2008 to FY 2019. Between FY 2017 and the first half of FY 2019, OJJDP-funded programs recruited 95,000 new mentors and served more than 600,000 youth nationwide.[3]

For such a large and broad investment portfolio to yield the desired results, it must be informed by rigorous and actionable research. This includes identifying ways to enhance program effectiveness[4] and, in doing so, minimize the risk of unintended harm to any participating youth.[5] It is equally important, however, to use research to advance understanding of how to implement effective programs with sufficient

Studies find that connecting youth to mentoring programs is a viable strategy for both preventing and reducing delinquent behavior.

scale and reach to make a measurable difference in delinquent behavior, juvenile arrest rates, victimization, and other outcomes at a community, state, regional, or national level.[6]

This article takes stock of the current state of mentoring research on program effectiveness and population-level impact. Each section reviews the research to date, notes key challenges and remaining questions, and highlights promising directions for addressing limitations in the current evidence base.

Mentoring Program Effectiveness

There is ample evidence that mentoring programs have the potential to contribute to positive outcomes for at-risk youth across a variety of demographic groups (e.g., age, gender, race/ethnicity) and program approaches, including cross-age peer, one-to-one, group, and both school- and community-based.[7] Studies find, in particular, that connecting youth to mentoring programs is a viable strategy for both preventing and reducing delinquent behavior.[8] In line with this research, CrimeSolutions — an initiative of the National Institute of Justice that reviews justice-related practices and programs for evidence of their effectiveness — has rated mentoring as "effective" for "reducing delinquency outcomes."[9] CrimeSolutions has also rated several specific mentoring programs aimed at preventing delinquency or reducing recidivism for those with justice system involvement as "promising" or "effective." These include, for example, Reading for Life, a group mentoring program that uses works of literature to facilitate moral development and character education as an alternative to court prosecution for first- and second-time juvenile offenders. A randomized controlled trial found statistically significant declines in rates of

rearrest and number of arrests for a two-year period following program participation, with these impacts most evident for relatively serious felony offenses compared to misdemeanors.[10]

Research suggests that the effectiveness of mentoring programs tends to be enhanced by practices that are directed toward training and supporting mentors, as well as implementation of programs with fidelity.[11] Furthermore, a strong emotional bond with one's mentor and related interpersonal experiences (e.g., when youth develop a sense that they matter) have emerged as important mechanisms through which mentoring relationships can promote positive outcomes,[12] including prevention of delinquent behavior.[13]

Conversely, findings also indicate a potential for program participation to be harmful under various conditions, such as when mentoring relationships end prematurely[14] or mentors fail to follow through on basic expectations for maintaining contact with youth.[15] Of particular relevance to delinquency prevention, one study found that participation in a mentoring program was associated with increased involvement in criminal behavior among youth who did not have significant prior arrest histories and who, due to the nature of the program, were exposed to youth who had been arrested.[16] Thus, even though mentoring programs like Big Brothers Big Sisters have been recommended as a way to minimize opportunities for peer contagion and deviancy training (e.g., peers modeling and rewarding deviant behavior),[17] they are not immune to this risk when they incorporate opportunities for peer interaction.

Challenges and Unanswered Questions

Despite significant research on youth mentoring to date, a number of challenges and unanswered questions remain. One is how to account for the substantial variability in the effectiveness of programs that have received rigorous evaluation.[18] CrimeSolutions has reviewed and rated 55 programs that involve mentoring. Of these, nearly one-third (17) have a rating of "no effects"; the remainder are rated as either "promising" (30) or "effective" (8).

Because a program must be implemented with fidelity to receive a rating, differences in the extent or quality of implementation are unlikely to fully account for this wide variation.

A second and related challenge is that efforts to incorporate new practices or activities into programs to help increase effectiveness have had limited success. A recent OJJDP-funded review of mentoring research looked at several studies that used randomized controlled designs to examine the effects of hypothesized enhancements to mentoring programs in areas such as mentor training, mentor-youth activities, staff support, and supervision of mentoring relationships. For the most part, the findings failed to reveal significant differences in youth outcomes based on whether they and their mentors had been selected to receive the new practices.[19] These results are concerning, in part, because most mentoring programs, even when demonstrating effectiveness, have been associated with only modest improvements in youth outcomes.[20]

Another challenge is the need for a deeper and more complete understanding of the specific mechanisms through which mentoring relationships influence youth outcomes in areas such as delinquent behavior. Both the lack of well-developed theories of change in the design and description of mentoring programs and the lack of measurement and analysis of potential mediators of outcomes have contributed to this limitation in the current knowledge base.[21] Research that illuminates the "black box problem" of what happens in mentoring relationships is likely to be key for better delineating sources of variation in youth outcomes within and across mentoring programs and then designing innovations that improve effectiveness.[22]

A final challenge worthy of note is that most research on mentoring programs to date focuses on their relatively immediate effects on the outcomes of participating youth.[23] Particularly striking is the limited investigation of the ability of programs to produce sustained, long-term effects on educational attainment, employment, arrests during adulthood,

and other key outcomes.[24] Evidence that program effects can decay rapidly following program participation[25] underscores the need for greater understanding of this issue.

Conversely, many programs like Big Brothers Big Sisters have open-ended time frames for participation (e.g., until youth reach age 18) but have been evaluated largely with respect to only brief durations of involvement (e.g., one year). This limits our understanding of the effects that may accrue as youth receive "full doses" of mentoring over more extended periods of their development.

Promising Directions

Recent research provides promising directions for addressing these limitations in the knowledge base. One is to use evaluation to inform modifications to programs that have, in turn, resulted in greater evidence of their effectiveness.[26]

This potential avenue for strengthening mentoring programs is illustrated by recent research on the Quantum Opportunities program of the Eisenhower Foundation, an intensive, year-round, multicomponent intervention for high-risk minority high school students from inner-city neighborhoods. Youth receive both individual and group mentoring from paid staff. Following an initial evaluation that yielded mixed results, a randomized controlled evaluation of a subsequent iteration of the program found that participants had significantly higher grade point averages, high school graduation rates, and college acceptance rates.[27] For example, approximately 76% of program youth graduated from high school, compared with 40% of control youth. The stronger results were attributed, in part, to modifications made to the program, including a new "Deep Mentoring" training curriculum for staff that fosters more intensive and longer-lasting mentoring relationships with participating youth. The training includes an emphasis on mentors serving as advocates for youth — visiting their homes to discuss problems and find solutions, attending parent-teacher conferences, and standing in for parents when needed, for example.

Relative to the research referenced earlier, which tested potential improvements to mentoring programs with largely disappointing results, examples such as this point to a program-specific, data-driven, and iterative approach as more promising for increasing impacts on youth outcomes. This idea is well aligned with the tremendous diversity that exists across mentoring programs, both in their target populations and core models — a reality that makes one-size-fits-all enhancements seem unlikely.

At the same time, notable progress has been made in delineating broader avenues for strengthening programs. Two meta-analyses have identified significant trends toward greater effectiveness for programs that feature support for mentors to provide youth with intentional teaching or guidance as well as advocacy.[28] These findings stand somewhat in contrast to earlier research that pointed to the potential for overly directive, prescriptive mentoring approaches to conflict with youths' developmental needs for autonomy and constrain opportunities for emotional bonding between mentors and youth.[29] They also run counter to an emphasis in many programs (particularly those using volunteers) on the need for firm boundaries in mentor-youth relationships, presumably to minimize any risk of harm to participating youth.[30]

Further study is needed to understand the conditions under which supporting more encompassing and directive roles for mentors helps avoid pitfalls and improve outcomes. Tasking mentors with highly structured, curriculum-based approaches to guidance, for example, has not been associated with greater effectiveness,[31] suggesting the need for more nuanced and flexible ways of incorporating a teaching role. Recent advances in measuring the distinct processes involved in mentoring relationships offer a promising direction for helping to answer these questions.[32] Researchers, for example, recently reported initial validation research on measuring five mentoring intervention processes: identification with the mentor, social and emotional support, teaching and education, advocacy, and shared time and activity.[33] Examining these processes in relation to youth outcomes could be highly informative in the design and ongoing development of mentoring programs.

Finally, evaluations have emerged that examine the longer-term effects of mentoring on outcomes extending into adulthood. On the whole, the findings provide intriguing preliminary evidence that mentoring received through a program during childhood or adolescence can indeed foster improved functioning at least into early adulthood.[34] One study, for example, recently reported that elementary and high school students randomly assigned to receive school-based mentoring, combined with case management through Communities in Schools (CIS), had fewer arrests in adulthood and, among females, were more likely to attend post-secondary education compared to those receiving CIS case management alone.[35] Meanwhile, a follow-up study of participants in a randomized controlled trial of the Youth Nominated Support Team-Version II (YNST-II) intervention — which helps adults from family, school, and neighborhood or other community settings provide support to suicidal youth following psychiatric care — found that those in the program had significantly lower rates of overall mortality, as well as deaths due to suicide or drugs, at follow-up 11 to 14 years after receiving the program.[36] It is notable that the longer-term impacts of these two programs are evident despite limited evidence of their effectiveness when evaluating outcomes closer to the time of program participation. (The YNST-II program's rating in CrimeSolutions has changed from "no effects" to "promising" based on the results of the follow-up study.) This pattern of results supports the idea that it can be important to examine the implications of mentoring program participation for later life outcomes, even when evidence of effects on more immediate outcomes is limited.

Scale and Population-Level Impact

It is critically important to consider the extent to which mentoring programs are reaching the youth who stand most to benefit from them, as well as the factors that may be inhibiting achievement of this goal.

Based on a 2013 survey of a nationally representative sample of youth between ages 18 and 21, researchers estimated that of the approximately 24 million at-risk young people, 15 million will have had an adult mentor at one or more points between ages 8 and 18. Structured mentoring relationships — that is, those established through programs — were substantially less common than informal mentoring ties with individuals such as neighbors or teachers. Nineteen percent of the surveyed youth reported having had a structured mentoring relationship, and 44% reported having had only an informal mentor.[37] The greater the number of risk factors reported, the more likely respondents were to recall a time when they did not have, but wished they had, an adult mentor (43% of those with two or more risk factors compared with 22% with no risk factors).

A recent national survey of mentoring programs[38] found that mentor recruitment was the most commonly reported challenge faced by programs (47%). More than 1 in 4 programs (28%) also reported program growth and sustainability as challenges. On average, programs reported that more than 50 youth were waiting to be matched with mentors, which is significant given that the average program served approximately 250 youth. Boys referred to programs were particularly likely to be on a waitlist and to have relatively long waits, with nearly half of programs reporting an average wait time of more than four months for boys.[39]

For youth involved in the juvenile justice system, the reach of mentoring programs has been limited.[40] A national study funded by OJJDP found that only about 6 in 10 juvenile justice settings provided mentoring to youth through their own embedded programs or services or referred youth to external mentoring programs.[41] Among the settings that did not use or refer youth to mentoring, the most common barrier cited (51%) was a lack of access to mentoring programs. Furthermore, more than one-third (39%) of juvenile justice settings reported that one-quarter or fewer of the youth they referred to outside programs were ultimately matched with a mentor. In line with the challenge of mentor recruitment, mentoring programs most commonly cited lack of mentor availability as a barrier to providing services to referred youth (50%). A substantial portion (27%) also reported that refusal or lack of acceptance of the referral by the youth or family was an issue.

When gauging the potential of mentoring programs for population-level impact, it is important to consider whether programs can be effective when implemented widely throughout a community (e.g., in a school system) or nationally. Several multisite randomized controlled trial evaluations of mentoring programs have reported evidence of their ability to positively influence youth outcomes. These include the Big Brothers Big Sisters community- and school-based mentoring programs,[42] Friends of the Children,[43] and the National Guard Youth Challenge program.[44] It should be noted, however, that the results of these evaluations have been somewhat mixed. For example, the National Guard Youth Challenge evaluation reported impacts on outcomes such as receiving a high school degree, but not on justice outcomes such as arrest.

These types of studies often place restrictions on site eligibility in ways that may limit the generalizability of findings to the full population of youth served by the program across all sites nationally. For example, affiliate agencies for the Big Brothers Big Sisters school-based mentoring trial were required to have at least four years of experience delivering the program, strong agency leadership, and strong established relationships with participating schools.[45]

Challenges and Unanswered Questions

It is clear from existing research that mentor recruitment is a pervasive challenge that substantially limits the reach and scale of many mentoring programs. However, investigation of this problem — particularly the effectiveness of different recruitment strategies — is strikingly limited. The OJJDP-funded National Mentoring Resource Center reviewed research on the effectiveness of male mentor recruitment practices, for example, and identified only one study that met methodological criteria for rigor.[46]

It is critically important to consider the extent to which mentoring programs reach the youth who stand most to benefit from them, as well as the factors that may inhibit achievement of this goal.

A second key challenge is the unknown effectiveness of most of the mentoring programs that have successfully scaled up to a regional or national level and are thus serving the largest numbers of youth. Furthermore, as noted above, the demonstrated effectiveness of widely disseminated or scaled programs that have undergone rigorous evaluation is mixed. These studies have noted challenges with maintaining fidelity of implementation within and across sites, as is common with scaled-up programs.[47] The burgeoning field of implementation science[48] offers frameworks and methods for cultivating a deeper understanding of such issues and developing and testing approaches to address them. However, for the most part, implementation science has not been integrated into research on youth mentoring. The companion area of dissemination science[49] likewise provides an opportunity to explore conditions and strategies that can encourage broader uptake of mentoring programs that show robust evidence of efficacy when implemented on a smaller scale.

Promising Directions

Broadening the range of people who are engaged as mentors is one promising direction for increasing the reach of mentoring programs. Some programs use mentors whose backgrounds may not necessarily align with conventional views or criteria for mentor eligibility or appropriateness, but whose life experiences align with those of participating youth in ways that are thought to make them "credible messengers." For example, the Arches Transformative Mentoring Program, a group mentoring program that seeks to reduce recidivism among youth on probation in New York City, often uses mentors who have been formerly involved in the justice system, are from the same neighborhood as participants, and have been recipients of similar types of programs or services. A quasi-experimental evaluation of the program found statistically significant reductions in felony reconvictions for program participants compared with comparison group youth at 24 months.[50] However, there were no statistically significant differences in arrests, felony arrests, or reconvictions.

A conceptually related approach involves engaging existing members of the youth's social network — people who are already involved in his or her day-to-day life. The previously referenced Youth Nominated Support Team-Version II and National Guard Youth Challenge programs employ this strategy. Youth recruit mentors from their own social networks; specific socialization agents, such as teachers in the youth's school[51] or coaches,[52] can also serve as mentors. Such programs provide a promising approach for expanding the pool of adults involved in mentoring youth by actively engaging those who might not otherwise be considered appropriate for the role or seek it on their own.

Some programs provide mentoring to all youth within a given setting (e.g., a school). Sources of Strength, for example, is a school-based suicide prevention program that uses youth opinion leaders from diverse social cliques to develop and deliver, with adult mentoring, messaging aimed at changing the norms and behaviors of their peers within the entire school population. A cluster-randomized trial[53] of the program involving 18 high schools found significant improvements in perceptions and behaviors pertaining to suicide and in social connectedness among students in program schools.[54] CrimeSolutions rates the program as "promising." This type of "whole setting" approach has received only limited evaluation to date, and not all results have been clearly supportive.[55] Yet, in view of its potential to greatly increase the number of young people whom structured mentoring programs can reach, it is a strong candidate for further investigation.

Also notable is a promising strategy from the broader prevention field that involves using technical assistance to help communities select, implement, and sustain evidence-supported prevention and promotion programs that are matched to their local needs and resources.[56] Cluster-randomized trials of these approaches have indicated sustained positive effects on youth outcomes, such as violence-related behavior and substance misuse.[57] Applying these approaches to youth mentoring programs could encourage greater uptake of evidence-supported mentoring programs within communities and other settings (e.g., schools, juvenile justice systems), especially given the wide range of program parameters that must be considered and the reliance of programs on local resources (e.g., types of available mentors) in making these decisions.

Research and Practice Going Forward

To realize the potential of youth mentoring programs, we must advance the knowledge bases required for optimizing both program effectiveness and the capacity for achieving broad, population-level impacts.

Several topics stand out as worthy priorities in the area of effectiveness research. First, there needs to be more intensive investigation of the change mechanisms that are most important in driving youth outcomes. The National Institutes of Health recently established a funding priority for investigations of mechanisms of change based, in part, on the prospects that such studies could help unify research on behavior change strategies and better delineate key targets for intervention.[58] Extending this approach to youth mentoring research, including its applications to juvenile justice, holds similar promise and could be supported through more consistent measurement of common relationship processes in evaluation studies.[59]

Second, greater attention should be given to the ongoing development of mentoring programs to optimize their effectiveness. Iterative cycles of development, rigorous evaluation, and program refinement appear particularly promising in this regard. This type of research can help better delineate

the outcomes and youth who are most likely to benefit from a given mentoring program. Clearly, no mentoring program will serve all purposes or benefit all youth. Greater understanding of which types of mentoring (e.g., one-to-one, group, or peer) are best suited for different purposes and youth would provide a valuable foundation of knowledge for research-informed matching of individual youth with specific programs.

Greater investigation of the longer-term effects of mentoring program participation also merits priority status. This is especially true given the research findings that suggest that some effects occur or continue several years after program participation on important justice-related outcomes. Data already collected in evaluations of shorter-term outcomes could be leveraged to extend the scope and examine program effects at later points in time in a relatively cost- and time-efficient manner. It is clear, furthermore, that this type of follow-up may be useful even when programs have demonstrated limited signs of initial effectiveness.

Advancing the knowledge base for population-level impact should include rigorous impact evaluations of mentoring programs currently being implemented at relatively large scale (e.g., on a regional or nationwide basis). To optimize generalizability of findings, these evaluations need to be designed with representativeness of program sites and participants in mind. Such studies also should carefully examine factors that facilitate or constrain implementation of key program components (e.g., mentor training) both across and within sites; this information can be leveraged to design approaches to improving the quality and consistency of delivery that then can be tested rigorously in the contexts of dissemination and scale-up.

Research that can help expand the reach of local programs also is needed. The relative efficacy of different strategies for recruiting mentors, especially those who are most often in short supply (e.g., males), is one area that is clearly ripe for investigation. Another is the development and evaluation of approaches for reaching larger numbers of youth,

including using nontraditional mentors and infusing widely available opportunities for mentoring into sites such as schools and correctional settings.

The future directions of research are meaningful only if they can be applied to future practice decisions and programming structures. Research must not just explain what has been observed, but also provide a systematic and structured path to applying that information in the dynamic reality of everyday practice. In keeping with these considerations, it is important to bear in mind that advancing the foundations of knowledge required for program effectiveness and population-level impact — although discussed separately here — stand to be mutually informative and synergistic in ways that support effective translation of research into practice. Consider, for example, strategies for encouraging uptake within communities and other settings of evidence-supported mentoring programs that are tailored to their specific needs and resources. Such approaches offer the promise of increasing the dissemination and reach of programs, thus furthering their potential for broader impact. At the same time, the viability of this type of strategy clearly depends on continued investment in research on program effectiveness. This research will be vital for ensuring that a robust menu of options for evidence-supported mentoring programs exists for those working on the ground in communities to leverage mentoring as a strategy for addressing the needs of young people.

A final and related point to underscore is the field's need for overarching initiatives and infrastructure to support mutually informing connections between research and practice. These connections are essential for translating research findings into practice — thus ensuring that new knowledge makes a meaningful difference. They are equally important for keeping research appropriately aligned with the most pressing needs of programs and the communities they serve, thereby avoiding gaps in areas of knowledge that are critical for supporting practice. To that end, the National Mentoring Resource Center, funded by OJJDP, has the goal of connecting research and practice through a variety of mechanisms, including reviews of the research

evidence to support different program practices and a curated repository of resources that facilitates sharing of practitioner innovations.

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For More Information

Visit the OJJDP-funded National Mentoring Resource Center at nationalmentoringresourcecenter.org for mentoring tools, program and training materials, and technical assistance.

Notes

1. David L. DuBois and Michael J. Karcher, "Youth Mentoring in Contemporary Perspective," in *Handbook of Youth Mentoring,* ed. David L. DuBois and Michael J. Karcher, 2nd ed. (Thousand Oaks, CA: SAGE Publications, Inc., 2014), 3-13.

2. David B. Baker and Colleen P. Maguire, "Mentoring in Historical Perspective," in *Handbook of Youth Mentoring,* ed. David L. DuBois and Michael J. Karcher (Thousand Oaks, CA: SAGE Publications, Inc., 2005), 14-29.

3. "Mentoring," U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, https://ojjdp.ojp.gov/ programs/mentoring?pi=54.

4. David L. DuBois, "Program Evaluation," in *Handbook of Youth Mentoring,* ed. David L. DuBois and Michael J. Karcher, 2nd ed. (Thousand Oaks, CA: SAGE Publications, Inc., 2014), 481-498.

5. Sarah E. Kremer and Becky Cooper, "Mentor Screening and Youth Protection," in *Handbook of Youth Mentoring,* ed. David L. DuBois and Michael J. Karcher, 2nd ed. (Thousand Oaks, CA: SAGE Publications, Inc., 2014), 411-425.

6. David L. DuBois and Michael J. Karcher, "Youth Mentoring: Progress and Prospects for the 21st Century," in *Handbook of Youth Mentoring,* ed. David L. DuBois and Michael J. Karcher, 2nd ed. (Thousand Oaks, CA: SAGE Publications, Inc., 2014), 525-534.

7. For reviews, see David L. DuBois et al., "How Effective Are Mentoring Programs for Youth? A Systematic Assessment of the Evidence," *Psychological Science in the Public Interest* 12 no. 2 (2011): 57-91, https://doi.org/10.1177/1529100611414806; Michael J. Karcher, "Ten-Year Follow-Up on the RCT Study of Mentoring in the Learning Environment (SMILE): Effects of the Communities in Schools Mentoring Program on Crime and Educational Persistence," Technical report to the Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice, grant number 2013-JU-FX-0008, April 2020, NCJ 254619, https://www.ojp.gov/pdffiles1/ojjdp/grants/254619.pdf; and Gabriel P. Kuperminc and Nancy L. Deutsch, "Group mentoring," under review for publication, National Mentoring Resource Center Research Review (2020).

8. For reviews, see Stephanie Hawkins et al., *Mentoring for Preventing and Reducing Delinquent Behavior Among Youth,* National Mentoring Resource Center Research Review, February 2020, NCJ 254592, https://www.ojp.gov/library/publications/mentoring-preventing-and-reducing-delinquent-behavior-among-youth; and Patrick H. Tolan et al., "Mentoring Programs To Affect Delinquency and Associated Outcomes of Youth At-Risk: A Comprehensive Meta-Analytic Review," *Journal of Experimental Criminology* 10 no. 2 (2014): 179-206, https://doi.org/10.1007/s11292-013-9181-4.

9. National Institute of Justice, "Practice Profile: Mentoring," *CrimeSolutions,* 2013, https://crimesolutions.ojp.gov/ratedpractices/15.

10. Alesha D. Seroczynski et al., "Reading for Life and Adolescent Re-Arrest: Evaluating a Unique Juvenile Diversion Program," *Journal of Policy Analysis and Management* 35 no. 3 (2016): 662-682, https://doi.org/10.1002/pam.21916.

11. David L. DuBois et al., "Effectiveness of Mentoring Programs for Youth: A Meta-Analytic Review," *American Journal of Community Psychology* 30 no. 2 (2002): 157-197, https://doi.org/10.1023/A:1014628810714; and Michael Garringer et al., *Elements of Effective Practice for Mentoring,* 4th ed. (Boston: MENTOR: The National Mentoring Partnership, 2015), https://www.mentoring.org/resource/elements-of-effective-practice-for-mentoring/.

12. Amanda Bayer, Jean Baldwin Grossman, and David L. DuBois, "Using Volunteer Mentors To Improve the Academic Outcomes of Underserved Students: The Role of Relationships," *Journal of Community Psychology* 43 no. 4 (2015): 408-429, https://doi.org/10.1002/jcop.21693; and Jean E. Rhodes and David L. DuBois, "Mentoring Relationships and Programs for Youth," *Current Directions in Psychological Science* 17 no. 4 (2008): 254-258, https://doi.org/10.1111/j.1467-8721.2008.00585.x.

13. Hawkins et al., *Mentoring for Preventing and Reducing Delinquent Behavior Among Youth.*

14. Jean B. Grossman and Jean E. Rhodes, "The Test of Time: Predictors and Effects of Duration in Youth Mentoring Programs," *American Journal of Community Psychology* 30 no. 2 (2002): 199-219, https://doi.org/10.1023/a:1014680827552; and Jean B. Grossman et al., "The Test of Time in School-Based Mentoring: The Role of Relationship Duration and Re-Matching on Academic Outcomes," *American Journal of Community Psychology* 49 no. 1-2 (2012): 43-54, https://doi.org/10.1007/s10464-011-9435-0.

15. Michael J. Karcher, "The Effects of School-Based Developmental Mentoring and Mentors' Attendance on Mentees' Self-Esteem, Behavior, and Connectedness," *Psychology in the Schools* 42 no. 1 (2005): 65-77, https://doi.org/10.1002/pits.20025; and Renée Spencer, "'It's Not What I Expected': A Qualitative Study of Youth Mentoring Relationship Failures," *Journal of Adolescent Research* 22 no. 4 (2007): 331-354, https://doi.org/10.1177%2F0743558407301915.

16. Clifford R. O'Donnell and Izaak L. Williams, "The Buddy System: A 35-Year Follow-Up of Criminal Offenses," *Clinical Psychological Science* 1 no. 1 (2013): 54-66, https://doi.org/10.1177/2167702612456907.

17. Kenneth A. Dodge, Thomas J. Dishion, and Jennifer E. Lansford, "Deviant Peer Influences in Intervention and Public Policy for Youth," *Social Policy Report* 20 no. 1 (2006): 1-20, https://doi.org/10.1002/j.2379-3988.2006.tb00046.x.

18. DuBois et al., "Effectiveness of Mentoring Programs for Youth: A Meta-Analytic Review"; and DuBois et al., "How Effective Are Mentoring Programs for Youth?"

19. David L. DuBois et al., *Synthesis of OJJDP-Sponsored Mentoring Research: 2019 Update,* Office of Juvenile Justice and Delinquency Prevention National Mentoring Resource Center, 2020, http://nationalmentoringresourcecenter.org/images/PDF/Synthesis_of_OJJDP_Sponsored_Mentoring_Research_2019_Update.pdf.

20. DuBois et al., "Effectiveness of Mentoring Programs for Youth: A Meta-Analytic Review"; DuBois et al., "How Effective Are Mentoring Programs for Youth?"; and Tolan et al., "Mentoring Programs To Affect Delinquency and Associated Outcomes of Youth At-Risk."

21. DuBois et al., *Synthesis of OJJDP-Sponsored Mentoring Research: 2019 Update;* and Tolan et al., "Mentoring Programs To Affect Delinquency and Associated Outcomes of Youth At-Risk."

22. Patrick H. Tolan et al., "Improving Understanding of How Mentoring Works: Measuring Multiple Intervention Processes," *Journal of Community Psychology* 48 no. 6 (2020): 2086-2107, https://doi.org/10.1002/jcop.22408.

23. DuBois et al., "How Effective Are Mentoring Programs for Youth?"

24. DuBois et al., "How Effective Are Mentoring Programs for Youth?"

25. Carla C. Herrera et al., *Making a Difference in Schools: The Big Brothers Big Sisters School-Based Mentoring Impact Study* (Philadelphia: Public/Private Ventures, 2007).

26. DuBois et al., *Synthesis of OJJDP-Sponsored Mentoring Research: 2019 Update.*

27. CrimeSolutions rated the program "effective." Alan Curtis and Tawana Bandy, *The Quantum Opportunities Program: A Randomized Control Evaluation,* The Eisenhower Foundation, 2015.

28. DuBois et al., "How Effective Are Mentoring Programs for Youth?"; and Tolan et al., "Mentoring Programs To Affect Delinquency and Associated Outcomes of Youth At-Risk."

29. Thomas E. Keller, "The Stages and Development of Mentoring Relationships," in *Handbook of Youth Mentoring,* ed. David L. DuBois and Michael J. Karcher (Thousand Oaks, CA: SAGE Publications, Inc., 2005), 82-99.

30. Kremer and Cooper, "Mentor Screening and Youth Protection."

31. DuBois et al., "How Effective Are Mentoring Programs for Youth?"

32. Mary A. Hamilton et al., "Functional Roles of Important Nonfamily Adults for Youth," *Journal of Community Psychology* 44 no. 6 (2016): 799-806, https://doi.org/10.1002/jcop.21792; and Tolan et al., "Improving Understanding of How Mentoring Works."

33. Tolan et al., "Improving Understanding of How Mentoring Works."

34. Jennifer E. Blakeslee and Thomas E. Keller, "Extending a Randomized Trial of the My Life Mentoring Model for Youth in Foster Care To Evaluate Long-Term Effects on Offending in Young Adulthood," Technical report to the Office of Juvenile Justice and Delinquency Prevention, award number 2013-JU-FX-0001, February 2018, NCJ 251418, https://www.ojp.gov/pdffiles1/ojjdp/grants/251418.pdf; David L. DuBois, Carla Herrera, and Julius Rivera, "Investigation of Long-Term Effects of the Big Brothers Big Sisters Community-Based Mentoring Program: Final Technical Report for OJJDP," award number 2013-JU-FX-0003, February 2018, NCJ 251521, https://www.ncjrs.gov/pdffiles1/ojjdp/grants/251521.pdf; Karcher, "Ten-Year Follow-Up on the RCT Study of Mentoring in the Learning Environment (SMILE)"; and Cheryl King et al., "Association of the Youth-Nominated Support Team Intervention for Suicidal Adolescents With 11- to 14-Year Mortality Outcomes: Secondary Analysis of a Randomized Clinical Trial," *JAMA Psychiatry* 76 no. 5 (2019): 492-498, https://doi.org/10.1001/jamapsychiatry.2018.4358.

35. Karcher, "Ten-Year Follow-Up on the RCT Study of Mentoring in the Learning Environment (SMILE)."

36. Cheryl King et al., "Association of the Youth-Nominated Support Team Intervention for Suicidal Adolescents With 11- to 14-Year Mortality Outcomes."

37. Mary Bruce and John Bridgeland, *The Mentoring Effect: Young People's Perspectives on the Outcomes and Availability of Mentoring. A Report for MENTOR: The National Mentoring Partnership* (Boston: MENTOR: The National Mentoring Partnership, 2014), https://www.mentoring.org/resource/the-mentoring-effect/.

38. Michael Garringer, Samuel McQuillin, and Heather L. McDaniel, *Examining Youth Mentoring Services Across America: Findings From the 2016 National Mentoring Program Survey* (Boston: MENTOR: The National Mentoring Partnership, 2017), https://files.eric.ed.gov/fulltext/ED605698.pdf.

39. Garringer, McQuillin, and McDaniel, *Examining Youth Mentoring Services Across America*.

40. Hawkins et al., *Mentoring for Preventing and Reducing Delinquent Behavior Among Youth*.

41. J. Mitchell Miller et al., "Researching the Referral Stage of Youth Mentoring in Six Juvenile Justice Settings: An Exploratory Analysis," Final report to the Office of Juvenile Justice and Delinquency Prevention, grant number 2010-JU-FX-0118, October 2012, NCJ 240820, https://www.ncjrs.gov/pdffiles1/Archive/240820NCJRS.pdf.

42. Jean Baldwin Grossman and Joseph P. Tierney, "Does Mentoring Work?: An Impact Study of the Big Brothers Big Sisters Program," *Evaluation Review* 22 no. 3 (1998): 403-426, https://doi.org/10.1177%2F0193841X9802200304; and Herrera et al., *Making a Difference in Schools*.

43. J. Mark Eddy et al., "A Randomized Controlled Trial of a Long-Term Professional Mentoring Program for Children at Risk: Outcomes Across the First 5 Years," *Prevention Science* 18 (2017): 899-910, https://doi.org/10.1007/s11121-017-0795-z.

44. Megan Millenky et al., *Staying on Course: Three-Year Results of the National Guard Youth ChalleNGe Evaluation,* MDRC, 2011, http://www.mdrc.org/sites/default/files/full_510.pdf.

45. Herrera et al., *Making a Difference in Schools*.

46. National Mentoring Resource Center, "Strategies for Recruiting Male Mentors," https://nationalmentoringresourcecenter.org/index.php/what-works-in-mentoring/reviews-of-mentoring-practices.html?id=318.

47. Millenky et al., *Staying on Course*.

48. Implementation science involves the study of methods to improve the integration of research-based practices into typical programs or services in the community. For an overview, see Paul A. Estabrooks, Ross C. Brownson, and Nicolaas P. Pronk, "Dissemination and Implementation Science for Public Health Professionals: An Overview and Call to Action," *Preventing Chronic Disease* 15 (2018): 180525, https://doi.org/10.5888/pcd15.180525.

49. Dissemination science is the systematic study of processes and factors that facilitate widespread adoption of an evidence-based intervention by organizations or groups for whom use of the intervention is intended in the community. For an overview, see Estabrooks, Brownson, and Pronk, "Dissemination and Implementation Science for Public Health Professionals."

50. Mathew Lynch et al., *Arches Transformative Mentoring Program: An Implementation and Impact Evaluation in New York City* (Washington, DC: Urban Institute, 2018), https://www.urban.org/sites/default/files/publication/96601/arches_transformative_mentoring_program_0.pdf.

51. Laura J. Holt, Brenna H. Bry, and Valerie L. Johnson, "Enhancing School Engagement in At-Risk, Urban Minority Adolescents Through a School-Based, Adult Mentoring Intervention," *Child & Family Behavior Therapy* 30 no. 4 (2008): 297-318, https://doi.org/10.1080/07317100802482969.

52. Elizabeth Miller et al., "'Coaching Boys Into Men': A Cluster-Randomized Controlled Trial of a Dating Violence Prevention Program," *Journal of Adolescent Health* 51 no. 5 (2012): 431-438, https://doi.org/10.1016/j.jadohealth.2012.01.018.

53. A cluster-randomized controlled trial is one in which groups (such as all students attending the same school) rather than individual students are randomized to the intervention or control group. Cluster-randomized controlled trials are also sometimes referred to as group-randomized trials or place-randomized trials.

54. Peter A. Wyman et al., "An Outcome Evaluation of the Sources of Strength Suicide Prevention Program Delivered by Adolescent Peer Leaders in High Schools," *American Journal of Public Health* 100 no. 9 (2010): 1653-1661, https://doi.org/10.2105/AJPH.2009.190025.

55. For example, Lisa Merrill, *Mentoring, Technology, and Social and Emotional Learning: Findings From the Evaluation of iMentor's College Ready Program* (New York: The Research Alliance for New York City Schools, 2020), https://research.steinhardt.nyu.edu/scmsAdmin/media/users/ks191/iMentor_Final_Report/iMentor_Evaluation_Report_final.pdf.

56. David L. DuBois, "Prevention and Promotion: Toward an Improved Framework for Research and Action," in *APA Handbook of Community Psychology: Theoretical Foundations, Core Concepts, and Emerging Challenges, Vol. 1,* ed. Meg A. Bond et al. (Washington, DC: American Psychological Association, 2017), 233-251.

57. J. David Hawkins et al., "Youth Problem Behaviors 8 Years After Implementing the Communities That Care Prevention System: A Community-Randomized Trial," *JAMA Pediatrics* 168 no. 2 (2014): 122-129, https://doi.org/10.1001/jamapediatrics.2013.4009; and Richard Spoth et al., "PROSPER Community-University Partnership Delivery System Effects on Substance Misuse Through 6 1/2 Years Past Baseline From a Cluster Randomized Controlled Intervention Trial," *Preventive Medicine* 56 no. 3-4 (2013): 190-196, https://doi.org/10.1016/j.ypmed.2012.12.013.

58. Lisbeth Nielsen et al., "The NIH Science of Behavior Change Program: Transforming the Science Through a Focus on Mechanisms of Change," *Behaviour Research and Therapy* 101 (2018): 3-11, https://doi.org/10.1016/j.brat.2017.07.002.

59. Tolan et al., "Improving Understanding of How Mentoring Works."

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FEMALE GENITAL MUTILATION/CUTTING: AN INCOMPLETE PICTURE OF A PRESSING GLOBAL PROBLEM

BY **NADINE FREDERIQUE** AND **BETH PEARSALL**
Improved prevalence data, increased understanding, and collaboration between stakeholders are key elements to mounting an effective response to female genital mutilation.

Each year, millions of girls around the world — some just babies, others as old as 15 — are at risk of undergoing the potentially dangerous procedure of having their genitalia partially or totally removed, often against their will. They are given little or no pain medication and no explanation, and are forbidden to speak about what happened.

The procedure — known as female genital mutilation/ cutting (FGM/C) — is internationally recognized as a serious violation of human rights and a form of gender-based violence and child abuse.[1] It has no known health benefits and can cause acute and chronic physical and mental health problems. It is illegal in 51 countries, including the United States.[2]

Yet FGM/C is still occurring at an alarming rate across the globe. Approximately 200 million women and girls have already been subjected to this crime, and an estimated 3.9 million girls are at risk of undergoing the procedure each year.[3] If current levels of the practice continue, prevalence numbers are projected to increase over the next 10 years.[4]

"FGM/C occurs in countries on nearly every continent," said Marieke Brock, researcher in the Federal Research Division of the Library of Congress, during an interview. "It is a global problem that transcends religion, socioeconomic status, and geography."

The United States is no exception. One estimate holds that as many as half a million girls and women in this country could have suffered or are at risk of suffering FGM/C.[5] Most were born in countries where FGM/C is rooted in cultural beliefs or live with a parent born in a country where it is practiced.[6]

From a criminal justice perspective, the burden of preventing FGM/C falls primarily to law enforcement. This can present significant challenges for officers, as affected women and girls are often difficult to identify and may not come into contact with law enforcement. Also, women who had the procedure when they were young may not even recognize that they have been subjected to FGM/C. The practice is deeply rooted in cultural traditions and beliefs, and departing from the norm can lead to condemnation, harassment, and

FGM/C can lead to acute and chronic physical and mental health problems. The risk of adverse outcomes generally increases with more severe forms of FGM/C, but all forms are associated with increased health risk.

"The goal is to help law enforcement and other professionals working with these women develop a sound knowledge base," said Brock. "Ultimately, it will take good data, strong partnerships, and collaboration across fields to mount an effective response to FGM/C."

An Incomplete Picture of FGM/C in the United States and Abroad

According to UNICEF, FGM/C mostly occurs in the eastern, northeastern, and western regions of Africa, and in some countries in Asia and the Middle East. It also occurs among certain immigrant communities in North America (including the United States) and Europe.[7]

even ostracism from the community. Consequently, women and girls at risk may not seek help.

To support law enforcement's ability to understand FGM/C, the National Institute of Justice (NIJ) partnered with Brock and her colleagues at the Library of Congress on a report that examines acts of gender-based violence in the United States that are rooted in cultural practices: FGM/C, honor violence, and forced marriage. The report offers a snapshot of all three practices in this country, noting, in particular, significant challenges in collecting accurate prevalence data on FGM/C. It also explores the cultural beliefs that reinforce these practices and existing responses across the federal government. (See sidebar, "Honor Violence and Forced Marriage.")

To determine how prevalent the practice is around the world, researchers use large-scale national surveys of women. Some groups, however, claim that this method is problematic because it includes only countries where there are available data from these large-scale surveys. A joint report by Equality Now, End FGM European Network, and the U.S. End FGM/C Network states: "The current, already worrying numbers are a woeful under-representation since they do not take into account numerous countries where nationwide data on FGM/C prevalence is not available."[8] The result, the joint report says, is an incomplete global picture of FGM/C.

Honor Violence and Forced Marriage

The NIJ-Library of Congress report examines two other alarming forms of gender-based violence in the United States that are rooted in cultural practices: honor-based violence and forced marriage. The report notes that as with female genital mutilation/cutting, research on honor crimes and forced marriage in this country is scant; consequently, empirical data on both are lacking. At this time, the United States has no federal or state laws addressing honor-based violence as a crime distinct from other types of assault, abuse, or homicide. There is also no federal law addressing forced marriage. Although several states do have criminal laws on forced marriage, these laws are problematic, the report explains, as they fail to address the complicated dynamics of forced marriage, hold the perpetrators involved accountable, and empower authorities to intervene before the marriage takes place. For more on honor-based violence and forced marriage, read the full report at https://www.ncjrs.gov/pdffiles1/nij/252841.pdf.

The NIJ-Library of Congress report raises additional concerns around current FGM/C prevalence numbers. Brock, lead researcher for the report, writes that prevalence varies considerably between regions and, subsequently, national estimates obscure the variation in different parts of a country. For instance, in Senegal, the national prevalence rate for FGM/C is 26%. But when this figure is broken down by region, the rates vary from as low as 1% in Diourbel to as high as 92% in Kedougou.[9]

Prevalence data for the United States prove equally problematic. The best estimate, provided by the Centers for Disease Control and Prevention in 2012, holds that 513,000 women and girls in the United States could have suffered or may be at risk of suffering FGM/C or its consequences.[10] However, this estimate is based on the national prevalence rates reported for immigrants' countries of origin — and, as noted in the NIJ-Library of Congress report, incidence can vary considerably by geographic area, ethnicity, and other factors. This figure also assumes that people will behave the same way in the United States as they would at home, the report explains, discounting assimilation, differences in education and other socioeconomic factors, and U.S. laws that ban the practice. (See sidebar, "Laws Prohibiting Female Genital Mutilation in the United States.")

"We really don't have data on the number of women and girls who have undergone FGM/C in this country," said Brock. "It is extremely difficult to collect this type of data. For one, the practice is against the law. If you ask people about it, they fear they will implicate themselves if they talk about it."

"We also need to understand that for women who have undergone this procedure, this is their version of womanhood," she added. "Researchers who go into these communities and try to measure how prevalent FGM/C is need to recognize the complex sensitivities around this practice and how we talk about it."

FGM/C May Lead to Acute and Chronic Physical and Mental Health Problems

Although prevalence data remain elusive, we do know this: FGM/C has no health benefits.

The practice involves removing and damaging healthy female genital tissue and interferes with the natural functions of a woman's body.[11] The World Health Organization describes four major types of FGM/C; these types are practiced at varying rates across the globe. (See sidebar, "Defining Female Genital Mutilation.")

FGM/C can lead to acute and chronic physical and mental health problems. The risk of adverse outcomes generally increases with more severe forms of FGM/C, but all forms of FGM/C are associated with increased health risk.[12] Immediate medical problems[13] can include blood loss, severe pain, infection of the wound, and sometimes death.[14] Long-term health problems can include urinary infections; fistula (an opening between the urethra and vagina that lets urine run into the vagina); infertility; painful urination, menstruation, or sexual intercourse; and a potential increase in the risk of HIV/AIDS infection.[15]

Women who have had FGM/C may also experience sexual dysfunction, such as painful sex, lack of desire, or bleeding.[16] In addition, they can face unique health risks during childbirth. These include prolonged labor, excessive bleeding after childbirth, higher risk for episiotomy during childbirth, and higher risk for cesarean section.[17] Risks to the baby include low birth weight (smaller than 5 ½ pounds at birth), breathing problems at birth, and stillbirth or early death.[18]

Women and girls can also experience severe, long-lasting mental health issues. During the procedure, girls are held down, often against their will, and they might not understand what is being done to them and why. This painful experience may lead to post-traumatic stress disorder, depression, or anxiety.[19] Women and girls might also feel scared, psychologically scarred, embarrassed, and distressed.[20]

Laws Prohibiting Female Genital Mutilation in the United States

FGM/C is against the law in the United States. The federal government "opposes FGM/C, no matter the type, degree, or severity, and no matter what the motivation for performing it." It is considered "a serious human rights abuse, and a form of gender-based violence and child abuse."[1]

In 1996, Congress passed the Federal Prohibition of Female Genital Mutilation Act, making it illegal to perform the procedure on girls younger than 18 in the United States. Congress amended this law in 2013 to criminalize the act of knowingly transporting a girl out of the country for FGM/C, often referred to as "vacation cutting."

In April 2017, in *U.S. v. Nagarwala,* the first case to be prosecuted under these laws, the U.S. Department of Justice indicted two Detroit-area doctors and one co-conspirator, alleging participation in a scheme to perform FGM/C on minors, transportation of those minors across state lines, and obstruction of justice. Dr. Jumana Nagarwala, Dr. Fakhruddin Attar, and Attar's wife Farida were accused of performing FGM/C procedures on at least six girls, between the ages of 6 and 8, in Attar's medical office in Livonia, Michigan. Two of the girls had traveled from Minnesota for the procedure. A federal judge in Detroit ruled that the federal law was unconstitutional and dismissed several charges against the doctors.[2]

In January 2021, the STOP FGM Act of 2020 was signed into law, clarifying the criminalization of FGM. It gives federal authorities the power to prosecute those who carry out or conspire to carry out FGM and increases the maximum prison sentence from five to 10 years.[3] The same month, the U.S. Department of Justice charged a Texas woman with transporting a minor from the United States to a foreign country for the purpose of FGM.[4]

Currently, 39 states have anti-FGM/C laws in place.[5]

Notes

1. U.S. Department of Justice, "Fact Sheet on Female Genital Mutilation or Cutting (FGM/C)."

2. Marieke Brock and Emma Buckthal, "Historical Overview of U.S. Policy and Legislative Responses to Honor-Based Violence, Forced Marriage, and Female Genital Mutilation/Cutting," Washington, DC: U.S. Department of Justice, National Institute of Justice, 2018, NCJ 252841, https://www.ncjrs.gov/pdffiles1/nij/252841.pdf.

3. Strengthening the Opposition to Female Genital Mutilation Act of 2020, Pub. L. No 116-309, 134 Stat. 4922 (2021), https://www.congress.gov/116/plaws/publ309/PLAW-116publ309.pdf.

4. The case is still being investigated at the time of publication. U.S. Department of Justice, Office of Public Affairs, "Texas Woman Indicted for Transporting Minor for Female Genital Mutilation," January 13, 2021, https://www.justice.gov/opa/pr/texas-woman-indicted-transporting-minor-female-genital-mutilation.

5. AHA Foundation, "FGM Legislation by State," https://www.theahafoundation.org/female-genital-mutilation/fgm-legislation-by-state/.

Defining Female Genital Mutilation

Female genital mutilation/cutting is the cultural practice of partially or totally removing the external genitalia of women and girls for nonmedical reasons.[1]

The World Health Organization describes four major types of female genital mutilation:[2]

- Type 1: The partial or total removal of the clitoris, and in very rare cases, only the prepuce (the fold of skin surrounding the clitoris). This is often called "clitoridectomy."

- Type 2: The partial or total removal of the clitoris and the labia minora (the inner folds of the vulva), with or without excision of the labia majora (the outer folds of the vulva). This is often called "excision."

- Type 3: The narrowing of the vaginal opening through the creation of a covering seal, which is formed by cutting and repositioning the labia minora or labia majora, sometimes through stitching, with or without removal of the clitoris. This is often referred to as "infibulation."

- Type 4: All other harmful procedures to the female genitalia for nonmedical purposes (e.g., pricking, piercing, incising, scraping, or cauterizing the genital area).

Notes

1. Some use the phrase "female circumcision," which is how practicing cultures refer to it, but this is disfavored in other circles for drawing an inaccurate comparison with male circumcision. Still others use "female genital cutting," but this is also criticized as normalizing the procedure.

2. World Health Organization, "Female Genital Mutilation," https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation; and Marieke Brock and Emma Buckthal, "Historical Overview of U.S. Policy and Legislative Responses to Honor-Based Violence, Forced Marriage, and Female Genital Mutilation/Cutting," Washington, DC: U.S. Department of Justice, National Institute of Justice, 2018, NCJ 252841, https://www.ncjrs.gov/pdffiles1/nij/252841.pdf.

A Practice Rooted in Tradition

Given the significant — and well-documented — health risks, the obvious question arises: Why is FGM/C still practiced around the world today? The answers are complex and diverse, and are deeply embedded in each community's customs and beliefs.

FGM/C forms a critical part of the identity for women and girls in many cultures. In some communities, it signals coming of age and solidifies membership within the community. This rite of passage is supported by local authorities, including tribal or religious leaders, circumcisers, and even some medical personnel, and is often accompanied by celebrations, public recognitions, and gifts.[21]

FGM/C is also commonly tied to marriageability. In many practicing communities, there is an expectation that men will marry only women who have had FGM/C, and so women and girls are cut in order to be suitable for marriage. As the NIJ-Library of Congress report explains, a proper marriage is often essential for economic and social security, as well as to fulfill local ideals of womanhood and femininity in many communities: "Girls may want the procedure themselves because of social pressure from their peers, and because of a fear of stigmatization and rejection if they do not follow the tradition."[22]

"When looking at FGM/C, it's critical that we understand cultural norms and expectations," said Brock. "We need to understand what a young girl is

truly up against if she says, 'I don't want this done to me.' The social pressures to conform, the fear of not being accepted by your community, the fear of being seen as unsuitable to marry — these are all very real."

"And then there is this notion that helps perpetuate the practice: Mothers had this done to them, and so their daughters will have it done, and so on. The common belief is 'This is what has been done, and we all have to do it,'" Brock explained. "The tradition is so ingrained within these communities."

Other reasons for FGM/C may include maintaining girls' chastity and hygiene. Some communities believe the procedure will help ensure a woman remains a virgin until marriage, and others hold that the external female genitals that are cut (the clitoris or the labia or both) are unclean.[23]

Lastly, some groups use religion and religious duty to justify the procedure; however, no religious text actually requires cutting. In fact, the NIJ-Library of Congress report points out that religious groups are among those actively working to eliminate FGM/C.[24]

A Complex Problem Demands a Multisector Approach

Family dynamics add an additional — and significant — layer of complexity to the issue. According to the NIJ-Library of Congress report, the extended family is typically involved in decision-making about FGM/C. Parents, especially mothers, who may be against FGM/C for their daughters, often face resistance from more conservative family members who want to see the tradition continue.[25]

In some cases, mothers may send their daughters to visit their homelands to become better acquainted with their family and culture not knowing that, once there, an FGM/C procedure may occur. In other instances, family members abduct a daughter against her parents' will and take her to be cut.[26]

"Who are these parents going to turn to for help?" asked Brock. "They feel like they can't call law

enforcement. FGM/C is illegal. They fear going to jail. They fear putting family members in jail. They fear endangering their immigration status. Are they going to turn in their aunts and uncles? Not likely. More likely is they will hide what happened."

Seeking proper medical care poses another set of concerns for women and girls who have undergone FGM/C and are living in the United States. "There are some really alarming stories of how poorly prepared our doctors are to treat women who have undergone FGM/C," explained Brock. "Many women have had bad experiences with doctors and failed to receive proper medical care. Others may fear having a bad experience with doctors. They feel scared and ashamed."

According to Brock, the result is an intricate web that is hard to navigate — for affected women and girls *and* for those trying to help them.

For example, a woman who has experienced FGM/C may go for regular checkups with a primary care provider or gynecologist, seek prenatal care while pregnant, visit a school nurse, or go to the emergency room. Health providers need to know what clues to look for and how to talk to these women in a culturally competent, nonjudgmental manner. The care these women and girls initially receive when disclosing their experience may determine their willingness to seek medical care in the future. Health providers also need to know the types of services to which they could refer affected women and girls.

Educators — teachers, counselors, and school nurses — come into regular contact with young women and girls who may be at a particularly high risk for FGM/C, making them a first line of defense. However, like healthcare professionals, educators need to know which clues to look for and how to intervene without further endangering these women and girls.

Social service organizations provide potentially critical support directly to women and girls who have experienced FGM/C. Some groups also work with policymakers to help improve protections and

access to services. People working in this sector must be familiar with practicing cultures and the unique circumstances of FGM/C.

Finally, a woman who has been subjected to FGM/C may go directly to those in the criminal justice sector for help, or someone may seek help on her behalf. Law enforcement and other criminal justice professionals need to know what signs to look for and the best practices to follow to effectively engage with these women.

"Cross-collaboration among all of these groups — health providers, educators, social services, and law enforcement — is absolutely critical," said Brock.

At the federal level, a coordinated response to FGM/C would involve multiple agencies, each with their own mission and focus but with overlapping responsibilities, according to Brock and her colleagues. The NIJ-Library of Congress report lists the efforts of some federal agencies. For example, the U.S. Department of Health and Human Services awarded $6 million in grant funding to eight organizations to address gaps and problems in FGM/C-related healthcare services for women and girls in the United States. The funds could also be used to prevent FGM/C of women and girls living in this country who are at risk for having the procedure conducted here or abroad.[27]

NIJ's sister agency, the Office of Juvenile Justice and Delinquency Prevention, provided training on FGM/C to members of the law enforcement community to raise awareness and understanding of the physical, psychological, and emotional effects of FGM/C. The training also provided tools and resources to help law enforcement identify and prevent FGM/C in at-risk girls.[28]

In fall 2020, the Office for Victims of Crime awarded nearly $1.8 million to increase education, detection, and local partner engagement, and more than $1.1 million to provide targeted technical assistance to front-line providers on how to identify and serve women and girls who have experienced FGM/C and those at risk. These awards will help raise awareness

of the danger of FGM/C to women and girls, as well as support organizations — including domestic violence and child abuse service providers — and first responders that may encounter affected women and girls.[29]

These federal efforts are a first step in addressing this complex crime. A unified strategy would also require collaboration with national and local organizations working to combat FGM/C and other forms of gender-based violence in the field. The NIJ-Library of Congress report lists several of these groups, including the U.S. End FGM/C Network and the Honor Our Bodies, Educate Our Community, Respect Our Heritage (HER) Initiative, although there are many more.[30]

Strong partnerships among these various stakeholders — along with solid prevalence data and increased understanding — are all key elements to mounting an effective and coordinated response to FGM/C.

About the Authors

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For More Information

Read the NIJ-Library of Congress report on female genital mutilation/cutting, honor-based violence, and forced marriage at https://www.ncjrs.gov/pdffiles1/nij/252841.pdf.


Notes

1. Equality Now, End FGM European Network, and U.S. End FGM/C Network, *Female Genital Mutilation/Cutting: A Call for a Global Response* (New York: Equality Now; Brussels: End FGM European Network; New York: U.S.

End FGM/C Network, 2020), https://d3n8a8pro7vhmx. cloudfront.net/equalitynow/pages/2280/attachments/ original/1587032303/FGM_Global_-_ONLINE_PDF_ VERSION_-_07.pdf?1587032303; and U.S. Department of Justice, "Fact Sheet on Female Genital Mutilation or Cutting (FGM/C)," Washington, DC: U.S. Department of Justice, 2015, https://www.justice.gov/sites/default/files/criminal-hrsp/legacy/2015/02/05/01-22-15fgm-notice.pdf.

2. Equality Now, End FGM European Network, and U.S. End FGM/C Network, *Female Genital Mutilation/Cutting*.

3. United Nations Population Fund, "Bending the Curve: FGM Trends We Aim To Change," New York: United Nations Population Fund, 2019, https://www.unfpa. org/sites/default/files/resource-pdf/18-053_FGM-Infographic-2018-02-05-1804.pdf.

4. According to the United Nations Population Fund, if FGM continues to be practiced at current levels, the current estimates of 3.9 million girls mutilated each year will rise to 4.6 million by 2030 and 68 million girls will be subjected to FGM by 2030. United Nations Population Fund, "Bending the Curve"; and United Nations Children's Fund, "Female Genital Mutilation," https://data.unicef.org/topic/ child-protection/female-genital-mutilation/.

5. Howard Goldberg et al., "Female Genital Mutilation/ Cutting in the United States: Updated Estimates of Women and Girls at Risk, 2012," *Public Health Reports* 131 no. 2 (2016): 340-347, https://doi.org/10.1177 %2F003335491613100218.

6. Some recent reports also suggest that the practice may occur among conservative religious communities, even though no religious text requires FGM/C. See Equality Now, End FGM European Network, and U.S. End FGM/C Network, *Female Genital Mutilation/Cutting*.

7. Marieke Brock and Emma Buckthal, "Historical Overview of U.S. Policy and Legislative Responses to Honor-Based Violence, Forced Marriage, and Female Genital Mutilation/ Cutting," Washington, DC: U.S. Department of Justice, National Institute of Justice, 2018, NCJ 252841, https:// www.ncjrs.gov/pdffiles1/nij/252841.pdf.

8. Equality Now, End FGM European Network, and U.S. End FGM/C Network, *Female Genital Mutilation/Cutting*.

9. Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

10. Goldberg et al., "Female Genital Mutilation/Cutting in the United States."

11. World Health Organization, "Female Genital Mutilation," https://www.who.int/news-room/fact-sheets/detail/ female-genital-mutilation.

12. World Health Organization, "Female Genital Mutilation."

13. Rigmor C. Berg et al., "Effects of Female Genital Cutting on Physical Health Outcomes: A Systematic Review and Meta-Analysis," *BMJ Open* 4 no. 11 (2014): e006316, http://dx.doi.org/10.1136/bmjopen-2014-006316.

14. Researchers do not know how many girls die because of FGM/C. Few records are kept, and deaths that may have been caused by FGM/C are often not reported as related to FGM/C. UNICEF Innocenti Research Centre, "Changing a Harmful Social Convention: Female Genital Mutilation/ Cutting," *Innocenti Digest* (Florence, Italy: UNICEF Innocenti Research Centre, United Nations Children's Fund, 2005), https://www.unicef-irc.org/publications/pdf/fgm_eng.pdf.

15. Dan Reisel and Sarah M. Creighton, "Long Term Health Consequences of Female Genital Mutilation (FGM)," *Maturitas* 80 no. 1 (2015): 48-51, https://doi. org/10.1016/j.maturitas.2014.10.009; Christos Iavazzo, Thalia A. Sardi, and Ioannis D. Gkegkes, "Female Genital Mutilation and Infections: A Systematic Review of the Clinical Evidence," *Archives of Gynecology and Obstetrics* 287 (2013): 1137-1149, https://doi.org/10.1007/s00404-012-2708-5; Berg et al., "Effects of Female Genital Cutting on Physical Health Outcomes"; U.S. Department of Health and Human Services, Office on Women's Health, "Female Genital Mutilation or Cutting," https://www.womenshealth.gov/a-z-topics/female-genital-cutting; and U.S. Department of Justice, "Fact Sheet on Female Genital Mutilation or Cutting (FGM/C)."

16. Khalid Yassin, Hadeel A. Idris, and Abdel Aziem, "Characteristics of Female Sexual Dysfunctions and Obstetric Complications Related to Female Genital Mutilation in Omdurman Maternity Hospital, Sudan," *Reproductive Health* 15 no. 7 (2018), https://doi.org/10.1186/ s12978-017-0442-y.

17. Yassin, Idris, and Aziem, "Characteristics of Female Sexual Dysfunctions and Obstetric Complications"; U.S. Department of Health and Human Services, Office on Women's Health, "Female Genital Mutilation or Cutting"; and Rigmor C. Berg and Vigdis Underland, "The Obstetric Consequences of Female Genital Mutilation/Cutting: A Systematic Review and Meta-Analysis," *Obstetrics and Gynecology International* (2013): 496564, https://doi.org/10.1155/2013/496564.

18. WHO Study Group on Female Genital Mutilation and Obstetric Outcome, "Female Genital Mutilation and Obstetric Outcome: WHO Collaborative Prospective Study in Six African Countries," *The Lancet* 367 no. 9525: 1835-1841, https://doi.org/10.1016/S0140-6736(06)68805-3; and U.S. Department of Health and Human Services, Office on Women's Health, "Female Genital Mutilation or Cutting."

19. Salma M. Abdalla and Sandro Galea, "Is Female Genital Mutilation/Cutting Associated With Adverse Mental Health Consequences? A Systematic Review of the Evidence," *BMJ Global Health* 4 no. 4 (2019): e001553, http://dx.doi. org/10.1136/bmjgh-2019-001553; and U.S. Department of Health and Human Services, Office on Women's Health, "Female Genital Mutilation or Cutting."

20. U.S. Department of Justice, "Fact Sheet on Female Genital Mutilation or Cutting (FGM/C)."

21. Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

22. Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

23. U.S. Department of Health and Human Services, Office on Women's Health, "Female Genital Mutilation or Cutting."

24. Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

25. Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

26. Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

27. Office of the Assistant Secretary for Health, "HHS Awards $6 Million To Improve Female Genital Cutting-Related Health Care Services for Women and Girls in the United States," Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Health, Press Office, July 20, 2016, https://public3.pagefreezer.com/browse/HHS.gov/02-01-2021T09:19/https://www.hhs.gov/ash/about-ash/news/2016/hhs-awards-6-m-improve-female-genital-cutting-related-health.html.

28. Office of Juvenile Justice and Delinquency Prevention, "Keeping Kids Safe: Preventing Female Genital Mutilation/Cutting in the United States," webinar, Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, March 18, 2015, https://www.gvsu.edu/cms4/asset/903124DF-BD7F-3286-FE3330AA44F994DE/female_genital_mutilation_cutting_in_the_us.pdf.

29. U.S. Department of Justice, Office for Victims of Crime, "Office for Victims of Crime Awards Nearly $3 Million to Help Victims of Female Genital Mutilation or Cutting," October 30, 2020, https://ovc.ojp.gov/announcement/ovc-awards-nearly-3-million-help-victims-female-genital-mutilation-or-cutting.

30. For more information on various organizations working to combat gender-based violence, see Brock and Buckthal, "Historical Overview of U.S. Policy and Legislative Responses."

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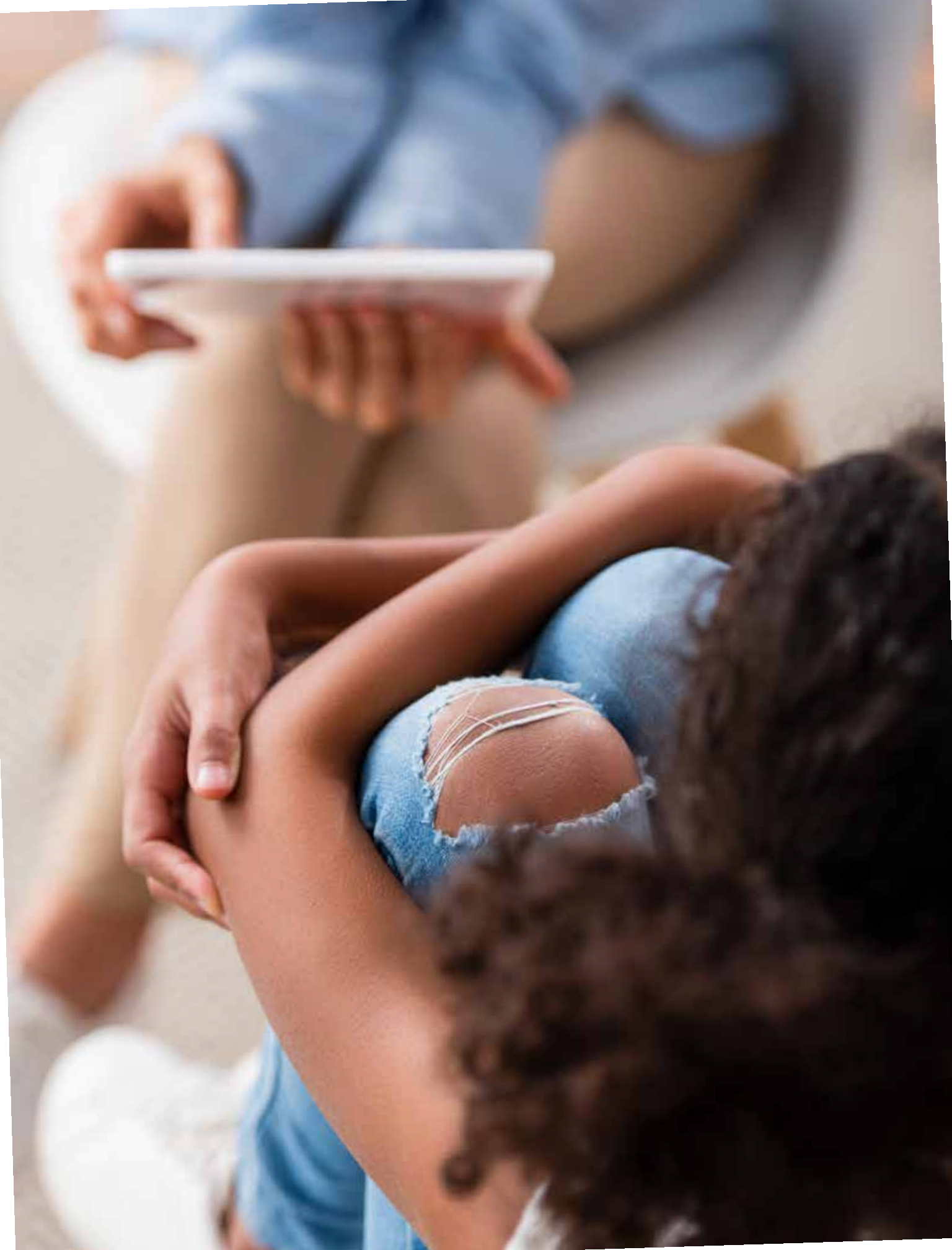
DUAL SYSTEM YOUTH: AT THE INTERSECTION OF CHILD MALTREATMENT AND DELINQUENCY

BY **BARBARA TATEM KELLEY** AND **PAUL A. HASKINS**

Youth who have experienced both the child welfare and juvenile justice systems have complex needs that require collaborative, multipronged interventions.

I n a perfect world, a push of a button would connect all juvenile court judges and authorized staff to relevant local child welfare files for each young person summoned before the court. The imperfect reality is that in many American juvenile court systems, there is no button, no data linkage — no way to readily retrieve the often-instructive personal histories found in child welfare data.

Many jurisdictions lack even a culture of collaboration between child welfare services and juvenile justice, an interagency nexus needed to identify and attend to the unique, complex needs of so-called dual system youth — a vulnerable, high-risk population.

It falls to judges to be the catalysts of connectivity between juvenile justice and child welfare services, research[1] and experience have shown. "Judicial leadership is the single most important factor for successfully implementing the dual system crossover youth model, without question," said Richard N. White, magistrate of the Mahoning County (OH) juvenile court. He added, "It is driven from the bench."[2]

For leadership to make inroads against a nationwide challenge, however, scientifically sound, data-driven systems are needed to illuminate the population of dual system youth and their distinctive needs.

Dual system youth are a subset of "crossover youth" — juveniles who have been both victims of maltreatment and engaged in delinquent acts. The dual system youth population consists of crossover youth who have entered, at some point, both the child welfare and juvenile justice systems (see exhibit 1).

The National Institute of Justice recognizes that having a dual system youth's child welfare history at hand could help juvenile courts figure out what remedies would, or would not, be suitable in particular cases. Interactive data linkages could help drive collaborative case management by child welfare and justice agencies. They could help inform and refine best practices for a jurisdiction's work with vulnerable youth. In addition, they could help researchers identify youth trajectories, assess interventions, quantify trends, and fuel future reforms. Finding out what works is also essential to refining public policy.

For policymakers and practitioners, better solutions to the distinctive needs of dual system youth are likely to require robust, multipronged strategies.

Without functional data linkages between the child welfare and juvenile justice systems, child welfare agencies and researchers are often hard-pressed to learn what becomes of child clients if and when they enter the juvenile justice system. That connective knowledge can be crucial to discovering which child welfare interventions correlate with the best outcomes for the individual down the line, and which interventions may be less promising, or even ineffective, in the long run.
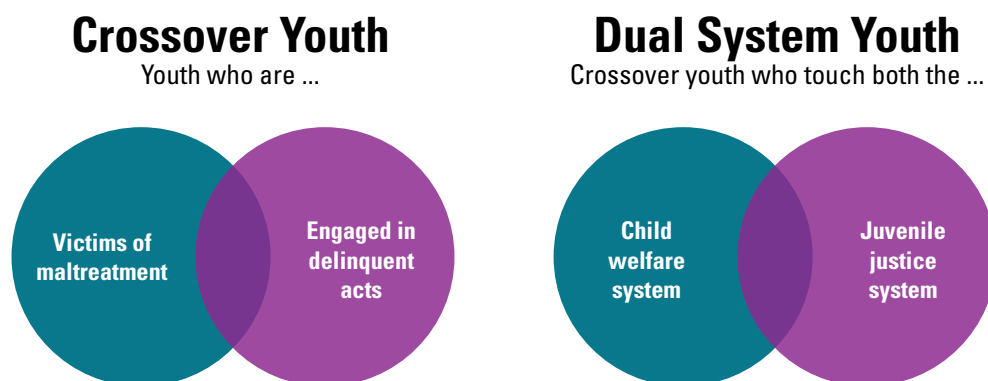
The data disconnect between child welfare and juvenile justice agencies that are dealing with the same young people has hidden a long-suspected truth about American youth who enter the juvenile justice system: Most youth who come to the attention of the juvenile justice system due to their engagement in delinquent behavior also have experience as victims served by the child welfare system.

The Dual System Youth Design Study, led by investigators at California State University Los Angeles, closely examined three jurisdictions with well-developed juvenile justice/child welfare data linkages.[3] This recent research established that half of the young people entering those court systems had past or current engagement with child welfare, or would become engaged with child welfare after a first contact with juvenile justice. The study also concluded that, throughout the nation today, half or more of youth entering the juvenile justice system might well be dual system youth with histories of child welfare intervention.

It should be noted that the inverse is not the case: The majority of all child welfare clients never enter the juvenile justice system. But the dual system youth subpopulation tends to have longer histories in child welfare, more out-of-home placements, and higher recidivism than youth who experience the child welfare or juvenile justice system alone.[4] African Americans have a higher probability of dual system youth status, as do females. Overall, youth with protracted child welfare histories, including multiple placements outside of the home, tend to penetrate the juvenile justice system more deeply.

For policymakers and practitioners, better solutions to the distinctive needs of dual system youth are likely to require robust, multipronged strategies. These include:

Exhibit 1. Distinguishing Key Terms

Crossover Youth
Youth who are ...

Victims of maltreatment

Engaged in delinquent acts

Dual System Youth
Crossover youth who touch both the ...

Child welfare system

Juvenile justice system

Source: Denise C. Herz, "Key Findings from the OJJDP Dual System Youth Design Study," presentation to the Federal Interagency Working Group on Child Abuse and Neglect, Washington, DC, July 2019.

- Broad adoption of integrated data systems between child welfare and juvenile justice agencies.

- Further development and dissemination of best practices for dual system youth, enabled by the adoption of a rubric, or measuring methodology, that breaks down progress into specific milestones.

- Collaboration between juvenile justice, child welfare, and other service agencies, along with judicial leadership.

- Policies, starting at the federal level, focused on preventing maltreatment, preventing delinquency among young people who experience maltreatment, and supporting integration of practices for dual system youth. Public policy reforms should support interventions targeting, in particular, those dual system youth with longer histories of child welfare involvement, with multiple out-of-home placements of long duration.

A Brief History of Research and Policy Development

The full magnitude of the child maltreatment/juvenile delinquency connection has eluded researchers for decades, but the importance of that connection has long been evident. In 1984, the Office of Juvenile Justice and Delinquency Prevention convened 31 experts spanning the fields of sociology, criminology, psychology, law, medicine, social work, juvenile justice, philanthropy, child abuse, and child advocacy to address the relationship of child abuse to delinquency. As noted in the symposium's report, "Child abuse and delinquency are not separate problems. They are intertwined in known and unknown ways. Isolated statistics and separate studies have existed for some time, and common sense leads one to postulate a strong link."[5]

The symposium experts determined that retrospective studies of youth involved in the juvenile justice system consistently have found that they experienced maltreatment at rates much higher than the general population. The report authors noted the shortcomings of existing research, including inconsistencies in definitions, lack of comparison groups, and reliance on either self-report or official records rather than both. They recommended further research and development focused on child abuse prevention and coordinated intervention for youth involved in the juvenile justice system who experienced child abuse. The research, prevention, and intervention issues raised in this seminal 1984 symposium permeate our current research, policy, and practice. For further policy background, see the sidebar "Evolution of Research Insights Into Dual System Youth."

The Unique Challenges Posed by Dual System Youth

Juvenile court staff note that dual system youth pose a special challenge for juvenile courts, in part because many young people in that segment have suffered double adversity — a pronounced lack of family support coupled with serious maltreatment (i.e., abuse or neglect). Magistrate White of Mahoning County said that, in his experience, those entering juvenile courts with a strong family support system stand a much better chance of a positive outcome and limited justice system exposure.

"When I'm on the bench and I have a child who is in front of me for the first time — let's say it's a property crime — and you have family support that you see in front of you, the chances of success are overwhelming," said White, who is deeply involved in implementing policy and practice for dual system youth. "This is a first occurrence, and you have the family to carry out any of the sanctions and any of the treatments and services that you put in place. In many cases, that may well be the last time you see the child."

In cases where the child lacks family support, and in fact has suffered maltreatment at home that triggers time in the child welfare system, the juvenile court dynamic is far different — provided the court knows of the maltreatment history. "It is a devastating situation for a child where there is no family support, and then in addition there is abuse or neglect by members of that family," White said. "I don't know that a child could be in a more difficult situation."

Evolution of Research Insights Into Dual System Youth

Over the decades, researchers have progressed in their examination of life course events punctuated by the involvement of children and youth across both the child welfare and juvenile justice systems. In the Rochester Youth Development Study, researchers examined the history of child maltreatment and the intervention of child protective services among a general population sample. This longitudinal study provided strong evidence that youth who experienced maltreatment during childhood displayed at least a 25% increase in risk for problems during adolescence, including serious and violent delinquency, drug use, low academic achievement, symptoms of mental illness, and teen pregnancy.[1]

In the Dual System Youth Design Study, the researchers reviewed the literature,[2] noting that most studies are either prospective and begin with children served by the child welfare system, or retrospective and look back in time for maltreatment histories among youth entering the juvenile justice system. Although relatively few child welfare clients end up in the juvenile justice system, a much higher percentage of all youth involved in the juvenile justice system have a history in the child welfare system. When contrasted with youth involved only in the juvenile justice system, dual system youth exhibit higher levels of mental illness, substance abuse, educational challenges (such as truancy, suspensions, and lower academic performance), and recidivism. As dual system youth age, they are also more likely to experience adverse outcomes, including homelessness, incarceration, and unemployment as young adults.

Recognizing the negative consequences associated with dual system involvement, researchers and practitioners have emphasized the need to reframe policy and practice to increase the (1) efficacy of delinquency prevention among the child welfare population, (2) systematic identification of dual system youth, (3) collaborative case management across child welfare and juvenile justice, and (4) provision of trauma-informed services. Collaborative efforts in more than 100 jurisdictions in the United States[3] have been guided and supported through training and technical assistance delivered by the Center for Juvenile Justice Reform[4] and the Robert F. Kennedy Children's Action Corps National Resource Center for Juvenile Justice.[5]

With respect to integrated systems work, the final report of the design study observed a significant gap in the literature: "To date, very little evaluation research has been published that examines youth outcomes associated with cross-system collaboration and practice change to support dual system youth. In part, this is due to the difficulty of designing a well-controlled, rigorous evaluation within and across these complex systems."[6]

As noted by the researchers involved in the Dual System Youth Design Study, the current literature has other key limitations, including a lack of comprehensive national studies or estimates of incidence, inconsistencies across studies in definitions of key terms, and a lack of distinctions in the types of trajectories of dual system contact. One major objective achieved by the design study team was the development of a sound methodological approach to generating national estimates of the incidence of dual system youth, incorporating greater clarity in definitions and trajectories. The research team laid out a study design plan in the final technical report built on a consensus that only a robust national sampling of data linkages between child welfare and juvenile justice agencies can deliver a statistically sound estimate of the total population of dual system youth. At present, implementing this design would be challenging because all states and jurisdictions have not sufficiently developed the capacity to effectively

link these administrative data records. The Dual System Youth Design Study provides a roadmap for building data linkage capacity nationwide in order to develop national estimates and to inform the future agenda for both research and practice.

Notes

1. Barbara Tatem Kelley, Terence P. Thornberry, and Carolyn A. Smith, *In the Wake of Childhood Maltreatment,* Youth Development Series Bulletin, Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, August 1997, NCJ 165257, https://www.ojp.gov/pdffiles1/165257.pdf.

2. All data in this paragraph come from Denise C. Herz et al., "Dual System Youth and Their Pathways: A Comparison of Incidence, Characteristics and System Experiences Using Linked Administrative Data," *Journal of Youth and Adolescence* 48 (2019): 2432-2450, https://doi.org/10.1007/s10964-019-01090-3.

3. Herz et al., "Dual System Youth and Their Pathways."

4. Denise Herz et al., *Addressing the Needs of Multi-System Youth: Strengthening the Connection Between Child Welfare and Juvenile Justice,* Washington, DC: Center for Juvenile Justice Reform and Lancaster, MA: Robert F. Kennedy Children's Action Corps, 2012, http://www.njjn.org/uploads/digital-library/Addressing-the-Needs-of-MultiSystem-Youth-Strengthening-the-Connection-between-Child-Welfare-and-Juvenile-Justice-CJJR-3.1.12.pdf.

5. Robert F. Kennedy National Resource Center for Juvenile Justice, *From Conversation to Collaboration: How Child Welfare and Juvenile Justice Agencies Can Work Together To Improve Outcomes for Dual Status Youth,* 2014, http://www.modelsforchange.net/publications/539.

6. Denise C. Herz and Carly B. Dierkhising, "OJJDP Dual System Youth Design Study: Summary of Findings and Recommendations for Pursuing a National Estimate of Dual System Youth," Final report to the National Institute of Justice, award number 2015-CV-BX-0001, March 2019, NCJ 252717, 17, https://www.ojp.gov/pdffiles1/ojjdp/grants/252717.pdf.

"When you've identified a child as a dual system child, then you know there is a whole other series of issues that must be addressed, and you can't simply stay focused on this delinquency piece," he added.[6]

Data Linkage: A Key to Understanding

For juvenile justice to holistically address issues confronting the dual system youth population, child welfare and juvenile justice data must be linked, both to identify individual needs and address them through proven remedial protocols.

The Dual System Youth Design Study team defined the key role that data linkages must play in improved systemic help for the dual system youth population. Given that social science already suggests that more than half of the juvenile justice population has or will have child welfare involvement, those linkages will be key to integrating programs between child welfare and juvenile justice agencies. They will also enable identification and support of those dual system youth subgroups on the most difficult developmental pathways.

A central element of the study was a deep analytical dive into administratively linked child welfare/juvenile justice data from three jurisdictions — New York City, Cook County (Chicago), and Cuyahoga County (Cleveland). The researchers examined all youth whose first juvenile justice petition was filed in 2013 or 2014 in New York City, and between 2010 and 2014 in Cook County and Cuyahoga County. That analysis yielded the incidence rates for dual system youth shown in exhibit 2.

Exhibit 2. Incidence Rates for Dual System Youth		
Jurisdiction	**Number of Youth in Study Cohort**	**Prevalence of Dual System Youth Among First Juvenile Justice Petition Cohort**
New York City, NY	1,272	70.3%
Cuyahoga County, OH	11,441	68.5%
Cook County, IL	14,170	44.8%

The study confirmed and strengthened confidence in prior research findings that dual system youth represent a massive challenge for juvenile courts and child service agencies throughout the nation. As the study's report concluded, "Research demonstrates that at least half of juvenile justice youth have touched the child welfare system at some point in their lives."[7]

The Dual System Youth Design Study team theorized six pathways into system involvement typically taken by dual system youth, then used linked administrative data from the three jurisdictions to illuminate which of those pathways were placing youth at greater risk for negative outcomes, such as higher rates of juvenile detention and recidivism.

For definitional purposes, youth who had contact with both child welfare and juvenile justice, but not at the same time, were labeled "dual contact" youth. Those who had contact with both systems at the same time were deemed "dually involved" youth. Another factor informing a dual system youth's pathway through the systems was whether that young person had first contacted child welfare or first contacted juvenile justice. An additional consideration for those youth who were dually involved was whether they had a separate historical — that is, preexisting — contact with the child welfare system. For example, the pathway marked by dual concurrent involvement with child welfare and juvenile justice, where the first contact was with the child welfare system, and with an earlier, separate contact with child welfare, was labelled "Dually Involved Youth Child Welfare Pathway with a Historical Child Welfare Case."

The Dual System Youth Design Study team initially identified the following discrete pathways (see exhibit 3):

- Dual Contact — Child Welfare Pathway
- Dual Contact — Juvenile Justice Pathway
- Dually Involved — Child Welfare Pathway
- Dually Involved — Child Welfare Pathway — With a Historical Child Welfare Case
- Dually Involved — Juvenile Justice Pathway
- Dually Involved — Juvenile Justice Pathway — With a Historical Child Welfare Case

Applying data from deep statistical dives done at the three sites, the researchers refined those pathways. With data indicating the majority of dual system youth do not touch both systems at the same time, the researchers emphasized the need for systems to review a youth's complete history, rather than simply the present. The researchers isolated two dually involved youth subgroups as especially high risk, regardless of whether their child welfare involvement was historical or concurrent with their juvenile justice contact: (1) those with a long duration in child welfare and (2) those with a higher incidence of out-of-home placement as part of their child welfare exposure. Those experiences tended to put dual system youth most at risk for negative outcomes, the study reported.[8] Generally, all dually involved youth — those whose contact with child welfare and juvenile justice overlapped — "had earlier, longer, and deeper contact with the child welfare system."[9]

By enabling identification of the dual system youth population, and of those dual system youth segments at greatest risk for delinquency or further abuse, administrative data linkages can help drive collaboration tailored to individual needs and risks. "Without question, the administrative data findings

Exhibit 3. Dual System Youth Pathways

First Juvenile Justice Petition Cohort (averaged across sites)
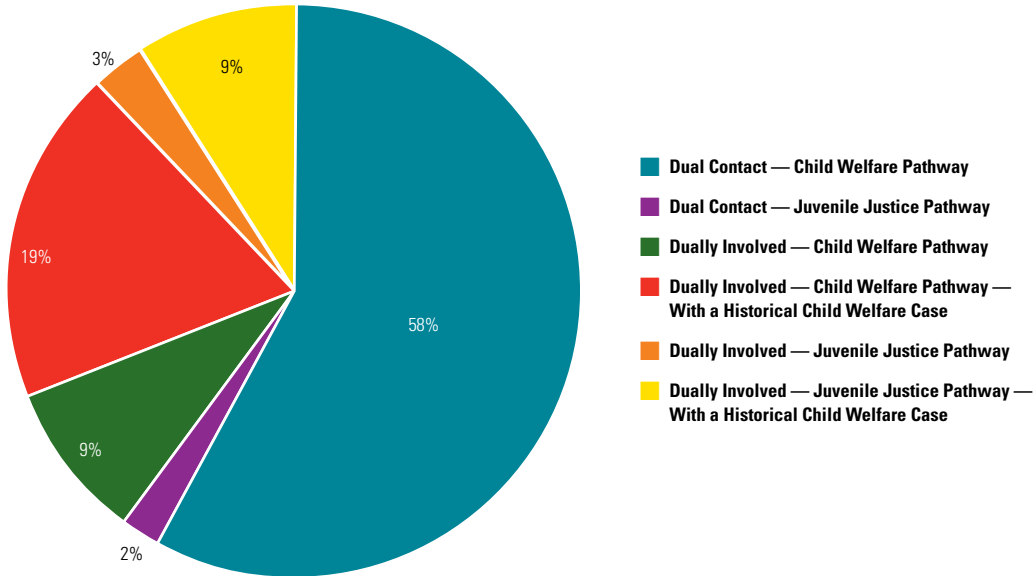
Source: Barbara Tatem Kelley, "At the Intersection of Child Maltreatment and Delinquency: Crossover Youth," National Institute of Justice Intramural Research presentation, Washington, DC, December 2019.

reinforce the need for cross-system collaboration and the implementation of integrated systems practice across the child welfare and juvenile justice system," the study report said.[10]

Using a Best Practices Rubric

If collaboration is vital to improved dual system youth services, developing best practices in each jurisdiction is vital to effective collaboration. Giving child welfare and other support agencies a greater voice in shaping the outcomes of juvenile justice cases can best support youth who are experiencing maltreatment or a lack of family support.

The second part of the Dual System Youth Design Study used case studies from 41 jurisdictions that are implementing the Center for Juvenile Justice Reform's Crossover Youth Practice Model[11] to identify best practices for guiding collaboration regarding dual system youth. The study identified several practices most commonly implemented and prioritized

across the sites, including early identification of dual involvement, improved information sharing across child welfare and juvenile justice systems, and coordinated case supervision.

The study team used its Crossover Youth Practice Model data analysis to create a "best practices rubric," a protocol for measuring each agency's progress across 11 performance areas, or "domains." The domains were:

- Interagency collaboration
- Judicial leadership
- Information sharing
- Data collection
- Training
- Identification of dual system youth
- Assessment process

- Case planning and management
- Permanency and transition plan
- Placement plan
- Service provision and tracking

For each domain, the rubric identified progress milestones toward best practice fulfillment on a continuum from "practice not in place" to "highly developed" practice. The team said that jurisdictions that are most fully evolved across the 11 domains will arguably have the most positive impacts on dual system youth.[12] Developing a rubric that helps agencies closely gauge their progress toward best practices is "one critical step" toward preventing young people from touching both systems, or at least reducing their involvement with juvenile justice, the research team reported.[13]

The team also stressed that preventing maltreatment, and preventing delinquency for those who experience maltreatment, are essential for reducing dual system contact and involvement.[14] For dual system youth, cross-system collaboration is essential for mitigating even deeper involvement with the juvenile justice system.[15] Early intervention against abuse and neglect reduces the likelihood of delinquency.[16]

Teamwork and Leadership

The tension inherent in the twofold mission of juvenile justice has long been evident. The juvenile justice system serves both to address juvenile delinquency in order to protect community safety and to provide intervention services to promote positive adolescent development. A 1969 Supreme Court decision quoted a juvenile court jurist describing juvenile justice as "an uneasy partnership of law and social work."[17]

That tension is reflected in the difficulty of forging collaborative, interagency solutions featuring tested protocols and team-building. According to White, the Mahoning County juvenile court magistrate and head of that county's multiagency dual system youth team, part of the problem is the false assumption of many juvenile justice staff throughout the country that they already understand the issues of dual system

youth who come before the court. "In many of the jurisdictions we have worked with, when you first present the dual system model, the answer you get is, 'We're already doing it.' I cannot tell you the number of times I have heard that in all good faith. It's just that without training and education, they don't realize how involved these cases can be, and how you have to have an orderly, organized plan to deal with them," said White, who also took part in a national initiative to promote and install crossover youth reforms.[18]

When a dual system juvenile is identified, White explained, the court "can't simply stay focused on the delinquency piece. You must put the team together, to address all aspects of what's going on in this child's and the family's lives." The organized collaborative approach, he added, "allows us to intervene early and swiftly and stop further penetration into the delinquency system."[19]

Mahoning County was one of 41 sites that generated data for the Dual System Youth Design Study. Those sites had adopted the Crossover Youth Practice Model devised by the Center for Juvenile Justice Reform.

The study's report emphasized the critical leadership role judges must play for interagency collaboration to succeed for dual system youth. The study team singled out Mahoning County as an exemplar of judicial leadership in implementing the Crossover Youth Practice Model. The Mahoning County juvenile court judge, Theresa Dellick, was a force for change as she assembled, engaged, and arranged training of multiagency stakeholders for a dual system youth team, according to White. "She is the person who absolutely insisted that we implement the Crossover Youth Practice Model in 2012," White recalled. "She was the visionary without any doubt, or we would not have done it. She put me in charge of the implementation of it, and since then we have just embraced it, run with it — and I don't know how we ever survived without it."[20]

In Mahoning County, White said, the Crossover Youth Practice Model team operation continues to run smoothly, eight years after implementation and without grant support or other special funding.

Policy Needs: Advancing Collaboration and Prevention for Maltreatment

Meaningful national progress in addressing the needs of this substantial at-risk population will require additional support for the development of integrated system practices, the Dual System Youth Design Study team concluded. Emphasis must be placed on codifying best practices in law and policy, with reforms across the federal, state, and local levels:[21]

- Committing resources and incentivizing community-based efforts to prevent maltreatment and delinquency before children, youth, and their families touch the child welfare or juvenile justice system.

- When system involvement is necessary, mandating better and more consistent identification of dual system youth, and evaluating integrated systems approaches to improving their outcomes.

- Funding community-based alternatives to removing children and youth from their families.

- Funding better data systems, particularly for juvenile justice systems.

- Mandating training at state and local levels on integrated system practices, and evaluating those practices.

- Identifying dual system youth as early as possible and providing comprehensive services — an essential building block for improving dual system youth practices. The key to reducing dual system contact and involvement is prevention, the study team emphasized. Preventing maltreatment and interrupting persistent maltreatment should be a priority because early intervention can reduce the likelihood of delinquency, according to the study report. Ultimately, the research team concluded, "well-developed policies depend on recognizing dual system youth as a critical target population rather than a marginal one."[22]

Conclusion

In sum, dual system youth merit timely, systematic identification; collaborative service delivery across the child welfare and juvenile justice systems; meaningful assessment of service delivery; and evaluation of the impact of integrated service delivery on key life outcomes.

An underlying prerequisite for both identification of and service delivery to those who meet the definition of dual system youth is developing the capacity for functional, linked administrative data. The study report recommends conducting an in-depth national assessment of dual system youth data capacity to advance both research and practice perspectives. Such an assessment could inform sound investment in the development of linked administrative data capacity.

The compelling need to advance technology and systems in support of dual system youth is informed by recognition of the profound human need informing these cases. In every case, a young individual faces serious, potentially life-altering challenges meriting the full attention of both juvenile justice and child welfare professionals. As observed by the principal investigator of the Dual System Youth Design Study, Denise Herz: "With deeper and more precise knowledge of pathways, we can reframe the narrative around dual system youth and fundamentally change the cultures of both the child welfare and juvenile justice systems."[23]

About the Authors

Barbara Tatem Kelley, M.A., M.Ed., is a social science research analyst in NIJ's Office of Research, Evaluation, and Technology. **Paul A. Haskins,** J.D., is a social science writer and contractor with Leidos supporting the National Institute of Justice.

For More Information

Watch a Research for the Real World seminar on the Dual System Youth Design Study at https://nij.ojp.gov/events/dual-system-youth-intersection-child-maltreatment-and-delinquency.

This article discusses the following award:

● "OJJDP FY 2015 Design Study of Dual System Youth," award number 2015-CV-BX-0001

Notes

1. Denise C. Herz and Carly B. Dierkhising, "OJJDP Dual System Youth Design Study: Summary of Findings and Recommendations for Pursuing a National Estimate of Dual System Youth," Final report to the National Institute of Justice, grant number 2015-CV-BX-0001, March 2019, NCJ 252717, 19, https://www.ojp.gov/pdffiles1/ojjdp/grants/252717.pdf.

2. Richard N. White (magistrate of Mahoning County juvenile court, Ohio), in interview with co-author Paul Haskins, July 2020.

3. Herz and Dierkhising, "OJJDP Dual System Youth Design Study." The Dual System Youth Design Study team was led by the principal investigators at California State University, Los Angeles, with extensive involvement of expert practitioners and researchers, including those from the Center for Juvenile Justice Reform at Georgetown University, Chapin Hall at the University of Chicago, the Center on Urban Poverty and Community Development at Case Western Reserve University, the Center for Innovation Through Data Intelligence in New York City, Westat, and Actionable Intelligence for Social Policy at the University of Pennsylvania.

4. Unless otherwise noted, all data in this section come from Herz and Dierkhising, "OJJDP Dual System Youth Design Study."

5. Unless otherwise noted, all data in this section come from Ellen Gray, *Child Abuse — Prelude to Delinquency?,* findings of a research conference conducted by the National Committee for Prevention of Child Abuse, April 7-10, 1984, 3, https://www.ojp.gov/ncjrs/virtual-library/abstracts/child-abuse-prelude-delinquency.

6. White in interview with Haskins.

7. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 128.

8. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 131.

9. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 127.

10. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 124.

11. The Center for Juvenile Justice Reform at Georgetown University has developed and supported implementation of the Crossover Youth Practice Model to address the unique needs of these youth. Additional information is available at https://cjjr.georgetown.edu/our-work/crossover-youth-practice-model/.

12. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 125.

13. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 125.

14. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 128.

15. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 129.

16. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 128.

17. *In re Agler,* 19 Ohio St. 2d 70, 73 (Ohio 1969), citing Whitlach, *The Juvenile Court,* 18 W. Res. L. Rev. 1239, 1246 (1967).

18. White in interview with Haskins.

19. White in interview with Haskins.

20. White in interview with Haskins.

21. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 129.

22. Herz and Dierkhising, "OJJDP Dual System Youth Design Study," 128.

23. Denise C. Herz, "Key Findings from the OJJDP Dual System Youth Design Study," presentation to the Federal Interagency Working Group on Child Abuse and Neglect, Washington, DC, July 2019.

NCJ 255646

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What factors help shape this process?
How can policy and practice improve individuals' chances of ending their criminal behavior?

———————————

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ADVANCING THE COLLECTION OF JUVENILE JUSTICE DATA

BY **BENJAMIN ADAMS**
The National Institute of Justice and the Office of Juvenile Justice and Delinquency Prevention are working to improve data on juvenile residential placement facilities and the youth they hold.

The National Institute of Justice (NIJ) works closely with the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to support a wide range of national data collection, analysis, and dissemination programs that inform the nation's understanding of juvenile crime, victimization, and the juvenile justice system. These efforts serve as an invaluable resource for policymakers and juvenile justice professionals who work tirelessly to prevent juvenile delinquency, protect children, and improve the juvenile justice system.

In particular, the Juvenile Justice and Delinquency Prevention Act of 1974, as amended, requires OJJDP to submit to Congress and the president an annual report on juveniles in custody.[1] In response, OJJDP has sponsored statistical collections — now managed by NIJ — to gather information from residential placement facilities that hold juveniles who are charged with, or adjudicated for, law violations. Two of these collections — the Census of Juveniles in Residential Placement (CJRP) and the Juvenile Residential Facility Census (JRFC) — provide the most comprehensive information available on national- and state-level trends and characteristics of juveniles in residential placement.

The data from these collections have served the juvenile justice field well over the years and have led to important insights regarding the nature of and changes in facility populations, environments, and practices. However, challenges remain in maintaining and improving the quality, completeness, and utility of these data. To help advance data collection in the field, NIJ is currently working with OJJDP and other partners to review and redesign the CJRP and JRFC. This effort will help to generate the most useful, timely, and reliable statistics available to describe juveniles in residential placement and the conditions in, operations of, and services provided by the facilities in which they are held.

Children in Custody Census

In 1971, the U.S. Department of Justice's Law Enforcement Assistance Administration sponsored the first Juvenile Detention and Correctional Facility

There is an ongoing struggle across establishment surveys to ensure data quality while maintaining high response rates and reducing respondent burden.

Census. The census replaced an annual survey on youth adjudicated delinquent that was conducted by the Department of Health, Education, and Welfare and published in a report series titled *Statistics on Public Institutions for Delinquent Children*. OJJDP took over sponsorship of the census in 1977, after the office was established under the Juvenile Justice and Delinquency Prevention Act of 1974.

Over time, the scope of the census expanded. In 1986, it became known as the Census of Public and Private Juvenile Detention, Correctional, and Shelter Facilities. Through 1995, it was typically conducted biennially, and findings were published in a report series titled *Children in Custody*. The reports provided information about the public and private facilities that held juveniles in custody and about the number and characteristics of the juveniles they held. The census included both one-day count items on the resident populations and annual items on admissions, discharges, and average length of stay.

The primary weakness of the census was that it collected only aggregate-level population data. This limited its utility for examining the intersection of juveniles' demographic characteristics and legal attributes.

Early Data Improvements

In the early 1990s, OJJDP began a broad, long-term examination and redesign of its data collections on juveniles in custody. The office consulted extensively with content and methods experts, held discussions with respondents, and tested questions and methodologies. The result was the development of two new data collection programs — the CJRP and JRFC — to gather comprehensive and detailed information about juveniles in residential placement and the facilities that hold them.

The CJRP and JRFC are administered in alternating years and collect information from all residential placement facilities that house juvenile offenders, defined as people younger than age 21 who are held in a residential setting for a delinquency or status offense.[2] This includes juveniles who are temporarily detained by the court and those who are committed after adjudication as part of a court-ordered disposition. The collections do not gather information on youth in federal facilities, adult prisons or jails, facilities used exclusively for mental health or substance abuse treatment, or facilities for abused or neglected children. The collections are currently managed by NIJ, in close collaboration with OJJDP and its data collection agent, the U.S. Census Bureau.

The CJRP provides a detailed picture of juveniles in residential placement, including the demographics and legal attributes of each youth in a juvenile facility on the census date. First administered in 1997, the CJRP typically takes place on the fourth Wednesday in October in odd-numbered years. It asks all juvenile residential facilities in the United States to describe each person younger than age 21 assigned a bed in the facility on the census date as a result of a delinquency or status offense. Facilities report individual-level information on each juvenile's date of birth, gender, race, placement authority, most serious offense charged, court adjudication status, and admission date, as well as some information on facility-level characteristics.

The JRFC provides a detailed picture of the facilities that hold juvenile offenders and the services these facilities provide. First administered in 2000, the JRFC is conducted on the fourth Wednesday in October in even-numbered years. The JRFC includes questions on facility ownership and operation, facility type, security, capacity and crowding, unauthorized departures, injuries, and deaths in custody. The JRFC also collects supplementary information each survey year on juvenile facility practices around identifying

Exhibit 1. Decline in Youth in Residential Placement

Number of youth in residential placement
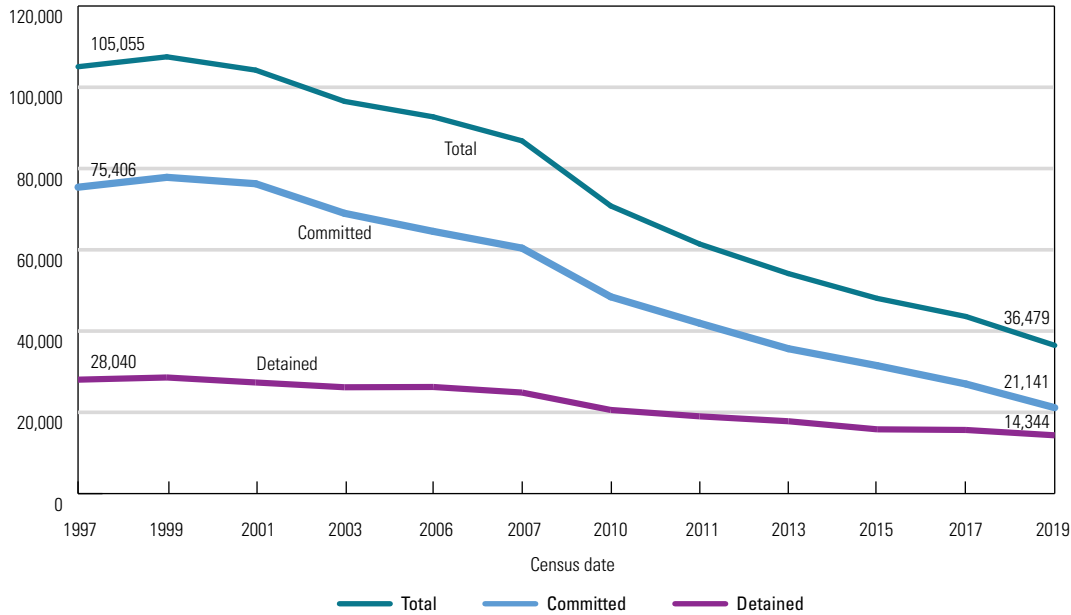
Note: Relative declines from 1997 to 2019 were greater for committed youth (72%) than for detained youth (49%). Total includes detained youth, committed youth, and a small number of youth in placement as part of a diversion agreement. The Census was conducted on the following dates (month/year): 10/1997, 10/1999, 10/2001, 10/2003, 02/2006, 10/2007, 02/2010, 10/2011, 10/2013, 10/2015, 10/2017, and 10/2019.

Source: Sarah Hockenberry, *Juveniles in Residential Placement, 2019,* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, In press.

youth's needs and the specific services that facilities provide, such as those related to mental health, physical health, substance use, and education needs.

Current Trends and Characteristics

To understand current characteristics of juveniles in residential placement and juvenile facilities, researchers supported through the NIJ-managed National Juvenile Justice Data Analysis Program analyzed data from the most recent CJRP and JRFC[3] (see sidebar, "Juvenile Court Statistics").
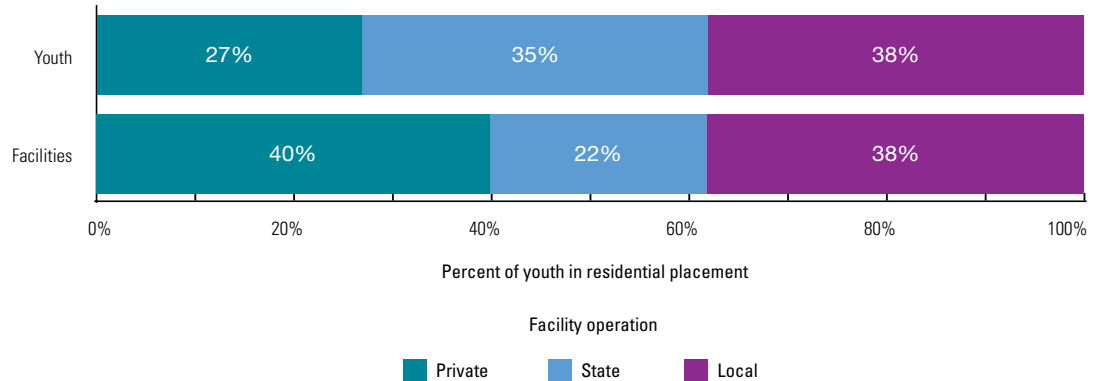
Juveniles in Residential Placement, 2019

On October 23, 2019, residential placement facilities held 36,479 juvenile offenders, which was 65% below the 1997 level when 105,055 youth were held

in placement.[4] In fact, by 2019 the total number of juvenile offenders in placement reached its lowest level since at least 1975.[5] Between 1997 and 2019, declines were greater for committed youth (down 72%) than for detained youth (down 49%). In 2019 there were 114 juvenile offenders in placement for every 100,000 juveniles in the U.S. population.[6] There was substantial variation in juvenile residential placement rates by state; however, rates declined in every state from 2007 to 2019 and many states cut their rates by half (see exhibit 1).

Nationally, 43% of juvenile offenders were held for person offenses, followed by property offenses (21%), technical violations and public order offenses (14% each), and drug offenses (4%). Youth held for status offenses made up 4% of the placement population.

Exhibit 2. Characteristics of Juvenile Residential Facilities in 2018

	Private	State	Local
Youth	27%	35%	38%
Facilities	40%	22%	38%

Percent of youth in residential placement

Facility operation

Private   State   Local

Note: In 2018, 40% of all facilities were private, but they held only 27% of juvenile offenders in placement. Sixty percent were public facilities and held the majority of juvenile offenders, with local facilities (38%) holding more youth than state facilities (35%).

Source: Sarah Hockenberry and Anthony Sladky, *Juvenile Residential Facility Census 2018: Selected Findings,* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 2020.

More than half (52%) of juvenile offenders in residential placement were age 16 or 17. Youth ages 13 through 15 made up 32% of those in placement. Females accounted for 15% and males 85% of juvenile offenders in residential placement. Forty-seven percent of the U.S. juvenile population were minorities, but minority youth accounted for 67% of juveniles in residential placement. Non-Hispanic Black youth made up the largest proportion (41%), followed by non-Hispanic white (33%) and Hispanic (20%) youth. Non-Hispanic youth of other races, including those of two or more races, accounted for 6% of youth in residential placement.

The median days in placement since admission was 113 days for committed juveniles and 26 days for detained juveniles.[7] Thirty-three percent of committed juveniles and about 8% of detained juveniles remained in placement six months after admission.

Juvenile Residential Facilities, 2018

In 2018, 40% of all facilities were private, but they held only 27% of juvenile offenders in placement (see exhibit 2).[8] Sixty percent were public facilities and held the majority of juvenile offenders, with local facilities (38%) holding more youth than state facilities (35%). Facilities most commonly identified themselves as detention centers (41%), residential treatment centers

(37%), or group homes (16%).[9] Other reported facility types included long-term secure facilities, shelters, reception/diagnostic centers, and ranch/wilderness camps.

Security features and practices varied across types of facilities. For example, 49% of facilities reported that they locked youth in their sleeping rooms; however, the percentage was much higher for local (81%) and state (69%) facilities than for private facilities (8%). Similarly, 29% of facilities reported using external fences or walls with razor wire, but this was most common among facilities that identified as reception/diagnostic centers (60%), training schools (55%), and detention centers (50%). About one-quarter of facilities (27%) reported using mechanical restraints in the previous month, and 22% reported locking youth alone in some type of seclusion for four or more hours to regain control of their unruly behavior.

Facility crowding affected a relatively small proportion of youth in custody. Eighteen percent of facilities reported that the number of residents they held on the 2018 census date put them at or over the capacity of their standard beds or that they relied on some makeshift beds. In 2018, 1% of facilities reported being over capacity, down from 8% of facilities in 2000.

Juvenile Court Statistics

National statistics on how cases referred to juvenile court are processed, including detention and disposition decisions, are also available. In 1929, the Children's Bureau within the U.S. Department of Labor first published the *Juvenile Court Statistics* report. The report presented delinquency and dependency case information for calendar year 1927 based on data reported by 42 courts in 15 states.[1] In the 1950s, the Children's Bureau and its work were transferred to the U.S. Department of Health, Education, and Welfare. In 1974, the Juvenile Justice and Delinquency Prevention Act established the Office of Juvenile Justice and Delinquency Prevention (OJJDP), which then assumed responsibility for the collection and reporting of juvenile court statistics.

Today, the National Juvenile Court Data Archive,[2] sponsored by OJJDP and managed by the National Institute of Justice, collects detailed, case-level data and court-level aggregate statistics to generate national estimates of delinquency and petitioned status offense caseloads. The archive is supported through a grant to the National Center for Juvenile Justice, the research division of the National Council of Juvenile and Family Court Judges. The most recent report includes data from more than 2,500 courts with jurisdiction over 87% of the juvenile population in 2018.[3]

The *Juvenile Court Statistics* report provides information on the use of detention between court referral and case disposition and on the most severe initial disposition in each case, which includes commitment to a residential facility.[4] The number of delinquency cases involving detention decreased 52% between 2005 and 2018. However, the proportion of cases detained was slightly larger in 2018 (26%) than in 2005 (25%). Similarly, the number of cases adjudicated delinquent that resulted in out-of-home placement decreased 59% from 2005 to its lowest level in 2018. Courts ordered out-of-home placement in 28% of all cases adjudicated delinquent in 2018, a proportion that was relatively stable between 2005 and 2018.

Notes

1. Children's Bureau, *Juvenile-Court Statistics, 1927,* Washington, DC: U.S. Government Printing Office, 1929, https://www.ojjdp.gov/ojstatbb/njcda/pdf/jcs1927.pdf.

2. "National Juvenile Court Data Archive" at the National Council of Juvenile and Family Court Judges, NIJ award number 2018-JX-FX-0002, https://nij.ojp.gov/funding/awards/2018-jx-fx-0002.

3. Sarah Hockenberry and Charles Puzzanchera, *Juvenile Court Statistics 2018,* Pittsburgh, PA: National Center for Juvenile Justice, 2020, https://www.ojjdp.gov/ojstatbb/njcda/pdf/jcs2018.pdf.

4. All data in this paragraph are from Hockenberry and Puzzanchera, *Juvenile Court Statistics 2018*.

Most facilities reported screening youth for suicide risk and treatment needs. All youth were evaluated for suicide risk in 95% of facilities, for education needs in 88% of facilities, for substance abuse problems in 75% of facilities, and for mental health needs in 63% of facilities. The majority of facilities reported screening all or some youth for service needs within one week of admission. More than half of facilities (62%) reported providing onsite treatment services. Of facilities providing treatment, the largest proportion

provided mental health services (86%), followed by substance abuse services (70%), sex offender services (36%), violent offender services (21%), and arson offender services (10%).

Juvenile facilities reported only eight deaths of youth younger than age 21 in residential placement for the 12 months prior to the 2018 census. Suicide was the most commonly reported cause of death (six deaths). The death rate was 2.1 per 10,000 youth in placement. Deaths of juveniles in residential placement remained relatively rare and well below the levels recorded in prior decades.

Ongoing Data Collection Challenges

There is an ongoing struggle across establishment censuses to ensure data quality while maintaining high response rates and reducing respondent burden. The CJRP and JRFC, which routinely achieve response rates near 90%,[10] are no exception. One way to meet these challenges is to clearly demonstrate the practical utility and unique contribution of the data to respondents, as well as more broadly to inform policy, practice, and the general public.

Notably, the items included in the CJRP and JRFC survey instruments have largely remained the same since their original design more than 20 years ago. Although this continuity is important to support trends for core estimates, the data show that there have been dramatic changes in juvenile corrections during this period. The juvenile residential placement population has been reduced by more than half. Security and safety in facilities remain paramount, but juvenile corrections practice is increasingly focused on appropriately screening youth and delivering rehabilitative services that are shown by research to reduce reoffending and promote prosocial youth outcomes. Youth are now more commonly held in facilities that are smaller, less crowded, and run by county or municipal governments. In addition, there is greater automation of data, and many facilities have improved their infrastructure for tracking and reporting youth and facility-level information.

Strategy for Future Data Improvements

NIJ and OJJDP have worked closely with the U.S. Census Bureau over the past few years to assess the performance of the data collections and identify potential opportunities for improvement. The assessment process included conducting respondent debriefings following data collection cycles, analyzing methods of response and other respondent behavior, and examining nonresponse patterns. This work provided an initial foundation for understanding respondent preferences and priorities for key data items, how respondents interacted with the web survey instruments, how nonresponse varied by key facility attributes such as location and size, and the potential for nonresponse bias in the population estimates produced from the collections.

To advance these efforts, NIJ is managing a study of how to redesign OJJDP's data collections on juveniles in corrections.[11] The study, led by RTI International, will result in improved data collection instruments and methodologies for generating statistics on the number and characteristics of juveniles in residential placement and information about the facilities in which they are held. In collaboration with NIJ, OJJDP, and other federal partners, the project team is conducting a comprehensive assessment of the current data collections and will develop and pilot test the redesigned CJRP and JRFC instruments and data collection methodologies. The project team has also engaged an expert panel of juvenile corrections leaders, researchers, and other juvenile justice practitioners to ensure that the project recommendations fully address information gaps and needs in the field.

This project will help improve the nation's primary effort to gather statistical data on juveniles in residential placement and make that information accessible to researchers, practitioners on the front lines, and policymakers at the federal, state, and local levels. NIJ remains committed to ensuring the dissemination of and access to clear, comprehensive, and reliable data to meet the pressing needs of the juvenile justice field.

About the Author

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For More Information

To learn more about juvenile crime, victimization, and youth involved in the juvenile justice system, visit OJJDP's online Statistical Briefing Book at OJJDP.gov/ojstatbb/corrections/faqs.asp.

For access to information from the Census of Juveniles in Residential Placement, visit OJJDP.gov/ojstatbb/ezacjrp.

For access to national and state data from the Juvenile Residential Facility Census, visit OJJDP.gov/ojstatbb/jrfcdb.

Original data from the two collections are archived at the National Archive of Criminal Justice Data, icpsr.umich.edu/icpsrweb/content/NACJD/index.html.

This article discusses the following awards:

- "National Juvenile Justice Data Analysis Program," award number 2019-JX-FX-K001
- "FY 18 Redesign Study of OJJDP's Juveniles in Corrections Data Collections," award number 2018-JX-FX-K001
- "National Juvenile Court Data Archive," award number 2018-JX-FX-0002

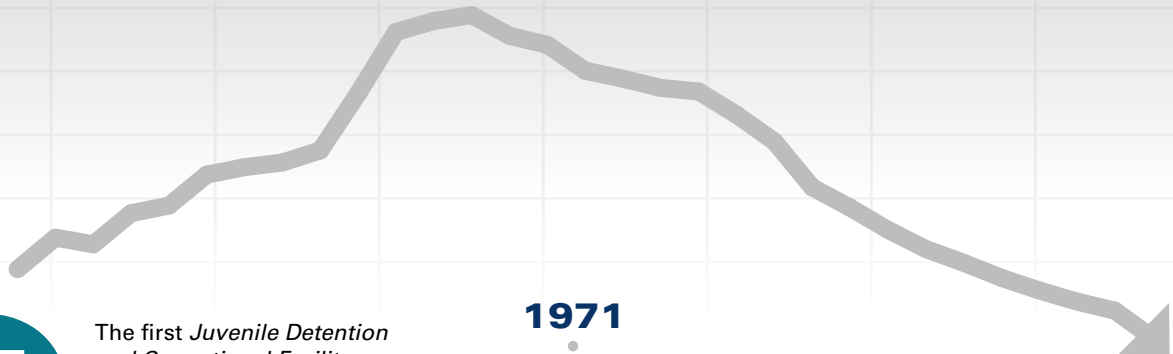## Notes

1. Office of Juvenile Justice and Delinquency Prevention, *Juvenile Justice and Delinquency Prevention Act Reauthorization 2018,* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 2019, https://ojjdp.ojp.gov/sites/g/files/xyckuh176/files/media/document/jjdpa-as-amended_0.pdf.

2. Delinquency offenses are acts committed by juveniles that could result in criminal prosecution if committed by adults. Status offenses, such as running away, truancy, and incorrigibility, are behaviors that are law violations only because the people committing them are juveniles.

3. "National Juvenile Justice Data Analysis Program" at the National Council of Juvenile and Family Court Judges, NIJ award number 2019-JX-FX-K001, https://nij.ojp.gov/funding/awards/2019-jx-fx-k001.

4. Unless otherwise noted, all data in this section come from Sarah Hockenberry, *Juveniles in Residential Placement, 2019,* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, In press.

5. Bradford Smith, "Children in Custody: 20-Year Trends in Juvenile Detention, Correctional, and Shelter Facilities," *Crime & Delinquency* 44 no. 4 (1998): 526-543, https://doi.org/10.1177%2F0011128798044004004.

6. The placement rate is the count of juvenile offenders in juvenile residential facilities on the census date per 100,000 youth age 10 through the upper age of original juvenile court jurisdiction in each state.

7. The CJRP captures information on the number of days since admission for each juvenile in residential placement. These data represent the number of days the juvenile had been in the facility up to the census date.

8. Unless otherwise noted, all data in this section come from Sarah Hockenberry and Anthony Sladky, *Juvenile Residential Facility Census 2018: Selected Findings,* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 2020, https://ojjdp.ojp.gov/library/publications/juvenile-residential-facility-census-2018-selected-findings.

9. The JRFC asks respondents to identify the type of facility. Although respondents were allowed to select more than one facility type category, the vast majority (81%) selected only one category.

10. U.S. Census Bureau, *Documentation of the Imputation Methodology for the 2018 Juvenile Residential Facility Census,* 2020, internal report, unpublished.

11. "FY 18 Redesign Study of OJJDP's Juveniles in Corrections Data Collections" at Research Triangle Institute, NIJ award number 2018-JX-FX-K001, https://nij.ojp.gov/funding/awards/2018-jx-fx-k001.

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JUVENILE JUSTICE DATA COLLECTION
THROUGH THE YEARS

1971

The first *Juvenile Detention and Correctional Facility Census* is sponsored by the U.S. Department of Justice to collect aggregate annual statistics on juveniles in custody and facility information.

1974

The Juvenile Justice and Delinquency Prevention Act establishes the Office of Juvenile Justice and Delinquency Prevention (OJJDP), providing authority to collect and report on juvenile justice statistics.

1977

OJJDP begins sponsoring the *Juvenile Detention and Correctional Facility Census*.

1986

The *Census of Public and Private Juvenile Detention, Correctional, and Shelter Facilities* is introduced, expanding the focus on private facilities and services provided.

1990s

OJJDP begins a broad redesign of its data collections on juveniles in custody to improve measures and methodologies and to collect individual information on each youth in custody.

1997

The first *Census of Juveniles in Residential Placement* is administered, providing information on the demographics and legal attributes of each youth in a juvenile facility on the census date.

2000

The first *Juvenile Residential Facility Census* is administered, providing a detailed picture of the facilities that hold juvenile offenders and the services they provide.

2018

The National Institute of Justice (NIJ) assumes management of the *Census of Juveniles in Residential Placement* and *Juvenile Residential Facility Census*.

2021

NIJ has redesigned and is testing new instruments and methodologies to improve OJJDP's data collections on juveniles in corrections.

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