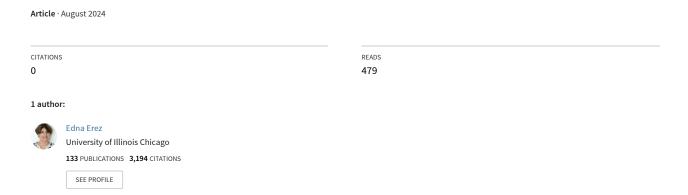
Domestic Radicalization, Violent Extremism, and Terrorism: The full research picture





NATIONAL INSTITUTE OF JUSTICE OF JUSTICE A STATE OF JUSTICE A S

06/2024

Focus on:

Domestic Radicalization, Violent Extremism, and Terrorism

IN THIS ISSUE

What NIJ Research Tells Us About Domestic Terrorism

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Advances in Detecting and Identifying Explosives After an Attack

Research and Practitioner Perspectives on the Rehabilitation and Reintegration of Violent Extremists





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Nancy La Vigne, Ph.D.

Director, National Institute of Justice

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DIRECTOR'S MESSAGE



Domestic radicalization and violent extremism are persistent and pernicious challenges to law enforcement agencies and community safety across the country. NIJ has long been committed to providing community leaders, law enforcement, and practitioners with evidence-based practices to help prevent and mitigate these ever-changing threats.

In 2012, Congress tasked NIJ with supporting research on pathways from domestic radicalization to violent extremism. Since then, we have invested extensively in pursuit of this mandate, funding more than 50 studies (totaling nearly \$40 million) through our domestic radicalization and violent extremism research portfolio.

That research has informed our understanding of the radicalization process in the United States and the identification of potential intervention points. We have helped develop databases

that can detect common threats among individuals who radicalize to terrorism. We have also supported research on how to distinguish between individuals who hold radical beliefs and those whose radical beliefs precipitate violence. As the field of terrorism and radicalization research has evolved, so too have our research investments, spurring projects to examine more nuanced and increasingly complex challenges faced by the law enforcement and victim service provider communities.

This issue of the *NIJ Journal* covers three main areas of research inquiry. First, we describe our data-informed understanding of the radicalization process, how to interrupt it, and how to address those who engage in violence because of it. Second, we document the vital roles of practitioners who work with radicalized individuals. Third, we synthesize findings from across our research investments on violent extremism to extract key recommendations and present them in ways that are accessible to practitioners and policymakers.

We invited researchers and practitioners, including past and present NIJ grantees and staff, to examine this topic from all angles. This *Journal* edition explores what we have learned about U.S. radicalization and terrorism, the degree to which it resembles other forms of mass or targeted violence, and how best to collect and analyze data on rare incidents like terrorist acts. Experts also examine the roles of trauma and mental health in the radicalization process and what makes prevention and intervention programs most effective. Importantly, this issue shares research on how to successfully reintegrate individuals involved in violent extremism back into society and the role of the forensic sciences in detecting and responding to terrorist attacks.

Research tells us that communities across our country want to engage in transparent, collaborative efforts to improve resiliency, reduce general violence, and increase overall public health. Therefore, standalone programs to address violent extremism will not succeed. To understand the needs and priorities of communities affected by local and global events, practitioners and policymakers must hold space for them to air their grievances and feel heard by their community leaders. They also need to establish safe environments in which residents can feel comfortable coming forward to report concerning or threatening behaviors to authorities.

The most proactive and collaborative approach we can take to root out the threat of violent extremism across the United States is to promote healthy and resilient communities. This starts with encouraging practitioners to focus on the early identification of precipitators of hate and extremism before they take root, and to address the needs of individuals at risk of radicalizing before the sentiments manifest into violence.

I encourage those doing this important work in the field to learn and apply lessons from the findings presented in this *NIJ Journal* edition. This issue represents a culmination of more than a decade of much-needed research on domestic radicalization, violent extremism, and terrorism. My hope is that this knowledge can be used to move both research and practice forward in actionable ways that aid prevention efforts and bolster community resilience.

Nancy La Vigne, Ph.D.

Director, National Institute of Justice

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NIJ BULLETIN



Publications in Brief



Best Practices for Optimizing Law Enforcement Job Descriptions To Recruit Diverse Candidates

Job descriptions play a key role in a potential applicant's perception of law enforcement agency culture, particularly as it relates to gender inclusivity. Research has shown that subtle word choices can affect how prospective applicants perceive advertised jobs and impact who applies. The need to improve job descriptions to facilitate law enforcement recruitment has long been recognized, but there has been little gender-related research on the topic.

In an NIJ-funded study, researchers at RTI International presented various job descriptions to over 600 participants. Findings suggest that the job description's content influences applicants' perceptions of policing jobs in important ways. Job description language especially affected women participants.

Read the report at https://nij.ojp.gov/library/publications/best-practices-optimizing-law-enforcement-job-descriptions-recruit-diverse.



Five Things To Know About Women and Reentry

In the United States, nearly two million women are released from prison or jail each year. These women face different challenges than men do during the period of transition from correctional confinement to the community — commonly referred to as "reentry." Existing correctional programming to support successful reintegration has largely focused on men. This demonstrates the need for investment in research, development, implementation, and evaluation of programs that integrate gender-specific factors.

This fact sheet summarizes available data and research regarding women and reentry, including four promising reentry programs geared specifically toward women.

Read the fact sheet at https://nij.ojp.gov/topics/articles/five-things-know-about-women-and-reentry.



Understanding Forensic Intelligence: The NIJ Framework

Solving crimes requires information, and the sooner investigators get that information, the more effective it is. In law enforcement, "forensic intelligence" describes using forensic data early in an investigation, when it can accelerate the process of solving the case. It also means using data across cases to understand crime trends and identify links between cases, such as serial crimes.

The key to forensic intelligence is making data actionable as quickly as possible, so results leave the laboratory fast enough to steer law enforcement actions. Forensic data can also reveal patterns to help officers disrupt ongoing crimes and prevent new ones, instead of responding only to crimes that have already happened.

Forensic intelligence approaches can be built into existing investigation processes without changing a case's entire workflow. Early use of forensic data and preliminary results in the investigation cycle can generate useful investigative leads and hasten case resolution.

Read a brief about forensic intelligence at https://nij.ojp.gov/topics/articles/understanding-forensic-intelligence-nij-framework.



Gideon v. Wainwright at 60: A Snapshot of State Public Defense Systems and Paths to System Reform

In 1963, the U.S. Supreme Court decided in *Gideon v. Wainwright* that defense lawyers are "necessities, not luxuries" to the pursuit of fairness in the criminal justice process. *Gideon* specified that states must ensure that people who cannot afford defense lawyers are provided with them at government expense. Since that initial ruling, the Court has clarified *Gideon*'s scope. However, the administration, funding, and oversight of public defense was left to individual states, leading to a variety of public defense system models.

In collaboration with the U.S. Department of Justice's Office for Access to Justice, NIJ sponsored a report on contemporary public defense system models to recognize *Gideon*'s 60th anniversary. The report presents findings from a national examination of current models used for adult, triallevel, criminal cases in U.S. state, local, and tribal jurisdictions.

Read the full report at https://nij.ojp.gov/topics/articles/gideon-60.



News & Events



Webinar: From Research to Reality: Recruiting More Women Into the Policing Profession

Jen Ranier, a research psychologist studying workplace and workforce issues at RTI International, discusses an applied research project funded by NIJ. The project's goal was to identify ways to help law enforcement agencies recruit more women.

The three-phase study: 1) examined current practices and identified strategies to improve recruitment of women into policing, 2) conducted a large-scale online experiment to test potential solutions, and 3) applied the field study's findings to assess results and strategies.

The webinar discusses the research efforts, findings, and implications for practice, providing evidence-based examples of how law enforcement agencies can recruit and retain more women in policing careers.

Watch the webinar at https://nij.ojp.gov/multimedia/recruiting-more-women-into-policing-profession.



2023 NIJ Research Conference: Looking Back

Last year, NIJ hosted a three-day, in-person conference in Arlington, Virginia. The theme of NIJ's 2023 National Research Conference was "Evidence to Action." Our goal was to bring researchers and practitioners together to learn about the latest research evidence and how it can be implemented to promote safety, equity, and justice.

Conference participants were exposed to a wide array of topics, including youth mentoring, officer wellness, school safety, forensics, technology evaluation, and strategies for more inclusive research processes. Attendees also learned how to find, apply for, and manage NIJ grant awards. Here are some highlights:

- "De-Escalation Training: What Works, Implementation Lessons, and Taking It to Scale" —
 This plenary session examines the Integrating Communications, Assessment, and Tactics
 (ICAT) de-escalation training program developed by the Police Executive Research Forum to
 guide officers in defusing critical incidents. Panelists discuss the development of the training
 curriculum, strategies to ensure training implementation fidelity, preliminary findings from
 other NIJ-sponsored evaluations, and strategies to scale ICAT. Watch the plenary session at
 https://nij.ojp.gov/multimedia/de-escalation-training.
- "Inclusive Research: Engaging People Closest to the Issue Makes for Better Science & Greater Impact" Inclusive research is a participatory research method designed to ensure people closest to the issue under study are authentically engaged in the research process. Panelists advocate for wider application of inclusive research methods and contend that employing it yields more accurate and policy-relevant evidence. The panel also addresses challenges to conducting inclusive research and how to overcome them. Watch the panel discussion at https://nij.ojp.gov/multimedia/inclusive-research-engaging-people-closest-to-the-issue.

- "Meet the OJP Science Directors: Nancy La Vigne and Alex Piquero Discuss the Future of Research and Statistics at the 2023 NIJ Research Conference" — The directors of the National Institute of Justice and the Bureau of Justice Statistics reflect on the future of research and statistics and take questions from the audience. Watch the discussion at https://nij.ojp.gov/multimedia/meet-the-ojp-science-directors.
- "Embodying Evidence to Action: Tracking the Impact of Three Key NIJ Research
 Investments" This plenary session discusses advances in forensic DNA, police body armor
 standards, and place-based analyses of public safety. Panelists represent the researcher,
 practitioner, policymaker, and advocacy perspectives and explore how evidence generation
 results in improved public safety and yields more equitable criminal justice outcomes. Watch
 the plenary session at https://nij.ojp.gov/multimedia/embodying-evidence-to-action.
- "Can Science Enhance Equity? Findings and Implications From a Study To Detect Bruising on Victims With Dark Skin Pigmentation" — This plenary panel examines research methodology to improve the detection and documentation of bruises on victims of violence who have dark skin pigmentation. The study highlights the intersection of science, justice, and racial equity through practitioner and victim advocacy perspectives. Watch the panel discussion at https:// nij.ojp.gov/multimedia/can-science-enhance-equity.



Multimedia



Justice Today Podcast

NIJ brings science into the heart of the U.S. justice system to combat crime and help victims. The Office of Justice Programs' Justice Today podcast lets listeners hear directly from NIJ scientists about the latest research in criminal justice — from gun violence and human trafficking to school safety and mass incarceration. Episodes include:

- Closing Cases Using Gunshot Residue NIJ graduate research fellow Shelby Khandasammy discusses how a tool she developed to analyze organic gunshot residue can be used to close cases lacking definitive evidence (such as DNA) to link an individual to a crime.
- What's Known and Unknown About Marijuana NIJ scientist Frances Scott explains the complications in drug chemistry and how difficulties defining marijuana result in crime lab backlogs around the country.
- A Data-Informed Response to Emerging Drugs Experts from the criminal justice and public health fields discuss strategies and tools to fight the emerging drug crisis in the United States.
- Cold Cases and Serial Killers NIJ social science analyst Eric Martin discusses cases that NIJ helped law enforcement solve, including that of Golden State Killer Joseph DeAngelo.
 Martin also answers broader questions about serial killers, such as: What is a serial killer? Are they on the rise? How do we know how many serial killers are currently active?
- Progressing From Evidence to Action Panelists at NIJ's 2023 National Research
 Conference share ideas, practical steps, and promising new approaches in applying research
 on crime and justice to influence practices in the field.

- Driving Down Gun Violence Three LEADS Scholars serving in different law enforcement agencies and positions discuss their experiences with identifying and implementing evidencebased interventions to reduce gun violence.
- Building More Reliable Forensic Sciences A 2009 National Research Council report
 questioned the scientific basis of many aspects of forensic evidence. Learn how that report
 had an immediate impact on law enforcement, crime labs, courtrooms, and the broader
 scientific community.

Listen to all episodes at https://nij.ojp.gov/library/multimedia/podcasts.



Research Findings



Determining the Age-At-Death of Infants, Children, and Teens

Despite decades of research, determining the age-at-death of skeletal remains of individuals ranging from birth to around 20 years old has proven daunting for forensic investigators. A team of researchers led by anthropologists Nicholas Herrmann at Texas State University and Joseph Hefner at Michigan State University developed a statistical framework to enable more precise age estimations.

Supported by an NIJ grant, the project created a large reference sample of developmental dental data from diverse international populations. It also addressed common issues encountered in forensic casework that can both inform and restrict accurate estimates of a deceased individual's dental age.

Read more about this research at https://nij.ojp.gov/topics/articles/determining-age-death-infants-children-and-teens.



Is It an Accident or Abuse? Researchers Develop Predictive Models for Pediatric Head Injuries

Every year nearly three million injured children are brought into emergency rooms. In each case, a physician must examine the child to determine if the injury was due to an accident or abuse — a daunting task. Although accidents are common in children, it is also common to conceal child abuse with claims of accidental injury.

For more than a decade, NIJ has supported research to help physicians and law enforcement differentiate accidents from abuse when presented with an injured child. Two recent NIJ-funded studies aimed to address the challenges of getting definitive answers. The first study developed a computational model to predict crack and fracture patterns in infant skull (cranial) bone. The second study developed a statistical model for predicting the probability of head injury in young children involved in falls.

Learn more about these studies at https://nij.ojp.gov/topics/articles/ it-accident-or-abuse-researchers-develop-predictive-models-pediatric-head-injuries.



Attitudes of Reporting Officers Extracted From Incident Reports Can Affect Rape Case Outcomes

One of the first steps in a rape investigation is the writing of the responding officer's report. What the officer includes and how conclusions are worded can have an impact on the case.

In an NIJ-sponsored study, data scientists applied machine learning techniques to nearly two decades' worth of police rape case reports to identify linguistic "signaling" of officers' views or biases in the rape report narratives. The scientists examined how officer opinions and subjectivity regarding victim credibility may affect key procedural decisions, such as whether to prosecute a rape case.

Read more about the research at https://nij.ojp.gov/topics/articles/ attitudes-reporting-officers-extracted-incident-reports-can-affect-rape-case.



Improving Analysis of "Trace DNA" Evidence

Sometimes forensic labs can find ample DNA in the evidence collected at a crime scene. Other times, investigators are not as fortunate. Evidence samples with low amounts of DNA may not yield a profile that investigators can use to match or exclude individuals.

Researchers have a potential solution: direct polymerase chain reaction (PCR). This DNA amplification method allows scientists to add a swab or sample directly to the PCR, which eliminates the loss of DNA that traditionally occurs during DNA extraction and quantification. NIJ-funded researchers assessed the operational requirements needed to maximize DNA recovery using direct PCR, which produced practical data about trace DNA evidence collection and analysis.

More details on the study and its results can be found at https://nij.ojp.gov/topics/articles/improving-analysis-trace-dna-evidence.



Research on the Mounting Problem of Correctional Officer Stress

Correctional officer stress stems from two primary sources: the demands of responding to critical incidents within the correctional facility and more mundane organizational stressors (ranging from understaffed shifts to toxic work environments). Panelists at the 2023 NIJ National Research Conference discussed the effects and interactions of both sources of stress, as well as promising mitigation strategies such as mindfulness training.

Learn more at https://nij.ojp.gov/topics/articles/research-mounting-problem-correctional-officer-stress.



Looking Beyond Recidivism: New Research on Well-Being in Prisons and Jails From the National Institute of Justice

Angel E. Sanchez is an attorney committed to making education more accessible to people who are incarcerated. He also spent more than a decade in a Florida prison, the source of his advocacy for reform. At the 2023 NIJ National Research Conference, Sanchez led a discussion on corrections research that looks beyond preventing recidivism and explores evidence-based ways of improving individual experiences and institutional culture within prisons and jails.

Learn more about the discussion at https://nij.ojp.gov/topics/articles/looking-beyond-recidivism-new-research-well-being-prisons-and-jails-national.



The Impact of False or Misleading Forensic Evidence on Wrongful Convictions

Conviction of a person for a crime that they did not commit is one of the greatest travesties of the criminal justice system. As of 2023, the National Registry of Exonerations has recorded over 3,000 cases of wrongful convictions in the United States. Often, faulty forensic science is at least partly to blame.

To understand the causes of errors in forensic science, NIJ enlisted independent research consultant John Morgan to analyze and describe the impact of forensic science on erroneous convictions classified as being associated with "false or misleading forensic evidence." Findings led to the development of a forensic error typology, or codebook, that categorizes factors related to misstatements in forensic science reports, errors of individualization or classification, testimony errors, issues related to trials and officers of the court, and evidence handling and reporting issues.

Read more about this research at https://nij.ojp.gov/topics/articles/impact-false-or-misleading-forensic-evidence-wrongful-convictions.



Detecting Drug Exposure Long After the Fact: New Method Proves Effective

Substance use and involuntary drug exposure have far-reaching consequences for individuals, families, and communities. Investigators often need forensic toxicologists to provide evidence of an individual's history of drug use or exposure, even if that history dates further back than current tests can determine.

Forensic toxicologists assess drug use and drug exposure by detecting and measuring drug metabolites in blood, urine, and other samples. Given that the body tends to clear drug metabolites within one week or less, detecting drug use after the fact presents a challenge.

To increase the window of time that a drug exposure can be detected, NIJ funded researchers from Florida International University to develop an innovative, sensitive, and specific method to detect drug exposure.

Learn more about this new detection method at https://nij.ojp.gov/topics/articles/detecting-drug-exposure-long-after-fact-new-method-proves-effective.



Workflow To Facilitate the Detection of New Psychoactive Substances and Drugs of Abuse in Influent Urban Wastewater

In this NIJ-sponsored study, researchers developed a workflow for detecting psychoactive substances and drugs in urban wastewater using high-resolution mass spectrometry. This workflow not only reduces the time needed to process data but also allows researchers to better understand the hazardous materials present in our environment.

Access the article at https://nij.ojp.gov/library/publications/workflow-facilitate-detection-new-psychoactive-substances-and-drugs-abuse.



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, alongside data from the Bureau of Justice Statistics and the Office of Juvenile Justice and Delinquency Prevention, 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.

Recent datasets updated or added to the National Archive include:

- DNA Contamination, Degradation, Damage, and Associated Microbiomes: A Comparative Analysis Through Massive Parallel Sequencing and Capillary Electrophoresis, United States, 2019-2021
- Defining Impact of Stress and Traumatic Events on Corrections Officers, Oregon, 2018-2020
- Census of Juveniles in Residential Placement, 2021 [United States]
- Verification and Evaluation of a miRNA Panel for Body Fluid Identification Using DNA Extracts, United States, 2019-2021
- Decontamination of Crime Scene Equipment: Evaluating Current Methods and Determining Best Practices, United States, 2019-2020
- The Role of Indigent Defense for Defendants With Mental Health Disorders, New York, 2013-2015
- Multisite Evaluation of Veterans Treatment Courts: Systematic Assessment of Implementation and Intermediate Outcomes, Florida, North Carolina, and Texas, 2016-2019
- Federal Justice Statistics Program: Statutes for Counts of Convictions for Defendants Sentenced Under the Sentencing Reform Act, 2022

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WHAT NIJ RESEARCH TELLS US ABOUT DOMESTIC TERRORISM

BY STEVEN CHERMAK, MATTHEW DEMICHELE, JEFF GRUENEWALD, MICHAEL JENSEN, RAVEN LEWIS, AND BASIA E. LOPEZ

NIJ-funded research projects have led to a better understanding of the processes that result in violent action, factors that increase the risk of radicalizing to violence, and how best to prevent and respond to violent extremism.

ilitant, nationalistic, white supremacist violent extremism has increased in the United States. In fact, the number of far-right attacks continues to outpace all other types of terrorism and domestic violent extremism. Since 1990, far-right extremists have committed far more ideologically motivated homicides than far-left or radical Islamist extremists, including 227 events that took more than 520 lives. 1 In this same period, far-left extremists committed 42 ideologically motivated attacks that took 78 lives.² A recent threat assessment by the U.S. Department of Homeland Security concluded that domestic violent extremists are an acute threat and highlighted a probability that COVID-19 pandemic-related stressors. long-standing ideological grievances related to immigration, and narratives surrounding electoral fraud will continue to serve as a justification for violent actions.3

Over the past 20 years, the body of research that examines terrorism and domestic violent extremism

has grown exponentially. Studies have looked at the similarities and differences between radicalization to violent domestic ideologies and radicalization to foreign extremist ideologies. Research has found that radicalization processes and outcomes — and perhaps potential prevention and intervention points — vary by group structure and crime type. In addition, research has explored promising and effective approaches for how communities can respond to radicalization and prevent future attacks.⁴

The National Institute of Justice (NIJ) has played a unique role in the evolving literature on terrorism and violent extremism. NIJ has promoted the development of comprehensive terrorism databases to help inform criminal justice responses to terrorism, address the risk of terrorism to potential targets, examine the links between terrorism and other crimes, and study the organizational, structural, and cultural dynamics of terrorism. In 2012, the U.S. Congress requested that NIJ build on these focal points by funding "research targeted toward developing a

One of the more common conclusions of recent research on radicalization is that no single profile accurately captures the characteristics of the individuals who commit extremist and hate crimes.

better understanding of the domestic radicalization phenomenon and advancing evidence-based strategies for effective intervention and prevention."⁵ NIJ has since funded more than 50 research projects on domestic radicalization, which have led to a better understanding of the processes that result in violent action, factors that increase the risk of radicalizing to violence, and how best to prevent and respond to violent extremism.

This article discusses the findings of several NIJ-supported domestic radicalization studies that cover a range of individual and network-centered risk and protective factors that affect radicalization processes, including military involvement and online environments. The article also explores factors that shape the longevity of radicalization processes and their variation by group structure and crime type, and examines factors that affect pathways away from domestic extremism. It concludes with a discussion of how these findings can inform terrorism prevention strategies, criminal justice policy, and community-based prevention programming.

The Characteristics of U.S. Extremists and Individuals Who Commit Hate Crimes

Over the past two decades, research that seeks to understand individual-level engagement in violent extremism has grown tremendously. However, as the research field has developed, a gap has emerged

between the increasingly sophisticated arguments that scholars use to explain extremism and the availability of data to test, refine, and validate theories of radicalization.

In 2012, NIJ funded the Empirical Assessment of Domestic Radicalization project to address the data gap in radicalization research. The project created the Profiles of Individual Radicalization in the United States (PIRUS) database, a cross-ideological repository of information on the characteristics of U.S. extremists. In 2017, NIJ supported a follow-on project that sought to replicate the PIRUS data for individuals in the United States who commit hate crimes. This project yielded the Bias Incidents and Actors Study (BIAS) dataset, the first data resource for researchers and practitioners interested in understanding the risk and protective factors associated with committing hate crimes.

PIRUS and BIAS are designed to provide users with information on a wide range of factors that can play a role in a person's radicalization to criminal activity.⁸ These risk and protective factors can be divided into four domains:⁹

- The situational characteristics of the crimes, including whether the acts were premeditated or spontaneous, involved co-conspirators, or were committed while under the influence of drugs and alcohol.
- The characteristics of the victims, including whether targets were "hard" (for example, military bases, secure facilities) or "soft" (for example, businesses, public areas, private civilians) and whether the individuals had prior relationships with their victims.
- Factors that produce the social bonds that may protect against mobilization to violence, such as marriage, military service, work experience, and advanced education.
- Factors that may act as radicalization mechanisms and risk factors for violence, such as previous criminal activity, membership in extremist or hate groups, substance use, and mental illness.

The PIRUS and BIAS data have been used to generate insights on a range of important topics related to hate crime and extremism; however, there are three overarching findings common to both datasets: diversity in beliefs, diversity in behaviors, and diversity in characteristics.

Diversity in Beliefs

Although it is not uncommon for a particular ideology to dominate the public discourse around extremism. the PIRUS and BIAS data indicate that U.S. extremists and individuals who commit hate crimes routinely come from across the ideological spectrum, including far-right, far-left, Islamist, or single-issue ideologies. These ideologies break down into particular movements, or sub-ideologies. For instance, in 2018, the PIRUS data identified extremists associated with several anti-government movements, Second Amendment militias, the sovereign citizen movement, white supremacy, ecoterrorism, anarchism, the antiabortion movement, the QAnon conspiracy theory, and others. 10 The prevalence of particular movements can ebb and flow over time depending on political climate and law enforcement priorities, but at no point in recent U.S. history has one set of beliefs completely dominated extremism or hate crime activity.11 Furthermore, the PIRUS and BIAS data reveal that U.S. extremists and individuals who commit hate crimes are often motivated by overlapping views. For instance, it is common for individuals from the anti-government militia movement to adopt views of white supremacy or for those from the extremist environmental movement to take part in anarchist violence. Nearly 17% of the individuals in PIRUS were affiliated with more than one extremist group or sub-ideological movement, and nearly 15% of the individuals in BIAS selected the victims of their hate crimes because of multiple identity characteristics, such as race and sexual orientation.12

Diversity in Behaviors

Although radicalization to violence has been a primary topic in extremism and hate crime research, the PIRUS and BIAS data indicate that U.S. extremists and individuals who commit hate crimes often engage in a range of violent and nonviolent criminal activities.

Indeed, 42% of PIRUS and nearly 30% of BIAS individual actors engaged exclusively in nonviolent crimes, such as property damage, financial schemes, and illegal demonstrations. ¹³ Moreover, the violent outcomes represented in the PIRUS and BIAS data vary in scope and type. For instance, approximately 15% of those in BIAS committed or planned to commit mass casualty crimes, while the remaining subjects targeted specific victims. ¹⁴ Similarly, nearly 50% of those in BIAS did not premeditate their crimes but rather acted spontaneously after chance encounters with their victims. ¹⁵

Diversity in Characteristics

One of the more common conclusions of recent research on radicalization is that no single profile accurately captures the characteristics of the individuals who commit extremist and hate crimes. 16 The PIRUS and BIAS data support this finding. revealing that background characteristics vary considerably depending on ideological affiliations. For instance, white supremacists in PIRUS tend to be older and less well-educated and are more likely to have criminal histories than those who were inspired by foreign terrorist groups, such as al-Qaida or the Islamic State of Iraq and Syria, or those associated with the extremist environmental or anarchist movements.¹⁷ Despite these differences, some risk and protective factors tend to separate violent from nonviolent individuals, regardless of ideology. 18 In the PIRUS data, individuals with criminal records, documented or suspected mental illness, and membership in extremist cliques are more often classified as violent, while those who are married with stable employment backgrounds are more likely to engage in nonviolent crimes. 19 Similarly, in BIAS, violent individuals are more likely to co-offend with peers, have criminal histories that include acts of violence, and offend while under the influence of drugs or alcohol.20

Military Experience and Domestic Violent Extremism

According to current statistics, individuals with military backgrounds represent 11.5% of the total known

extremists who have committed violent and nonviolent crimes in the United States since 1990.²¹ Although this percentage seems small, there has been a growing trend of (former) military members engaging in extremist offenses in recent years. An average of seven people with U.S. military backgrounds per year committed extremist crimes between 1990 and 2010. That rate has risen to an average of 29 people per year over the past decade. Also worth noting is that more than half (52%) of extremists with military experience are identified as violent.

Given the growth of violent domestic extremism among military personnel, the relationship between military service and radicalization has become a major concern. Prior NIJ-funded studies have identified military experience as a potential risk factor for attempted and actual terrorism.²² The likelihood of radicalization and radicalization to violence increases when individuals have already left military service.²³ This research suggests that military service is not a social bond that inhibits extremist violence.

NIJ studies have also shown that individuals with military experience may be susceptible to recruitment by domestic violent extremist groups due to their unique skills, which an extremist group may perceive as contributing to the success of a terrorist attack. Also, transitioning from military to civilian life appears to be a pull factor for engaging in violent extremism. Indicators for potential involvement in extremism may include a lack of a sense of community, purpose, and belonging. If these indicators are identified early, community stakeholders — in partnership with military agencies — could have an opportunity to intervene. Although such knowledge is valuable, the role of military service in radicalization to violent extremism still requires study.

Differences in Violent Extremist Characteristics Between Military Veterans and Civilians

In 2019, NIJ funded researchers at the University of Southern California to investigate the link between military service and violent domestic extremism. They are also examining the differences between military veteran and civilian extremists in terms of their characteristics and social networks.²⁶ Although

this study is ongoing, preliminary findings have been drawn from a secondary analysis of the American Terrorism Study data, which contain information on people federally indicted for terrorism-related crimes by the U.S. government between 1980 and 2002.²⁷ With these data, the researchers compared the demographic and homegrown violent extremist characteristics among military veterans and civilians. The demographic characteristics considered were age, race, sex, marital status, and education level. The homegrown violent extremist characteristics consisted of the length of group membership, type of terrorist group, role in the group, mode of recruitment into the group, primary target, and the state of indictment.

The research team observed significant differences between military veteran and civilian extremists across both demographic and homegrown violent extremist characteristics. First, they found that military veteran and civilian extremists differed with respect to age, sex, and marital status. Specifically, individuals with military service who engaged in homegrown violent extremism were more likely to be older, male, and in marital or cohabiting relationships than civilians who engaged in homegrown violent extremism. Second, analyses revealed that, compared to civilian extremists, military veteran extremists had greater affiliations with right-wing terrorist groups (versus left-wing, international, or other terrorist groups) and were more likely to hold leadership positions within these groups and either initiate a terrorist group or unite groups together. Finally, other than government/federal officials or buildings, which were the primary targets across all groups, the primary targets of veterans were diverse social groups, such as those belonging to racial, ethnic, and religious minority groups.

Implications of Transitioning Out of Military Service

The University of Southern California researchers intend to supplement these results by interviewing members from the social networks of military veterans and civilians who committed homegrown violent extremism between 2003 and 2019. The findings produced thus far are important, especially because the association between military experience

and terrorism is understudied. Ultimately, these results suggest that people who transition from active duty to veteran status experience a nuanced, complex, and potentially lifelong process. Veterans who encounter difficulties during this transition and desire — but lack — a sense of community, purpose, and belonging after leaving the military may be attracted to the pull of domestic extremist groups. In these groups, veterans can lead and collaborate with others of similar ideologies to accomplish a shared mission akin to what they did in the military. For example, the military veterans in this study largely endorsed right-wing values; thus, perhaps something about the narratives of right-wing extremist groups compensates for the void felt when leaving military service. With such insights in mind, researchers recommend forming partnerships among civilians, the military, and veteran communities to identify and prevent violent extremism among U.S. veterans.

Longevity of Terrorist Plots in the United States

A major question for researchers and counterterrorism officials is how to prevent the next act of terrorism or violent extremism from occurring. As such, much attention has been paid to disrupted plots and successful interdiction tactics that ultimately led to arrest and indictment. Less attention has been given to what those responsible for acts of terrorism and violent extremism do to successfully evade detection and arrest. In other words, the focus has not been on what terrorists and violent extremists are doing "right."

In 2013, NIJ funded researchers at the University of Arkansas' Terrorism Research Center to study the sequencing of precursor behaviors for individuals who have been federally indicted in the United States for charges related to terrorism and domestic violent extremism.²⁸ Based on preliminary analyses, the researchers somewhat serendipitously observed lifespan differences between lone actors and those operating in small cells or more formalized groups. Consequently, it warranted a more comprehensive examination of the factors that increased the likelihood of terrorists and violent extremists

evading arrest. NIJ funded the researchers to identify behaviors that improved the chances of plot longevity — or the ability for terrorists to commit acts of terrorism and evade capture by law enforcement — for individuals federally indicted on terrorism-related charges.²⁹

Data on the longevity of terrorism and violent extremism plots come from the American Terrorism Study, the longest-running project on terrorism and violent extremism in the United States. With NIJ funding that began in 2003,30 the American Terrorism Study maintains the most comprehensive dataset on temporally linked precursor behaviors and outcomes of terrorism and violent extremism plots. To examine plot longevity, the Arkansas researchers31 limited their analyses to 346 federally indicted individuals who were linked to the planning or completion of a terrorist attack in the United States from 1980 to 2015. Longevity, or duration of their "terrorist lifespan," is based on the date of a person's involvement in their first preparatory activity and their "neutralizing" date (usually the date of arrest).

One of the key findings from this research is a correlation between significant declines in the lifespan of individual terrorists and major changes to the U.S. Attorney General guidelines established to combat terrorism and violent extremism in the United States. For example, those who began in the mid- to late 1970s, following Watergate, COINTELPRO, and the Privacy Act, had a median longevity of 2,230 days. In contrast, the median lifespan of terrorists who began operating in the mid-1980s decreased to 1,067 days. Later, in the early 2000s, it fell even further to 99 days, which reflects the FBI's tighter focus on terrorism and violent extremism and guidelines granting law enforcement more discretion in the investigative techniques employed.

The researchers also found that the lifespans of terrorists and violent extremists vary significantly depending on key attributes, such as ideology, sex, and educational attainment. For example, environmental and extreme left-wing violent extremists tend to sustain themselves for relatively

long periods of time (5.4 and 4.3 years, respectively), while the longevity of extreme right-wing and radical Islamist terrorists is, on average, two years or less.

Females federally indicted on charges related to terrorism and violent extremism also tend to have increased longevity compared to male terrorists and violent extremists, perhaps because of females' disproportionate representation in longer-lasting extreme left-wing and environmental movements, as well as increased representation in left-wing group leadership roles. Females involved in terrorism and extremism are usually more educated, which is also associated with extended longevity. Further, females who play support roles in terrorism and extremist groups — as is more often the case for right-wing extremists and radical Islamist terrorists — also appear to have longer lifespans. In contrast, males have been more likely to engage in overtly criminal preparatory behavior and actual incident participation than females. Both types of behavior are significantly more likely to attract the attention of law enforcement and would be expected to shorten the longevity of both male and female terrorists and violent extremists.

Finally, longevity also depends on a plot's sophistication and the extent of the planning required to carry it out. Less sophisticated plans or executed plots, or those using simpler and less advanced weapons, are generally associated with longer lifespans for terrorists and violent extremists. More sophisticated plots may provide greater potential for missteps by terrorists and violent extremists and leads for law enforcement. Additionally, more sophisticated plots are associated with more meetings with accomplices and necessitate extra preparation. Importantly, both the number of meetings and preparatory activities have been found to be negatively related to the successful completion of terrorist incidents, suggesting that early intervention or arrest are also linked to these two factors.

How Domestic Terrorists Use the Internet

Terrorists and terrorist groups use the internet to share propaganda and recruit new members. The

internet provides a platform to strengthen their members' commitment to the cause, encourage radicalized individuals to act, and coordinate legal and illegal activities. A recently published meta-analysis concluded, "Exposure to radical content online appears to have a larger relationship with radicalization than other media-related risk factors (for example, television usage, media exposure), and the impact of this relationship is most pronounced for the behavioral outcomes of radicalization." 32

In 2014, NIJ funded a study to develop a deeper understanding of what domestic terrorists discuss on the internet.³³ The study analyzed 18,120 posts from seven online web forums by and for individuals interested in the ideological far right. The research team read each post's content and coded it for either quantitative or qualitative analyses depending on the project's objective.

The project provided several important insights into terrorist use of the internet. First, the web forums included discussions about a variety of beliefs, such as gun rights, conspiracy theories, hate-based sentiments, and anti-government beliefs; however, the intensity of ideological expression was generally weak. The nature of the online environments that far-right groups use likely facilitates the diffusion of ideological agendas.

Second, the amount and type of involvement in these forums played a key role in radicalization. Posting behaviors changed over time. Users grew more ideological and radical as other users reinforced their ideas and connected their ideas to those from other forums. (It is important to note that the study focused on online expression and not conversion to offline violence.)

Third, far-right extremists were primarily interested in general technology issues. Discussions focused on encryption tools and methods (such as Tor), internet service providers and social media platforms, and law enforcement actions to surveil illicit activities online. These far-right extremists appeared more interested in defensive actions than sophisticated schemes for radicalization or offensive actions such as criminal cyberattacks.

The study used social network analyses to visualize user communications and network connections. focusing on individuals' responses to posts made within threads to highlight interconnected associations between actors. The social network analyses indicated that far-right forums have a low network density, which suggests a degree of information recycling between key actors. The redundant connections between actors may slow the spread of new information. As a result, such forums may inefficiently distribute new knowledge due to their relatively insular nature. They may also be generally difficult to disrupt, as the participants' language and behaviors reinforce others and create an echo chamber. These networks are similar to others observed in computer hacker communities and data theft forums,34 which suggests that there may be consistencies in the nature of online dialogue regardless of the content.

The study also indicated that extreme external events usually did not affect posting behaviors. However, there were significant differences associated with conspiratorial, anti-Islamic, and anti-immigrant posts after the Boston Marathon bombing. It may be that violence or major disruptive events inspired by jihadist ideologies draw great responses from farright groups relative to their own actions. The same appears to be true for the 2012 presidential election; the study observed increases both in the number of posts in the month after the election and in overt signs of individual ties or associations to far-right movements through self-claim posts, movementrelated signatures, and usernames. These findings are consistent with other recent work comparing online mobilization after the 2012 and 2016 presidential elections.³⁵

Entering and Exiting White Supremacy in the United States

An NIJ-funded research team led by RTI International examined the complex social-psychological processes involved with entering, mobilizing, and exiting white supremacy in the United States.³⁶ The researchers conducted in-depth life history interviews with 47 former members of white supremacist groups in 24 states and two provinces in Canada.³⁷

For this project, white supremacy referred to groups that reject essential democratic ideals, equality, and tolerance. A key organizing principle is that inherent differences between races and ethnicities position white and European ancestry above all others. Those interviewed were authoritarian, anti-liberal, or militant nationalists who had a general intolerance toward people of color. They had used violence to achieve their goals and supported a race war to eradicate the world of nonwhite people.³⁸

The study led to several key findings about entering and exiting white supremacy in the United States.

Hate as Outcome

The study found that most people do not join white supremacist groups because they are adherents of a particular ideology. Rather, a combination of background factors increases the likelihood that someone will be susceptible to recruitment messaging (for example, propaganda).³⁹ Previous research has highlighted that hate or adherence to racist violence was an outcome of participation in white supremacist groups.40 The commitment to white supremacist groups lacked a preexisting sense of racial grievance or hatred that motivated an individual to join the racist movement.41 One former member reported having "no inkling of what [Nazism] really was other than what you saw on TV."42 The NIJ-funded study found that people joined white supremacist groups because they were angry, lonely, and isolated, and they were looking for opportunities to express their rage.⁴³

Vulnerabilities as Precondition

The former white supremacists had various personal, psychological, and social vulnerabilities that made them strive for what psychologists have framed as developing a new possible self.⁴⁴ High levels of negative life experiences — including, but not limited to, maladjustment, abuse, and family instability — potentially make a person imagine a new, different, and more fulfilled self.⁴⁵ They can imagine an empowered future self with friends and a purpose. Extremist recruiters prey on these desires. The former white supremacists indicated high levels of physical, sexual, and psychological abuse as children; strained

personal relationships; and general difficulties throughout their lives. These struggles made white supremacy seem like an improvement to their sense of self, as the group came with a ready-made set of friends, social events, and camaraderie among individuals with similarly rough pasts. Besides these social benefits, white supremacist groups provided members with a deeper sense of belonging and explanation for their life troubles, rooted in a sense of racial pride and empowerment.

Gradual, Nonlinear Exit

Most white supremacists in this country do not remain members for life. Rather, group membership is often temporary (but not always short-lived), and many become disillusioned and burnt out over time. The study showed that the exit process is gradual, as the former white supremacists reported slowly becoming dissatisfied with the ideology, tactics, or politics of a group.⁴⁶ They described an identity that became filled with negative encounters with other members, even breeding distrust. White supremacy requires the development of a totalizing identity that results in isolating members from nonextremists. This marginalization fosters a sense of social stigma that makes white supremacy less attractive and further supports disengagement and deradicalization processes.

This research reported that emotional dynamics create trajectories of development and decline in white supremacy and the role of disillusionment among the reasons why members exit the organization.⁴⁷ These analyses offer an explanation for how white supremacist organizations maintain solidarity even though many individuals stay in groups after losing their ideological commitment. They also demonstrate that exit from a group is a nonlinear process.⁴⁸ Meanwhile, in other analyses, the study team reported that, even after an individual exits a group, their white supremacist identity lingers with a residual effect. 49 That research likened hate to an addiction that creates an uncontrollable emotional, social, and cognitive hold over adherents, which has the ability to pull former members back into hate almost against their will.⁵⁰ The former white supremacists shared experiences in which music, environments, and images created

desire, longing, and curiosity about their old lifestyle within the organization.

Opportunities

The NIJ-funded study found several blind spots in terms of identification and awareness among criminal legal system practitioners and other responders. This resulted in several missed opportunities for intervention and practical solutions. Exhibit 1 details four areas in which the study findings can contribute to criminal justice policy and practice.⁵¹

Policy Implications

The results of the NIJ-funded studies discussed in this article have several implications for policy and practice. First, they illustrate that extremism is complex and that successfully countering it will require a unified response that bridges law enforcement, community partners, health officials, and concerned citizens. To facilitate a shared understanding of the extremist threat, stakeholders engaged in counterextremism efforts routinely use findings from these studies to provide training to concerned family and friends about potential radicalization warning signs and how best to respond. They also use the findings to educate law enforcement, corrections and probation officers, and mental health professionals on the complexity of radicalization so they can accurately gauge and respond to extremism in their communities. These types of training initiatives will remain critical to counterextremism efforts as the threat continues to evolve.

Second, the studies highlight the importance of focusing criminal justice resources on domestic extremism. Although international terrorist organizations remain a threat, these studies show that domestic extremists continue to be responsible for most terrorist attacks in the United States. Historically, far fewer resources have been dedicated to the study of domestic extremism, leaving gaps in our understanding about terrorist trends, recruitment and retention processes, and online behaviors. Due in large part to NIJ's commitment to funding research on domestic radicalization, considerable progress has

Exhibit 1. Missed Opportunities for Intervention and Practical Solutions



Knowledge and Awareness

Criminal legal system practitioners and other responders lack knowledge about radicalization and exit processes related to white supremacy in the United States.



Missed Opportunities

This lack of knowledge and awareness results in missed opportunities. Former white supremacists revealed that, although they wore clothes and exposed tattoos associated with white supremacy, criminal justice stakeholders (who do not always know the meaning of such symbols) did not address their potential affiliation with extremist groups.



Community Supervision

Extremist group members are highly involved with the criminal justice system, and supervision conditions should be responsive to whether an individual is involved with extremism.



Community Partnerships

Criminal justice systems cannot respond to radicalization alone. Instead, law enforcement, courts, and corrections need to develop connections with local resources (for example, criminal justice coordinating councils, mental health professionals, social workers, and education professionals).

recently been made in addressing these topics. But this work will need to continue if we hope to keep pace with the rapidly evolving threat landscape.

Finally, the studies highlight the need for communitywide partnerships that link government and nongovernment organizations in support of community-level prevention and intervention programs. Law enforcement and criminal justice resources for countering extremism are finite and scarce, making it imperative that we focus our research and support efforts on understanding what occurs before a crime takes place. As the studies reviewed in this article show, there is often an opportunity to intervene to help individuals exit extremism before they engage in criminal activity. Similarly, prevention efforts are needed in digital spaces where extremist narratives often flourish. Achieving these goals will require community members, policymakers, and practitioners to commit to supporting counterextremism efforts.

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This article discusses the following awards:

- "Exploring the Social Networks of Homegrown Violent Extremist (HVE) Military Veterans," award number 2019-ZA-CX-0002
- "Sequencing Terrorists' Precursor Behaviors: A Crime Specific Analysis," award number 2013-ZA-BX-001
- "Radicalization and the Longevity of American Terrorists: Factors Affecting Sustainability," award number 2015-ZA-BX-0001
- "Pre-Incident Indicators of Terrorist Incidents," award number 2003-DT-CX-003
- "Empirical Assessment of Domestic Radicalization," award number 2012-ZA-BX-0005
- "A Pathway Approach to the Study of Bias Crime Offenders," award number 2017-VF-GX-0003
- "Research and Evaluation on Domestic Radicalization to Violent Extremism: Research To Support Exit USA," award number 2014-ZA-BX-0005
- "An Assessment of Extremist Groups Use of Web Forums, Social Media, and Technology To Enculturate and Radicalize Individuals to Violence," award number 2014-ZA-BX-0004

Notes

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COMPARING VIOLENT EXTREMISM AND TERRORISM TO OTHER FORMS OF TARGETED VIOLENCE

BY B. HEIDI ELLIS, EDNA EREZ, JOHN HORGAN, GARY LAFREE, AND RAMÓN SPAAIJ

NIJ-supported research indicates that although there is no single, clear-cut overlap between individuals who engage in these types of violence, there are important and sometimes unexpected similarities.

argeted violence spans a wide array of offenses, from mass shootings, to gang or group-violence-related activities, to human trafficking. Although each of these topics has been researched extensively, until recently they have not been studied to identify similarities and differences in the context of domestic violent extremism and terrorism. Gaining a better understanding of any links or overlaps between people who perpetrate these types of violence and those engaged in violent extremism and terrorism is essential to developing or adapting targeted violence prevention efforts.

The National Institute of Justice (NIJ) has funded multiple projects that compare individuals who perpetrate violent extremism and terrorism and those who engage in other forms of targeted violence. This article reviews findings from several NIJ-supported projects that explore similarities and differences between:

 Violent extremists and individuals who are involved in gangs.

- People who engage in terrorism and those involved in human trafficking.
- Lone actor terrorists (that is, single individuals whose terrorist acts are not directed or supported by any group or other individuals) and persons who commit nonideological mass murder.

Some of these projects draw on large national databases of individuals who are known to have committed violent acts, while others explore community and stakeholder perceptions of the acts. In addition, some of these projects focus on how communities that contend with heightened risk factors, such as adversity and disadvantage, experience certain types of violence.² The article closes with a discussion of possible implications for policy and future research.

Violent Extremists and Individuals Involved in Gangs

Pyrooz and colleagues developed a comparative model that emphasizes explicit, spurious, and indirect

The studies suggest that although
the motivational structures
that underpin each type of
violence vary, situationally specific
combinations of push and pull
factors shape individuals' entry
into, or radicalization toward, the
different forms of violence.

links between violent extremist groups and criminal street gangs. Using national data sources on domestic extremists and individuals involved in gangs — the Profiles of Individual Radicalization in the United States (PIRUS) and the National Longitudinal Survey of Youth 1997 (NLSY97), respectively — the researchers compared the two groups across group involvement and demographic, family, religious, and socioeconomic status characteristics.3 They found that 6% of domestic extremists in PIRUS have a history of gang ties; this constitutes a minimal proportion of domestic extremists and is likely the rare exception among those involved in gangs. Domestic extremists with gang ties more closely resemble nongang extremists in PIRUS than they do individuals involved in gangs in the NLSY97. Although these groups have some similarities, one major difference is that individuals involved in gangs are younger than domestic extremists. This likely contributes to many of the other differences between the groups across the life course, including in education, unemployment, marriage, and parenthood.

A critical step in determining similarities is to examine the circumstances of those who enter these two groups. Based on 45 in-person interviews of individuals involved in U.S. gangs and 38 life history narratives of individuals who radicalized in the United States, Becker and colleagues provided a unique comparison of entrance into these groups by drawing on four broad group entry mechanisms:⁴

- Pull factors (influences that entice vulnerable individuals toward criminal group involvement).
- Push factors (influences that drive vulnerable individuals toward an interest in criminal group involvement).
- Barriers to effective socialization.
- Recruitment.

Individuals involved in gangs were more motivated than extremists by the promise of material rewards (a pull factor). In contrast, extremists were more motivated by cultural disillusionment and a perceived loss of significance (push factors). (For more detail on push and pull factors, see exhibit 1.) Individuals in gangs were more likely to have been abused by family members (a barrier to effective socialization), while extremists were far more likely to have been recruited through electronic media (recruitment). Evidence for each mechanism was present in both groups and no single mechanism dominated entry into either group. Thus, prevention and intervention efforts that draw on multiple pathways to entry are most likely to be effective.

In a separate community-based participatory research study, Ellis and colleagues explored attitudes toward gangs and violent political activism within a community sample of 498 ethnic Somali young adults living in the United States and Canada. Somali communities in North America have been impacted by both gang violence and targeted recruitment by extremist networks; they have also disproportionately experienced structural disadvantages, such as poverty. The analysis showed that attitudes favoring both gangs and violent activism could — but did not necessarily — co-occur; prosocial bonds reduced the likelihood of attitudes in support of both.

One important distinction between gang involvement and violent extremism was the Somali community's perceptions of these two types of violence. During a series of nine focus groups and in-depth interviews, ethnic Somali young adults described how the community saw radicalization to violent extremism as irrelevant.⁷ Despite quantitative data suggesting some overlap in attitudes in support of gangs and violent

Exhibit 1. Examples of Push and Pull Factors

Push and Pull Factors



PUSH FACTORS

Influences that drive vulnerable individuals toward criminal group involvement.

EXAMPLES

Cultural disillusionment

A perceived loss of significance

Poverty, lack of opportunities, unemployment, and financial hardships

Political grievances against the United States and its allies

Perceived profiling or overpolicing by law enforcement

Unaddressed trauma and mental health problems, which push individuals to seek support, advice, and acceptance by predatory recruiters



PULL FACTORS

Influences that entice vulnerable individuals toward criminal group involvement.

EXAMPLES

The promise of money or other material rewards

A sense of belonging, companionship, and acceptance

A sense of heroism and empowerment

Easy ways to join the cause

Access to the internet, where peers or recruiters deceptively present benefits

radicalism, community perceptions of the two issues were highly divergent. Community members viewed political radicalization as an individual choice. On the other hand, these community members considered gang involvement a major community concern and the product of societal factors such as marginalization and a lack of opportunity. This divergence has implications for policy and programming. Although certain risk and protective factors (for example, enhancing prosocial connections) may be common targets for different types of interventions, gang prevention programming may be more accepted by the community than programming focused on radicalization.

Terrorists and Those Involved in Human Trafficking

Research has identified two possible connections between terrorism and human trafficking. First, a terrorist organization may perpetrate human trafficking to advance its interests or meet the needs of its

members; this occurs mostly in international contexts and conflict zones.⁹ Second, terrorism and human trafficking may co-occur.¹⁰

Weine and colleagues studied an immigrant community in which terrorism and human trafficking allegedly co-occurred. The researchers conducted in-depth interviews with ethnic Somali young adults and parents, community leaders, service providers, and law enforcement officials in three U.S. cities with large Somali communities.¹¹ Their findings suggest that terrorism and human trafficking co-occur due to the convergence of risk (push and pull) factors.¹²

Perceived negative personal, social, cultural, economic, and political factors that pushed individuals toward these two forms of violence included:

 Poverty, lack of opportunities, unemployment, and financial hardships that made individuals vulnerable to promises of money and a better life.

- Generational divide due to parents' lack of familiarity with the English language and American values and culture, and consequent limited ability to provide guidance and support for their children.
- High proportion of female-headed, single-parent households and dual-parent families with working parents who have limited visibility into their children's whereabouts and thus are unable to combat negative influences or pressures to join violent groups or activities.
- Disconnect between young community members and religious leaders who represent older generations.
- Challenges associated with navigating identities of people who are Somali, Muslim, and African American.
- Unaddressed trauma and mental health problems related to integration into American society, which push youth to seek support, advice, and acceptance by misguided peers or predatory recruiters.
- Exposure to negative influences in the form of "bad company" or terrorism recruiters.

Factors that pulled individuals to both forms of violence, or that recruiters and their proxies used to depict desirable outcomes, included:

- A sense of belonging, companionship, and acceptance.
- Money or other material benefits.
- Access to the internet, where peers or recruiters used deceptive presentations of benefits.

However, some push and pull factors were limited to either terrorism or human trafficking. Distinct push factors for terrorism included:

- Political grievances against the United States and its allies.
- Perceived profiling or overpolicing by law enforcement of Somali and Black individuals and communities.

- Stereotyping and stigmatization by the media.
- Belief that the costs of joining terrorist groups are negligible.

Pull factors unique to terrorism included:

- A sense of heroism and empowerment through following extremist ideology directed at English speakers.
- Easy ways to join the cause.

Distinct push and pull factors for human trafficking, specifically alleged sex trafficking, included:

- Patriarchal beliefs about women's lower status and submissive behavior.
- Lack of protection for women following gender role violations.
- Victims' shame or fear of disclosing the victimization.

Taken together, negative societal responses to both human trafficking and terrorism (such as overpolicing, profiling, and media stigmatization) caused community members to perceive race- and ethnicity-based discrimination, feelings of social exclusion due to being labeled terrorists or morally inferior, and victim-blaming for not reporting victimization. Community members also lamented about a lack of social services and consequently weak community efficacy; insufficient communal representation and a sense of disempowerment; distrust of governmentfunded programming; and perceptions that local and federal law enforcement overreact to incidents and work against the community. They were particularly concerned about cultural, social, or political stigma attached to community members who reported victimization or cooperated with law enforcement. Consequently, respondents preferred to resolve problems within the community rather than relying on those outside the community.13

Although these findings are drawn from one specific study and community, some of the risk and protective factors identified may have relevance for

other populations, particularly those that experience social marginalization and disadvantage. The findings suggest that to prevent violent extremism, terrorism, and human trafficking, efforts must address underlying risks, disadvantages, and social problems. These include building effective prevention programs, strengthening law enforcement and community relations, increasing programmatic emphasis on community needs, and encouraging law enforcement and the media to avoid a continual focus on crime and violent extremism and terrorism in these communities.

Lone Actor Terrorists and Individuals Who Commit Nonideological Mass Murder

Targeted violence takes many forms. It can be carried out by a single person or a group. The violence can be aimed at a specific target, such as a spouse or co-workers, or it can be directed against a category of people, such as children at a school or bystanders in a public space. From the perspective of victims and survivors, the impacts may well be similar, but distinguishing the types of individuals who commit these crimes might illuminate actionable steps toward prevention.

Horgan and colleagues compared lone actor terrorists (single individuals whose terrorist acts are not directed or supported by any group or other individuals) with individuals who commit nonideological mass murder. 14 Although the motivational structure associated with each differs, the violence conducted by them appears very similar: both engage in largely public and highly publicized acts of violence, often with similar weaponry. The reasons behind any type of targeted violence are typically a "complex mix of personal, political and social drivers that crystallize at the same time to drive the individual down the path of violent action." 15 Both lone actor terrorists and those who commit mass murder share this process. 16

Furthermore, researchers have found little to distinguish between the sociodemographic profiles of lone actor terrorists and individuals who commit mass murder. In particular, a closer look at pre-attack

behaviors revealed that both were likely to "leak" their grievances and intentions to others. ¹⁷ Although lone actor terrorists were more likely to communicate intentions or beliefs to friends and family members, others were aware of the grievances held by both groups. ¹⁸ Knowing that these individuals leak — or even deliberately broadcast ¹⁹ — their intent is important for the development of responses, particularly when there may be natural barriers to reporting this information, such as being the individual's friend or family member.

Comparing the behavior of lone actor terrorists and individuals who commit mass murder also revealed some critical differences regarding:

- The degree to which they interact with co-conspirators.
- Their antecedent event behaviors.
- The degree to which they leak information prior to the attack.

Importantly, researchers realized that they can learn more by focusing on behaviors (what people do) as opposed to focusing on characteristics (what or who people are).

For example, compared to lone actor terrorists, individuals who commit mass murder were significantly more likely to have familiarity with the attack location (79% vs. 30%). This may account for why lone actor terrorists were much more likely to engage in dry runs (34% vs. 4%). Those who committed mass murder were significantly more likely to consume drugs or alcohol just prior to the attack (20% vs. 4%). They followed a different "script" than lone actor terrorists as they moved closer to committing acts of violence; lacking an ideology, their behavior was influenced less by the prevailing social and political climate, and more by feelings of being wronged by a specific person or category of people. Overall, most individuals who committed mass murder did not pay much attention to post-attack planning or other strategic considerations. Indeed, most were either killed at the scene by police or took their own lives.20

Further research has compared lone actor terrorists to those who undergo radicalization in a group setting. Hamm and Spaaij found both similarities and differences between lone actor terrorists and groupbased terrorists in terms of their sociodemographic profiles, behavioral patterns, and radicalization processes.²¹ Compared to members of terrorist groups, lone actors were older, less educated, and more prone to mental health concerns.²² The latter points to a potentially important mental health component in lone actor terrorism relative to groupbased terrorism. Recent evidence has consistently shown that mental health concerns are more prevalent among lone actor terrorists (about 40%) than for group actors and for the general population.²³ However, the relationship between mental health and violent extremism is highly complex. Mental health is neither a reliable risk factor nor a consistent predictor of involvement in terrorism, and research to this point cannot rule out the possibility that negative mental health is a consequence rather than a potentially aggravating factor of involvement in terrorism.

Commonalities also exist between lone actor and group-based terrorists, and the boundary between these categories is often porous and fluid. Whereas group-based terrorists, by definition, exhibit a relatively high degree of interaction with co-conspirators, a considerable proportion of lone actor terrorists also display an affinity with extremist groups to frame and give meaning to their beliefs and grievances. The nature and locus of such affinity with extremist groups has changed over time. Currently, it occurs primarily via online networks of like-minded activists or sympathizers found on the internet and social media platforms.²⁴ This insight reiterates earlier observations regarding leaking behavior: Compared to those who commit mass murder, lone actor terrorists exist in wider social networks, with varying degrees of contact with and influence from friends, family, and co-workers. Crucially, online communities often play an important role in providing a space for individuals to socialize and exchange beliefs and strategies with other extremists or sympathizers.

These studies reveal a striking and counterintuitive finding: Some terrorists, especially lone actors, leak or broadcast their intentions prior to their attacks. Knowing this, the field must develop and promote better strategies to detect and prevent such attacks. Although friends, family members, and co-workers may be well placed to detect violent ideation and intention, the fact that they know the individual creates a natural barrier to reporting. There needs to be greater effort to educate the public about the signs of attack leakage and broadcasting. Furthermore, there must be a concerted effort to provide clear, accessible, and convenient means of reporting such concerns.

Implications

The cumulative findings of these projects have implications for policy, practice, and future research. The current research highlights the various synergies and differences between violent extremism, groupbased terrorism, gang activities, human trafficking, mass shootings, and lone actor terrorism. No single study provides a definitive or exhaustive set of explanations or shared risk factors. However, each provides critically important points to consider and address in future research. Moreover, the collective contribution of this body of research lies in providing a broader comparative view beyond single variables or narrow research questions. This review demonstrates that although there is no single, clearcut overlap between the different criminal activities, they nonetheless exhibit important and sometimes unexpected similarities.

The implications extend beyond increasing knowledge, pointing toward multiple ways for policy and practice to intervene and to conduct evaluative research that addresses their impact. At the individual level, the studies suggest that although the motivational structures that underpin each type of violence vary, situationally specific combinations of push and pull factors shape individuals' entry into, or radicalization toward, the different forms of violence. At the community level, the findings encourage

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policymakers and practitioners to consider effective ways to increase community awareness about the overlap in the factors that lead individuals to specific forms of violence, as well as about their potential co-occurrence, such as in the case of human trafficking associated with violent extremism and terrorism. Attention should also be directed to communal grievances that may lead community members to become alienated or engage in violent extremism, and measures should be designed to address them or lessen their impact.

The results further encourage policymakers and practitioners to embrace interventions that invest in strengthening protective measures against violence of any form. For such interventions to be accepted and endorsed by the communities in which they operate, it is important that interventions respond to community concerns, such as addressing social disadvantages that may lead to radicalization and terrorism, rather than focusing prevention efforts on the outcomes of such disadvantages. Finally, at the societal level — government, civil society, or media — promoting inclusion of those who feel they are outsiders, stigmatized, or otherwise undeserving or underserved may help reduce violence of all types.

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This article discusses the following awards:

- "Gang Affiliation and Radicalization to Violent Extremism Within Somali-American Communities," award number 2014-ZA-BX-0001
- "Lone Wolf Terrorism in America: Using Knowledge of Radicalization Pathways To Forge Prevention Strategies," award number 2012-ZA-BX-0001
- "A Comparative Study of Violent Extremism and Gangs," award number 2014-ZA-BX-0002
- "Across the Universe? A Comparative Analysis of Violent Radicalization Across Three Offender Types With Implications for Criminal Justice Training Education," award number 2013-ZA-BX-0002
- "Transnational Crimes Among Somali-Americans: Convergences of Radicalization and Trafficking," award number 2013-ZA-BX-0008

Notes

- 1. National Institute of Justice funding award description, "Gang Affiliation and Radicalization to Violent Extremism Within Somali-American Communities," at Children's Hospital Corporation, award number 2014-ZA-BX-0001, https://nij.ojp.gov/funding/awards/2014-za-bx-0001; National Institute of Justice funding award description, "Lone Wolf Terrorism in America: Using Knowledge of Radicalization Pathways To Forge Prevention Strategies," at Indiana State University, award number 2012-ZA-BX-0001, https://nij.ojp.gov/funding/awards/2012-za-bx-0001; National Institute of Justice funding award description, "A Comparative Study of Violent Extremism and Gangs," at the University of Maryland, award number 2014-ZA-BX-0002, https://nij.ojp.gov/funding/awards/2014-za-bx-0002; National Institute of Justice funding award description, "Across the Universe? A Comparative Analysis of Violent Radicalization Across Three Offender Types With Implications for Criminal Justice Training Education," at the University of Massachusetts Lowell, award number 2013-ZA-BX-0002, https://nij.ojp.gov/funding/awards/2013-za-bx-0002; and National Institute of Justice funding award description, "Transnational Crimes Among Somali-Americans: Convergences of Radicalization and Trafficking," at the Board of Trustees, University of Illinois Chicago, award number 2013-ZA-BX-0008, https://nij.ojp.gov/funding/ awards/2013-za-bx-0008.
- This review focuses on the Somali community more than other U.S. communities not because there were necessarily more cases of violent extremism there but simply because two of the five grants that form the basis of this review were located there.

- All data in this paragraph come from David C. Pyrooz et al., "Cut From the Same Cloth? A Comparative Study of Domestic Extremists and Gang Members in the United States," *Justice Quarterly* 35 no. 1 (2018): 1-32, https://doi. org/10.1080/07418825.2017.1311357.
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- B. Heidi Ellis et al., "A Qualitative Examination of How Somali Young Adults Think About and Understand Violence in Their Communities," *Journal of Interpersonal Violence* 37 no. 1-2 (2022): NP803-NP829, https://doi. org/10.1177/0886260520918569.
- Ellis et al., "A Qualitative Examination of How Somali Young Adults Think About and Understand Violence in Their Communities."
- 9. An example of the nexus between terrorism and human trafficking is the use of human trafficking by terrorist organizations to raise money or supply young women to their fighters — a phenomenon primarily found in international radicalization and conflict areas. In these areas, trafficking and sexual violence target girls and women of ideologically opposed groups, which spreads terror in the civilian population. Indeed, some have referred to sex trafficking and violence as a form of terrorism. The incentives for and ability of terrorist groups to engage in human trafficking are determined by their need for resources and the extent of their territorial control. See Daniel Sheinis, "The Links Between Human Trafficking, Organized Crime, and Terrorism," American Intelligence Journal 30 no. 1 (2012): 68-77, https://www.jstor.org/ stable/26201986; Office of the Special Representative and Co-ordinator for Combating Trafficking in Human Beings, "Trafficking in Human Beings and Terrorism: Where and How They Intersect," Vienna, Austria: Organization for Security and Co-operation in Europe, 2021, https:// www.osce.org/files/f/documents/2/7/491983.pdf; Cóman Kenny and Nikita Malik, "Trafficking Terror and Sexual Violence: Accountability for Human Trafficking and Sexual and Gender-Based Violence by Terrorist Groups Under

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- Stevan Weine, Edna Erez, and Chloe Polutnik, "Transnational Crimes Among Somali-Americans: Convergences of Radicalization and Trafficking," Final report to the National Institute of Justice, award number 2013-ZA-BX-0008, May 2019, NCJ 252135, https://www.ojp.gov/pdffiles1/nij/ grants/252135.pdf.
- 11. The cities (in order of the size of the Somali community living there) are Minneapolis-St. Paul, Minnesota; Columbus, Ohio; and Nashville, Tennessee. It should be noted that although the cases of human trafficking tried in these cities did not result in convictions for various evidentiary concerns, the responses of those who were interviewed addressed human trafficking as if it did happen in the community.
- Unless otherwise noted, all data in this section come from Weine, Erez, and Polutnik, "Transnational Crimes Among Somali-Americans," 33-42.
- 13. Weine, Erez, and Polutnik, "Transnational Crimes Among Somali-Americans," 53-57.
- 14. John G. Horgan et al., "Across the Universe? A Comparative Analysis of Violent Behavior and Radicalization Across Three Offender Types With Implications for Criminal Justice Training and Education," Final report to the National Institute of Justice, award number 2013-ZA-BX-0002, June 2016, NCJ 249937, https://www.ojp.gov/pdffiles1/nij/grants/249937.pdf.
- 15. Horgan et al., "Across the Universe," 111.
- 16. See also Mark S. Hamm and Ramón Spaaij, "Lone Wolf Terrorism in America: Using Knowledge of Radicalization Pathways To Forge Prevention Strategies," Final report to the National Institute of Justice, award number 2012-ZA-BX-0001, February 2015, NCJ 248691, https://www.ojp.gov/ pdffiles1/nij/grants/248691.pdf; and Mark S. Hamm and Ramón Spaaij, *The Age of Lone Wolf Terrorism* (New York: Columbia University Press, 2017).
- 17. Horgan et al., "Across the Universe."
- Horgan et al., "Across the Universe." See also the comprehensive follow-up work by Paul Gill, *Lone-Actor Terrorists: A Behavioural Analysis* (London: Routledge, 2015).

- 19. Hamm and Spaaij, The Age of Lone Wolf Terrorism.
- 20. All data in this paragraph come from Horgan et al., "Across the Universe"; and Gill, *Lone-Actor Terrorists*.
- 21. Hamm and Spaaij, "Lone Wolf Terrorism in America."
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LESSONS LEARNED ON THE METHODOLOGICAL CHALLENGES IN STUDYING RARE VIOLENT INCIDENTS

BY BASIA E. LOPEZ, DANIELLE M. CRIMMINS, AISHA J. QURESHI, AND NADINE FREDERIQUE

To increase knowledge and aid prevention efforts, the research community must develop a strategy to source, code, check, and analyze the data surrounding rare violent incidents.

iolent incidents such as public mass shootings and terrorist events are rare but have widespread, catastrophic impacts on society. These devastating and often high-profile events raise questions about their causes and how best to prevent them. Yet their infrequent occurrences make them hard to predict.

Finding answers to questions that can guide the prevention of such events is complicated. Naturally, one may turn to "what the research shows" to inform these discussions, but research on rare — albeit high-impact — events is incredibly difficult to carry out and even more challenging to generalize. Research designs and methods are continuously evolving; however, rare incidents remain an exceptionally difficult phenomenon to study.

For example, public mass shootings are both infrequent and context-dependent, meaning that the situation, background, or location differs in each case. As a result, it is challenging for researchers to quantify their impact. Further, the rarity of public mass shootings makes it difficult to develop and

test theoretical models, owing to the dearth of qood-quality data.

Research must move beyond these limitations to advance the criminal justice field's capacity to prevent rare violent incidents. For example, we need reliable and valid information on which factors may lead an individual to commit a mass shooting. Determining these factors requires rigorous data collection methods and analysis. But this is just the starting point. We can also capitalize on methods used in other disciplines that study rare events to potentially help forecast violent incidents and suggest appropriate mitigation strategies.²

As the scientific research, development, and evaluation arm of the U.S. Department of Justice, the National Institute of Justice (NIJ) has played a crucial role in improving the knowledge and understanding of rare violent incidents, such as public mass shootings and terrorist events. The Institute has funded various studies over the years that seek to provide rigorous data, a better understanding of what the data convey, improved connectivity between data sources, and

Research on rare — albeit high-impact — events is incredibly difficult to carry out and even more challenging to generalize.

consistent definitions so that the field has more information about who perpetrates mass violence, their motivations, and how they plan and carry out their attack.

In late 2019, NIJ convened a meeting with current and former grantees and research scholars focusing on rare mass murder incidents.³ (For a list of meeting participants, see sidebar "NIJ Topical Meeting on Rare Incidents Data Collection Models To Advance Research on Mass Violence.") The participants discussed methodologies, the nuances of collecting and analyzing data on these incidents, and challenges related to validity and accuracy. This article briefly summarizes these discussions, along with NIJ's efforts on studying rare violent incidents. It closes with implications for the research community and the criminal justice field to consider.

Defining Key Terms

A mass shooting falls under the broader category of mass murder, which is defined as the willful (nonnegligent) killing of at least four human beings by another person by whatever means (for example, bomb, knife/machete, firearm, or use of a vehicle).⁴ A mass shooting is a mass murder that involves at least one firearm and is typically carried out at a single point in time and in one location.⁵

Mass shootings have additional subcategories, which include:

 Public mass shootings (school shootings, workplace shootings, and shootings in other publicly accessible places, such as cinemas, restaurants, bars, places of worship, or outdoor events in open spaces).

- Domestic mass shootings (familicide with a firearm).
- Shootings connected to crimes, such as robberies and gang-related shootings (a form of organized crime and "turf wars").

Another example of mass murder is a terrorist attack during which multiple victims are intentionally murdered. Unlike in mass shootings (which may or may not be driven by an ideological motive), terrorist attacks are always driven by ideological objectives and are often carried out by means other than a firearm.

NIJ's History of Research on Rare Incidents

Over the years, NIJ has been committed to supporting research on rare incidents such as terrorism and mass shootings, with a particular emphasis on school shootings. Recognizing that there are also knowledge gaps around mass shootings outside of the school setting, the Institute began investing in research on domestic radicalization to violent extremism and terrorism in 2012 and on other public mass shootings in 2018. These rare violent incidents are all linked by a lack of data, which has prompted researchers to use open-source databases to better understand them.

Terrorism

Following the September 11 terrorist attacks, NIJ began funding research focused on developing terrorism databases, improving responses to terrorism, and studying the composition of terrorist organizations. In 2012, NIJ received new congressional direction to fund research specifically focused on developing a better understanding of the domestic radicalization process and advancing evidence-based strategies to effectively intervene and prevent radicalization in the United States.⁶

While this shift in focus emphasized the study of the radicalization process, data collection efforts on terrorist attacks and related incidents, including factors surrounding radicalization, continued. This NIJ portfolio dedicated resources to developing and supporting open-source databases to understand rare violent incidents. For example, NIJ has helped fund the Terrorism and Extremist Violence in the United States (TEVUS) database and portal, which "compiles behavioral, geographic, and temporal characteristics of extremist violence in the United States dating back to 1970." Similarly, NIJ has helped fund the Profiles of Individual Radicalization in the United States (PIRUS), a database that "contains deidentified individual-level information on the backgrounds, attributes, and radicalization processes of over 2,200 violent and non-violent extremists who adhere to far right, far left, Islamist, or single-issue ideologies in the United States covering 1948-2018."

These efforts have highlighted that researchers collecting data on terrorist attacks face similar methodological problems as researchers collecting data on school and other public mass shootings.

School Shootings

One of the first NIJ-funded studies on school shootings was the Safe School Initiative (1999-2004). This project, carried out by the U.S. Department of Education and the U.S. Secret Service, focused on threat assessment. The project's goal was to identify information that could be obtainable, or "knowable," prior to an attack. It used administrative source data, including investigative, school, court, and mental health records, as well as data derived from interviews. However, the researchers had limited access to administrative sources, and they often had to obtain information through publicly available means.

From 2014 to 2017, NIJ funded several other research projects related to school shootings under the Comprehensive School Safety Initiative. One of these projects, The American School Shooting Study (TASSS), developed a database modeled after terrorism studies that used open-source data to examine both school shootings and mass shootings. TASSS is a national, open-source database that includes all publicly known shootings that resulted in at least one injury on K-12 school grounds in the United States between January 1, 1990, and December 31, 2016.

Other Public Mass Shootings

In 2015, NIJ collaborated with the Office for Victims of Crime to fund a project examining the impact of school and other mass shootings on communities and individuals. ¹¹ Since then, NIJ has prioritized research on public mass shootings, funding four projects in 2018 and one in 2019. Three of these projects aimed to build or expand databases on public mass shootings using publicly available sources to answer specific research questions and ensure the data were rigorously collected. ¹²

Collecting Data on Rare Incidents

When studying rare incidents, researchers must often build a database from scratch. These databases are typically based on research questions and the variables needed to answer those questions, thus requiring a well-developed process. During the NIJ meeting on rare incidents data collection, participants described the following steps in building a database (see exhibit 1):

- 1. Construct the codebook.
- 2. Identify cases.
- 3. Manage sources.
- 4. Recruit and train a coding team.
- 5. Code cases.
- 6. Perform quality control and data testing.
- 7. Disseminate.

Participants also discussed key challenges that often emerge during this process and, where applicable, identified possible solutions. They noted, however, that in some cases, there are no clear solutions. The overall goal is to create a nuanced and comprehensive database that is reliable and usable to help the criminal justice system prevent violent crime.

Constructing the Codebook

A database must be functional and reliable in order to be valid and useful. The research team should construct a "codebook" based on an analysis of existing literature and databases, their critique of the

Exhibit 1. Steps To Build a Database



important issues, the questions they want to answer, and the theories they want to examine.

Publicly available data sources include a wide range of variables, which results in both complexity and missing information. When analyzed, this may produce invalid or even erroneous findings. Thus, the meeting participants stated that, instead of including all possible variables, the research team should pick the "right" variables (considering the sources available). The participants suggested using broad definitions and allowing future users to filter the data to maximize functionality. They also stressed the importance of using the right measurement scheme when constructing the codebook — for example, entering the person's exact age, not an age range.

Participants noted that it is imperative to use several test cases to see what the codebook captures and misses and what is too subjective — and then make necessary changes. If the research team wants

to expand the codebook, they must focus on new research questions and a new set of variables and then operationalize them accordingly.

Identifying Cases

Next, the research team must identify cases to include in the database. The team must be clear from the start about inclusion criteria and set benchmarks.

The meeting participants suggested using multiple methods to help build a representative sample, including:

- Conducting searches from lists generated by news aggregators and Boolean search strings to select cases based on specified inclusion criteria.¹³
- Using customized news alerts.
- Following external sources and social media accounts for cases that are not high profile.

The research team should use protocols to search for and collect open-source documents to identify incidents. They should conduct a systematic review of the literature to locate sources that could have pertinent information, including databases from other academics and organizations. They can verify leads from internet sources against official, publicly available, or requested records of specific incidents.

According to the participants, to ensure they have enough cases for critical analysis, researchers should not limit the number of incidents included in the database. Nevertheless, inclusion criteria should be based strictly on the study's goals or research questions and the associated operational definitions. Participants added that, instead of limiting data to events only, researchers should also collect data on individuals, their lives, and their characteristics, as well as any additional variables required to inform prevention. Accessing and capturing life history data can be difficult; however, the participants noted that this information is often available through open sources and can be triangulated (that is, use multiple data sources to ensure the information is accurate).

Managing Sources

The meeting participants stressed that databases should include a wide range of sources to limit poor source validity. The research team should consider all possible data sources even though they likely will not use all of them.

For example, the research team should discuss whether they will use court records and have a budget line item to cover potential costs. Most state and local cases are not available on the internet, which limits access to those court documents. As such, the researchers will have to contact a given agency to obtain information, sometimes through relevant state or local government's freedom of information laws. 14 If unsuccessful, the fallback is often news sources. Participants stated that researchers must use multiple sources to corroborate news data and use caution when entering these data, warning that an author might edit or update information already obtained by the research team.

The participants added that researchers can also access primary sources and historical archive data. For example, the FBI's Supplementary Homicide Report includes voluntarily entered data.

Research teams often develop a ranking system for the reliability of source documents, with court documents at the top and personal opinions expressed in blogs or editorials at the bottom.

Meeting participants suggested developing a ranking system that includes the number of sources used for corroboration. Thus, the research team would include the source with higher-ranking information (for example, a court case file) in the database, especially when corroborated with another source. The team can exclude the lowest-ranked information (for example, internet blogs), even when corroborated by another, higher-ranking source.

The research team can use an online relational database to manage sources, which offers efficiency at a reasonable cost. This approach allows team members to link sources to individuals and single

documents to multiple people. Thus, people internal to the project, as well as external users, can view the same pool of sources collated in the same place.

Recruiting and Training a Coding Team

The first step in the coding process is to recruit and train a coding team. When recruiting coders, the research team must be transparent about the tedious nature of coding to ensure that project staff are fully aware of their assigned tasks and the larger, overarching goals of these ambitious data collection efforts.

It is crucial to allow adequate time for training, including a test period to work out technical issues and to build a team that understands what it means to be a data collector or coder. The coders should undergo extensive training to review the codebook, practice cases, and perform partner coding based on a rigorous training protocol and established inclusion and exclusion criteria. Untrained coders may misidentify or miss information, resulting in data errors and poor validity of the results.

After initial training, the coders can perform multiple rounds of independent searching and critiques. Their training should emphasize how to think like an investigator and track down leads. For instance, they should be intimately familiar with case files so that when they come across buried information (for example, a prior conviction), they can use it as a lead to get more information. The coders should also meet frequently to discuss questions and have regular meetings with the research team to address any issues that arise.

The meeting participants acknowledged the time and resources needed to conduct this type of research and suggested training a large team, if possible. Depending on an organization's resources, they noted that the coding team could consist of interns, research assistants, graduate students, or contract staff. Another possible solution is using technology — such as machine learning, web crawlers, and textual analysis programs — to identify incidents. The participants discussed bringing computer scientists

into the conversation and merging social science and computer science to make the process more effective. The field of computational social science offers promise for applying new methods of analyzing complex social science problems in dynamic social systems and complex organizations. These can include the dynamics of epidemics or social movements, among others.¹⁵

Coding Cases

Coding must be conducted effectively, reliably, and accurately. The meeting participants said that to overcome subjective judgment in the coding process, the research team must establish clear codebook guidelines with thorough instructions. Setting a goal (for example, number of cases per a specific period) is also helpful.

Setting a range of possible data values in the data collection tool can help reduce data entry errors. Practicing version control (that is, having only one master file) also preserves data accuracy. The participants said that quality control and data tests are necessary and reiterated that researchers can use multiple sources to corroborate and triangulate information. The participants also suggested double-or triple-coding at least 25% of the cases to check intercoder reliability. This will allow the team to reconcile disagreements and modify the codebook if needed.

Another important aspect to consider when coding cases is to account for the time that has elapsed between the incident and coding. The workflow may not be in "real time," so monitoring any updates to the case — including corrections made to initial codes based on new information — is crucial. Data must go through layers of fact-checking and independent coding to ensure accuracy.

Quality Control and Data Testing

The research team should incorporate quality control and data testing from the start — for example, double coding, preliminary analyses to look for logical impossibilities, and having multiple people check for errors.

The meeting participants underscored the issue of missing data, as there is a difference between missing variables and no information found. For example, some variables have a higher likelihood of leaving a paper trail (such as military records) compared with variables that are harder to determine (such as substance use). To adequately address this challenge, the participants said that the research team should create a plan for dealing with missing data and follow it consistently.

The research team must collaborate closely with the coding team to work through difficult cases. After the coders review a file and conduct targeted searches to fill in missing values, the research team should assess the type and number of documents reviewed in the search file. Nevertheless, some values will always be missing. A different coder must then confirm values and conduct a final targeted search to fill in missing data, while also flagging any reliability concerns. As new information comes out (for example, in a book written years after the event), the research team must ask coders to reevaluate the data and make any necessary changes.

Dissemination

The participants discussed ways to communicate findings to multiple audiences, including academics, practitioners (such as law enforcement), and policymakers — something the participants agreed has become increasingly more difficult in recent years. They added that data dissemination often receives inadequate attention until too late, yet it is key to avoiding data misuse and misinterpretation.

The media is a primary (although imperfect) vehicle to get messages to the public. The participants acknowledged that there is no quick way to explain the process of creating a database. However, they recommended highlighting the three or four most important data pieces, saying this strategy can help prevent misinterpretation.

Several participants also suggested that when working with the media, researchers should:

- Clearly explain how the data can and cannot be used and the limitations of the data.
- Make the data available through multiple outlets.
- Provide a user guide and codebook.
- Write a frequently asked questions section for publicly accessible databases.
- Use technology tools to visualize the data and make the data interactive and accessible (for example, create infographics).

They also recommended using language that everyone can digest (for example, writing op-eds).

Implications for the Field

Rare incident research on terrorism and public mass shootings has the potential to affect policy and aid prevention efforts. Although researchers must consider many methodological steps, challenges, and limitations when investigating rare incidents, establishing strong data collection and data entry procedures is imperative to producing rigorous research. Researchers must understand the nuances and procedures essential for studying these rare phenomena in order to accurately translate the findings to the field.

Researchers must adequately describe their methods, any known limitations, and the operational definitions so that those outside the project team and outside the research community can understand the findings. Policymakers and practitioners must have all the necessary information to interpret the research and inform their decisions. Specifically, they should review the data sources and how the project team created the database and defined the variables. Researchers should present the findings to practitioners and policymakers to help remove skepticism regarding open-source data from sources such as media reports.

NIJ Topical Meeting on Rare Incidents Data Collection Models To Advance Research on Mass Violence

San Antonio, Texas, September 24-25, 2019

Participants:

- Steven Chermak, Michigan State University
- Nadine M. Connell, Griffith University, Queensland (Australia)
- James Densley, Metropolitan State University (Minnesota)
- Grant Duwe, Minnesota Department of Corrections
- James Alan Fox, Northeastern University (Massachusetts)
- Joshua D. Freilich, John Jay College of Criminal Justice (New York)
- Michael Jensen, University of Maryland
- Hannah Laqueur, University of California, Davis
- Jillian Peterson, Hamline University (Minnesota)
- Travis C. Pratt, University of Cincinnati Corrections Institute
- Michael Rocque, Bates College (Maine)
- Jillian J. Turanovic, Florida State University
- Basia Lopez, NIJ
- Danielle Crimmins, NIJ
- Nadine P. Frederique (former NIJ social science analyst)
- Mark Morgan (former NIJ policy advisor)
- David B. Muhlhausen (former NIJ director)
- Phelan Wyrick, Office of Justice Programs/
 Office of the Assistant Attorney General
- Notetaker: Mary Beth de Ribeaux, CSR, Incorporated

It is also important for policymakers to understand what research questions the project team considered, because results will vary based on the questions and operational definitions. For example, if the researchers defined a mass shooting as three fatalities versus four fatalities, the trend line will differ. When these factors are not considered, misinformation spreads.

Those who work in fields related to rare violent incidents — whether in policy, research, or practice — are often asked what is being done to prevent these tragedies from occurring. But it is not always possible to identify the number of incidents that were prevented. Foiling plots and implementing timely interventions are critical; however, given the developing nature of this research compared with other areas in criminology, one of our best opportunities to identify patterns and trends, answers to questions, and functional tools for law enforcement is to bolster databases and data collection efforts. Developing a meticulous strategy to source, code, check, and analyze the data surrounding rare violent incidents remains paramount. We must consider the lessons learned from the creation and expansion of other pioneering databases, especially as the nature of terrorist and mass shooting threats in the United States continues to evolve. To get ahead of — or even keep up with — the threat, a strong foundation of knowledge will remain key to prevention and intervention efforts.

About the Authors

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analyst at NIJ and currently a social science analyst at the U.S. Department of Homeland Security's Science & Technology Directorate, where she leads research efforts on terrorism, targeted violence, and radicalization.

This article discusses the following awards:

- "Understanding the Causes of School Violence Using Open Source Data," award number 2016-CK-BX-0013
- "Examination of the Short- and Long-Term Impact of School Shootings," award number 2015-VF-GX-K113
- "A Comprehensive Assessment of Deadly Mass Shootings, 1980-2018," award number 2018-75-CX-0024
- "Mass Shooter Database," award number 2018-75-CX-0023
- "The Nature, Trends, Correlates and Prevention of Mass Public Shootings in America, 1976-2018," award number 2018-75-CX-0025
- "Firearm Purchase Behavior and Subsequent Adverse Events," award number 2018-75-CX-0026
- "Improving the Understanding of Mass Shooting Plots," award number 2019-R2-CX-0003
- "Empirical Assessment of Domestic Radicalization," award number 2012-ZA-BX-0005

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- Grant Duwe et al., "Forecasting the Severity of Mass Public Shootings in the United States," *Journal of Quantitative Criminology* 38 (2021): 385-423, https://doi.org/10.1007/ s10940-021-09499-5.
- NIJ Topical Meeting on Rare Incidents Data Collection Models, San Antonio, TX, September 24-25, 2019.
- 4. This is the most commonly used definition. However, it hinders examination of incidents where there was a premeditated intent to kill multiple victims but the plan was either not carried out or resulted in fewer or no fatalities and injuries. For the development of prevention strategies, there are benefits to including both averted attacks (e.g., due to official or bystander intervention) and less deadly attacks (e.g., due to near misses, weapon malfunction, rapid medical response, or fewer potential victims at the crime scene).

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- Joshua D. Freilich et al., "Understanding the Causes of School Violence Using Open Source Data," Final report to the National Institute of Justice, award number 2016-CK-BX-0013, August 2021, NCJ 301665, https://nij.ojp.gov/ library/publications/understanding-causes-school-violenceusing-open-source-data.
- 11. National Institute of Justice funding award description, "Examination of the Short- and Long-Term Impact of School Shootings," at the Regents of the University of California, Los Angeles, award number 2015-VF-GX-K113, https://nij. ojp.gov/funding/awards/2015-vf-gx-k113.
- 12. See National Institute of Justice funding award description, "A Comprehensive Assessment of Deadly Mass Shootings, 1980-2018," at Florida State University, award number 2018-75-CX-0024, https://nij.ojp.gov/ funding/awards/2018-75-cx-0024; National Institute of Justice funding award description, "Mass Shooter

- Database," at The Hamline University of Minnesota, award number 2018-75-CX-0023, https://nij.ojp.gov/ funding/awards/2018-75-cx-0023; National Institute of Justice funding award description, "The Nature, Trends, Correlates and Prevention of Mass Public Shootings in America, 1976-2018," at Northeastern University, award number 2018-75-CX-0025, https://nij.ojp.gov/funding/ awards/2018-75-cx-0025; National Institute of Justice funding award description, "Firearm Purchase Behavior and Subsequent Adverse Events," at the University of California, Davis, award number 2018-75-CX-0026, https://nij.ojp. gov/funding/awards/2018-75-cx-0026; and National Institute of Justice funding award description, "Improving the Understanding of Mass Shooting Plots," at The Rand Corporation, award number 2019-R2-CX-0003, https://nij. ojp.gov/funding/awards/2019-r2-cx-0003.
- 13. This is a type of search that allows users to combine keywords with operators (or modifiers) such as AND, NOT, and OR to produce more relevant results.
- 14. The federal Freedom of Information Act (FOIA) requires federal agencies to provide access to certain types of records, subject to exceptions as set out in the statute (5 U.S.C. § 552 (2) (A)-(E)). It applies only to federal agencies as defined in the statute and does not apply to state agencies or local governments. FOIA does not create a right of access to records held by Congress, the courts, or by state or local government agencies. Although FOIA doesn't directly apply to local governments, many states and some local governments have passed their own freedom of information laws. Requests for information from a state or local government must be made under that jurisdiction's freedom of information legislation.
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ASSESSING THE EFFECTIVENESS OF PROGRAMS TO PREVENT AND COUNTER VIOLENT EXTREMISM

BY MAX ERDEMANDI. ELENA SAVOIA. AND MICHAEL J. WILLIAMS

Three NIJ-supported evaluation studies offer key insights and recommended practices to examine the effectiveness of initiatives to prevent and counter violent extremism.

nitiatives designed to prevent and counter violent extremists' efforts to recruit, radicalize, and mobilize followers and commit acts of violence in the name of a group or ideology are critical.

It is equally important to assess the effectiveness of these initiatives. Initiatives may apply different theoretical and methodological approaches when designing their objectives, activities, and measures of success. Scientifically rigorous evaluation studies make it possible to assess whether these initiatives have been implemented according to their design (i.e., program fidelity)¹ and have met success benchmarks, which helps decision-makers decide whether to sustain, modify, limit, or scale up such efforts.²

This is no simple task. It may be difficult to assess an initiative because of a lack of available data, suitable control and comparison groups, and validated metrics against which to assess programs.³ In general, it is

difficult to determine whether a particular strategy or program is the cause or reason an act or event has been prevented. Evaluation efforts also demand human and financial resources. A Researchers should address these challenges during program design and implementation to evaluate whether the initiative achieved its intended goals.

Over the past decade, the National Institute of Justice (NIJ) has solicited cross-disciplinary studies to help understand the effectiveness of policies, programs, and initiatives to prevent and counter violent extremism. This article discusses NIJ-supported evaluations of three programs: the World Organization for Resource Development and Education's countering violent extremism program, 5 the Muslim Public Affairs Council's Safe Spaces Initiative, 6 and the Peer to Peer Challenging Extremism Initiative. Our goal is to help address long-standing challenges and inform future, locally led and community-based program design and evaluation practices.

Initiatives designed to prevent and counter violent extremism are critical. It is equally important to assess the effectiveness of these initiatives.

WORDE's Countering Violent Extremism Program

The World Organization for Resource Development and Education (WORDE) was a U.S. community-based, Muslim-led organization in Montgomery County, Maryland. Its countering violent extremism program aimed to create and maintain networks of civically engaged individuals who were sensitized to issues of violent extremism and had proactive, cooperative relationships with local social services and law enforcement agencies.

The program — as evaluated — was composed of primary prevention activities, although it evolved to also include secondary prevention activities. WORDE's flagship program, Youth Against Hunger, brought together youth and adults from diverse faith and ethnic groups to prepare and deliver food to individuals who were homeless, which fostered inclusivity and honored volunteer community service. The program offered student service learning credits and thus attracted high school students who were required to earn such credits.

WORDE also had a multicultural program called the JustART series, which brought together a culturally diverse group of youth to produce digital artistic works (e.g., short films) on themes of social change. JustART was designed to be creatively empowering, interactive, and collaborative.

Key Findings

The evaluation initially employed a grounded theory approach and discovered (via focus groups) that peers might notice early signs that indicated individuals were considering acts of violent extremism. ⁹ The

researchers recognized the importance of further understanding peers' ("bystanders") willingness or reluctance to intervene. This led to the "Theory of Vicarious Help-Seeking," which asserts that the fear of damaging one's peer relationships tends to reduce their willingness to intervene in matters concerning violent extremism. However, when fear is greatest or most desperate, peers will tend to intervene. The researchers tested the theory via a survey embedded within the overall data collection; the theory was supported and subsequently replicated within a sample representative of the U.S. population. 11

This NIJ-supported evaluation 12 also produced an evidence-based inventory of participants' reasons why they chose to participate in WORDE's programming — their motivations and what they felt they gained by participating (the "Brief Volunteer Program Outcome Assessment" scale, included in appendix 3 of the evaluation report). For example, participants reported, "I feel a part of something bigger than myself," "I feel a sense of purpose," "I feel accepted," and "I learn about cultures other than my own." 13 Furthermore, it tested a theoretical model (the "Investment Model") 14 that predicted an incredibly large 77% of the variance in participants' commitment to continued involvement in the program. 15

The evaluation found that, across the two programs referenced above, WORDE had the intended effects on 12 of the 14 outcomes believed to be relevant to countering violent extremism that comprised the "Brief Volunteer Program Outcome Assessment" scale. Exhibit 1 lists the 14 outcomes, along with example references of peer-reviewed literature pertinent to each outcome.

As shown in exhibit 1, on all but two of the 14 outcome measures, participants' average/mean level of agreement was greater than or equal to "somewhat agree" (i.e., ≥4 on 6-point Likert-type scales ranging from "strongly disagree" to "strongly agree"), to an extent that exceeded the standard deviations for each outcome. Therefore, such responses were reliably above the midpoint of those items (i.e., above "neither agree nor disagree"). Indeed, among those 12 outcomes, only one did not have a median rating of "agree."

Exhibit 1. Participants' Self-Reported Outcomes of Participation in WORDE's Programming

Item		Mean	Median	SD
1.	I feel welcome ¹	5.71	6	1.05
2.	I feel a part of something bigger than myself ²	5.84	6	1.01
3.	I feel a sense of teamwork ³	5.56	5	.95
4.	I make friendships that are active beyond the event4	5.73	6	1.19
5.	I make friends with people from other races ^{5*}	5.44	6	1.08
6.	I feel useful ⁶	5.83	6	1.06
7.	I have responsibilities ⁷	5.65	6	1.12
8.	I have leadership responsibilities8*	5.35	5	1.20
9.	I feel a sense of purpose ⁹	5.69	6	.97
10.	I feel free of peer pressure ¹⁰	5.67	6	1.02
11.	I feel accepted ¹¹	5.78	6	.96
12.	I wouldn't feel lonely ¹²	5.73	6	1.17
13.	I wouldn't feel afraid to talk to others13	5.61	6	1.01
14.	I learn about cultures other than my own ¹⁴	5.72	6	1.18

 $[\]textbf{4} = \text{``neither agree nor disagree'' (midpoint)}$

Notes

- Erin Marie Saltman and Melanie Smith, Till Martyrdom Do Us Part: Gender and the ISIS Phenomenon, London, United Kingdom: Institute for Strategic Dialogue, 2015, https://www.isdglobal.org/wp-content/uploads/2016/02/Till_Martyrdom_Do_Us_Part_ Gender_and_the_ISIS_Phenomenon.pdf; and David Weise et al., "Interpersonal Politics: The Role of Terror Management and Attachment Processes in Shaping Political Preferences," Psychological Science 19 no. 5 (2008): 448-455.
- 2. Arie W. Kruglanski et al., "Terrorism A (Self) Love Story: Redirecting the Significance Quest Can End Violence," *The American Psychologist* 68 no. 7 (2013): 559-575; and John Horgan, *The Psychology of Terrorism*, 2nd ed. (New York: Routledge, 2014).
- 3. Kruglanski et al., "Terrorism"; and Horgan, The Psychology of Terrorism.
- 4. Emily Corner and Paul Gill, "A False Dichotomy? Mental Illness and Lone-Actor Terrorism," Law and Human Behavior 39 no. 1 (2014): 23-34; and Clark McCauley and Sophia Moskalenko, "Individual and Group Mechanisms of Radicalization," in Protecting the Homeland From International and Domestic Terrorism Threats: Current Multi-Disciplinary Perspectives on Root Causes, the Role of Ideology, and Programs for Counter-Radicalization and Disengagement, ed. Laurie Fenstermacher et al. (U.S. Government Interagency White Paper, 2010).
- Kristen Davies et al., "Cross-Group Friendships and Intergroup Attitudes: A Meta-Analytic Review," Personality and Social Psychology Review 15 no. 4 (2011): 332-351; and Matthew P. Deegan et al., "Positive Expectations Encourage Generalization From a Positive Intergroup Interaction to Outgroup Attitudes," Personality and Social Psychology Bulletin 41 no. 1 (2015): 52-65.
- Kruglanski et al., "Terrorism"; and Arie W. Kruglanski et al., "The Psychology of Radicalization and Deradicalization: How Significance Quest Impacts Violent Extremism," *Political Psychology* 35 (2014): 69-93.
- 7. Kruglanski et al., "Terrorism"; and Kruglanski et al., "The Psychology of Radicalization."
- 8. Kruglanski et al., "Terrorism"; and Kruglanski et al., "The Psychology of Radicalization."
- 9. Kruglanski et al., "Terrorism"; and Kruglanski et al., "The Psychology of Radicalization."

⁵ = "somewhat agree"

⁶ = "agree"

^{*} These items did not reliably exceed the threshold for "neither agree nor disagree." SD = standard deviation

- 10. Saltman and Smith, Till Martyrdom Do Us Part; Weise et al., "Interpersonal Politics"; and McCauley and Moskalenko, "Individual and Group Mechanisms of Radicalization."
- 11. Saltman and Smith, Till Martyrdom Do Us Part; Weise et al., "Interpersonal Politics"; and McCauley and Moskalenko, "Individual and Group Mechanisms of Radicalization."
- 12. Corner and Gill, "A False Dichotomy?"; and Saltman and Smith, Till Martyrdom Do Us Part.
- 13. Saltman and Smith, Till Martyrdom Do Us Part; and Weise et al., "Interpersonal Politics."
- 14. Thomas F. Pettigrew and Linda R. Tropp, "How Does Intergroup Contact Reduce Prejudice? Meta-Analytic Tests of Three Mediators," *European Journal of Social Psychology* 38 no. 6 (2008), 922-934; and McCauley and Moskalenko, "Individual and Group Mechanisms of Radicalization."

These findings made the WORDE program the first research-based countering violent extremism program in the United States. ¹⁶ However, the outcomes for participants were not significantly better than the comparison group (those living in the same county who engaged in volunteer service but not with WORDE). ¹⁷ In fairness, WORDE represented that its programming was oriented toward enhancing communication and understanding between communities to mitigate social and political conflict. ¹⁸ Therefore, for this evaluation, the fair test was whether WORDE's programmatic outcomes, relevant to those objectives, were reliably produced — not whether they were produced in a superior way relative to other, perhaps similar, types of programming.

This highlights the concept of so-called equifinality; that is, there can be more than one means of achieving a given outcome. In other words, there can be more than one way (i.e., more than one type of programming) to achieve a given programmatic outcome relevant to preventing and countering violent extremism. In conclusion, the researchers recommended testing the generalizability of the outcomes by implementing the program in other municipalities.

Recommended Practices for Evaluation

We can draw several recommended practices for future evaluation from studying the WORDE program:

 Articulate — and test — underlying programrelevant theory. Such theoretical advancements might be as useful to the field as the findings from the program evaluation.

- Quasi-experimental¹⁹ methods can and should — be used in evaluations of initiatives to prevent and counter violent extremism.
 Previously validated measures should be used whenever possible.
- Incorporate a mixed-methods approach (e.g., use both quantitative and qualitative methods) whenever possible.
- Researchers should publish all measurement instruments (e.g., as annexes). This is a key component of building an evidence-based approach. Such open access to measurement instruments and their subsequent use allows researchers to perform meta-analyses of programs.²⁰ The present project produced a set of 12 freely licensed survey measures (totaling 99 items) that demonstrated excellent measurement reliability and consistency and are available to aid future efforts.²¹

Safe Spaces Initiative

Another NIJ-supported evaluation examined the Muslim Public Affairs Council's (MPAC)²² Safe Spaces Initiative, which helps Muslims in the United States implement programming to prevent and counter violent extremism in their communities. The program trained community stakeholders (e.g., religious leaders, community organizers, social workers) on the Safe Spaces toolkit and helped them create community response teams that would perform prevention and intervention activities after initial training. MPAC also provided post-implementation technical assistance.

The original program and model received widespread criticism from the U.S. Muslim community for its policy-driven, top-down, national security framing, which communities associated with self-policing and law enforcement surveillance.²³ Thus, many communities declined to take part in the program. Out of nine recruited sites, only four received the training and executed the prevention activities, and three of those four did not continue prevention programming as prescribed by the training.²⁴

Safe Spaces was revised following a three-year, multisite program evaluation conducted with support from an NIJ grant.²⁵ The newer version of the program that resulted from this evaluation promoted a grassroots approach to building healthy and resilient communities as an effective way of preventing violent extremism through primary, secondary, and tertiary prevention.²⁶ Despite the shift in framing from violent extremism to public health, concerns over the political climate, stigmatization, and sole focus on Muslim communities prevented successful implementation and, consequently, evaluation.

Key Findings

Safe Spaces failed to address the actual concerns and priorities of the communities, such as mental health, substance use, youth leaving religion, and domestic violence. This failure was largely due to the top-down approach that did not resonate with the local communities. Additionally, the lack of buy-in from community leaders, confusion regarding long-term commitment, and insufficient financial and human resources and partnerships with local organizations caused participation to decline. Finally, Safe Spaces replicated services, structures, and programs that already existed in some communities.²⁷

Due to implementation challenges, the researchers modified the evaluation study. Rather than using data-driven methods as planned, researchers instead used follow-up interviews to focus on implementation barriers and recommendations.²⁸ Still, some elements showed potential and could inform future program design in key areas.

Recommended Practices for Programming

Drawing from the implementation and evaluation experiences of the Safe Spaces Initiative:

- Engaging with community members and developing partnerships from the start is key to success.
 Designers should consider the community's top priorities and concerns as they define program objectives, and they should tailor the content for different communities. Public health framing should permeate every facet of the program, including the language used.²⁹ Through primary and secondary prevention activities, programs should adopt community-level strategies to mitigate risk and leverage protective factors as well as decrease risky behavior. Instead of ejecting individuals who have committed to extremist causes, programs should rehabilitate and reintegrate them.
- A true public health framing emphasizes a
 whole-of-community approach, which may boost
 the longevity of program outcomes and overall
 community health through inter-community
 dialogue with external partners, institutions,
 and networks. Programming across a range of
 communities rather than focusing on a single
 faith or ethnic community should be baked into
 the design, which could also alleviate concerns
 about profiling and stigmatization.
- An outside trainer, who is not only intimately familiar with the subject matter and the target community but also adequately trained to effectively address participants' concerns and questions, should deliver the program.³⁰
- The teams designing and implementing the program should emphasize the value and benefits of a public-health-focused violence prevention program to earn the trust of the communities, increase community support and participation, and mobilize community resources. Additionally, buy-in from local political leadership would give communities greater agency and boost the success of implementing the program.³¹

- After initial delivery, researchers and program implementation teams should monitor fidelity measures and post-implementation support on an ongoing basis to ensure implementation fidelity.
- Program success relies, in part, on engaging community leaders and volunteers, being transparent about expectations, and familiarizing the target communities with the training materials in advance, or co-developing them in collaboration with the community.³² In communities that lack the personnel and capacity to execute and sustain their own violence prevention programming, stakeholders should collaboratively work toward capacity building (e.g., providing guidance for potential external funding and staffing search, considering services needed such as translation). Researchers and program design and implementation teams should prioritize finding expertise within the community, but they should also engage partners outside the immediate community as necessary.
- Communities should develop an understanding of the different types of resources and commitments needed for primary, secondary, and tertiary prevention activities. It may not be possible to simultaneously implement distinct stages.
 Communities should not be expected to assess their own needs and reach out, given the resource and personnel challenges involved. Researchers and initial program design and implementation teams should include post-implementation technical assistance in their designs from the outset.

Peer to Peer Challenging Extremism Initiative

The Peer to Peer (P2P) Challenging Extremism Initiative — renamed Invent2Prevent (I2P) in 2021 — encourages college and high school students to develop social campaigns and educational interventions to counter violent extremist rhetoric while emphasizing positive messages about ethnic and cultural diversity. The initiative developed 150 U.S.-based campaigns from 2015 to 2017. The initiative was interrupted for several years and later restarted in 2021. Since 2021, 77 collegiate

programs and 27 high school programs have been engaged in more than 100 violent extremism prevention projects.³³

The NIJ-supported evaluation of the P2P Initiative began with a review of 150 domestic campaigns produced by P2P students. The majority (121 in 150) of these campaigns focused on promoting unity, peace, acceptance, and similar values; 29 of them addressed specific extremist ideologies. ³⁴ The researchers chose to evaluate two campaigns in real time: Kombat with Kindness (Utah) and Operation 250 (Massachusetts).

Key Findings

Prior to conducting the evaluation study, the researchers distributed surveys to a sample of students in the high schools where the two campaigns were taking place to determine the students' attitudes toward diversity and exposure to online hate, violence, and grooming. Responses from 1,087 students showed that 6 in 10 students had been exposed to hateful messages³⁵ when online, and 1 in 10 had come across a hateful group on the internet and had someone from that group try to convince them of their views.³⁶

Survey data also showed that girls were twice as likely to experience bullying, harassment, insults, exposure to sexual content, and violence online compared with boys. Girls were also more likely than boys to have their photos used inappropriately, receive sexual content, and have a stranger online ask them to meet in person.³⁷ Finally, the surveys found that students who spent more than three hours online per day had twice the risk of being exposed to hateful messages compared to those who spent less time online.³⁸

Kombat with Kindness

The Kombat with Kindness campaign aimed to combat hatred with kindness by promoting acceptance of diversity through video presentations, t-shirts, banners, and social events in middle and high schools. To evaluate the campaign's effectiveness, the researchers surveyed 143 students at participating schools before and after implementing the initiative.

They compared the survey results to a control group of 183 students who attended schools with similar demographic characteristics in the same state that were not involved in the initiative. The findings showed that students who attended the schools where Kombat with Kindness was implemented saw and heard fewer hateful messages on school grounds after the start of the campaign compared to the students in the control group, which suggests that the campaign achieved its intended results. Furthermore, in both the control and experimental groups, students who acquired awareness about institutional and cultural racism over the course of the school year became more accepting of diversity.³⁹

Operation 250

The Operation 250 initiative educates youth about the risk of being recruited and exploited by violent extremist groups online. It teaches youth about their own psychological vulnerabilities when interacting with others in the online space and about in-group versus out-group bias. It also raises awareness of preconceived notions about people of a different race, ethnicity, gender, or other identity-shaping characteristic.⁴⁰

To evaluate the impact of the initiative, the researchers randomized high school students into two groups: a group of 67 students who received the Operation 250 training and a control group of 61 students who received training on how to prepare for a snow emergency. The findings of the evaluation showed that students who received the Operation 250 training were 9.6 times more likely than those in the control group to have gained awareness about in-group versus out-group bias. The evaluation showed that the initiative achieved promising but only marginally statistically significant results for its impact on students' awareness of online risky behaviors. 41

Recommended Practices for Evaluation and Programming

We can draw two key recommended practices for future programming and evaluation from the P2P Initiative study:

- Anonymized school surveys are an important tool
 to assess students' experiences (such as bullying
 and exposure to hate messages and groups), their
 attitudes toward diversity and racism, and the
 segments of the student population most at risk
 for becoming victims of bullying, harassment, and
 online grooming. These data can help better target
 school-based programs to prevent and counter
 violent extremism.
- Initiatives that both enhance youth's knowledge about cultural and institutional racism and online risks and promote an overall school environment focused on acceptance of diversity are promising practices that create resilience toward violent extremism.

Conclusion

All three programs discussed in this article highlight the importance of evaluation studies. WORDE's countering violent extremism program and the P2P Initiative show how successful implementation coupled with a well-designed evaluation study that has clear definitions and outcome measures can help inform future efforts. In comparison, Safe Spaces provides a good example of an evaluation study flexible enough to be modified as implementation challenges arise and still produce insight to inform better program design and highlights the importance of initial and ongoing community engagement. Researchers still need to conduct systematic and meta-analytic reviews and to improve their understanding of the measures of effectiveness through comparative and multisite evaluations.

Future programs to prevent and counter violent extremism should include rigorous evaluations. As evidenced by the various methods discussed in this article, researchers have several types of evaluation methodologies — for example, pre- and post-intervention, quasi-experimental designs, post-mortem, and qualitative interviews — that they can consider to conduct an effective assessment. Researchers and practitioners should also identify core components of the programs and intended outcome measures early in the process. These

measures should go beyond those that are commonly employed in present studies, which is an individual's sense of self, level of support for violent extremist groups or activity, or level of support for the use of violence generally. 42 Most importantly, researchers should create a feedback loop that allows practitioners and program implementers to use the evaluation results to improve the program.

About the Authors

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This article discusses the following awards:

- "Evaluation of a Multi-Faceted, U.S. Community-Based Muslim-Led CVE Program," award number 2013-ZA-BX-0003
- "Evaluating the Safe Spaces Community-Led CVE Program," award number 2015-ZA-BX-0003
- "Evaluation of the Peer to Peer (P2P): Challenging Extremism Initiative." award number 2016-ZA-BX-K001

Notes

- Michael J. Williams, "Research Methods Brief: Anatomy of Process Evaluations for P/CVE," *Journal for Deradicalization* 30 (2022): 262-274, https://journals.sfu.ca/jd/index.php/jd/article/view/583.
- Todd C. Helmus et al., RAND Program Evaluation Toolkit for Countering Violent Extremism, Santa Monica, CA: RAND National Defense Research Institute, 2017, https://doi. org/10.7249/TL243.

- 3. Adrian Cherney and Emma Belton, "Evaluating Case-Managed Approaches To Counter Radicalization and Violent Extremism: An Example of the Proactive Integrated Support Model (PRISM) Intervention," Studies in Conflict & Terrorism 44 no. 8 (2021): 625-645, https://doi.org/ 10.1080/1057610X.2019.1577016; Adrian Cherney and Emma Belton, "Assessing Intervention Outcomes Targeting Radicalised Offenders: Testing the Pro Integration Model of Extremist Disengagement as an Evaluation Tool," Dynamics of Asymmetric Conflict 13 no. 3 (2020): 193-211, https://doi.org/10.1080/17467586.2019.168 0854; Daniel Koehler, "Preventing Violent Radicalisation: Programme Design and Evaluation," Barcelona Center for International Affairs (CIDOB), September 2017, https://www.cidob.org/en/articulos/monografias/ resilient cities/preventing violent radicalisation programme design and evaluation; and Georgia Holmer, Peter Bauman, and Kateira Aryaeinejad, "Measuring Up: Evaluating the Impact of P/CVE Programs," Washington, DC: United States Institute of Peace, September 2018, https://www.usip.org/publications/2018/09/ measuring-monitoring-and-evaluating-pcve-programs.
- 4. Helmus et al., RAND Program Evaluation Toolkit for Countering Violent Extremism; Naureen Chowdhury Fink, Peter Romaniuk, and Rafia Barakat, "Evaluating Countering Violent Extremism Programming: Practice and Progress," Center on Global Counterterrorism Cooperation, September 2013, https://globalcenter.org/wp-content/ uploads/Fink_Romaniuk_Barakat_EVALUATING-CVE-PROGRAMMING_20132.pdf; and Adrian Cherney, Emma Belton, and Daniel Koehler, "Program Integrity Guidelines To Inform the Design, Implementation and Evaluation of P/CVE Initiatives: Guideline Review Document & Program Integrity Toolkit," Brisbane, Australia: University of Queensland, August 2020, https://espace.library.uq.edu.au/view/ UQ:82987ea.
- Michael J. Williams, John G. Horgan, and William P. Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program," Final report to the National Institute of Justice, award number 2013-ZA-BX-0003, June 2016, NCJ 249936, https://www.ojp.gov/pdffiles1/nij/ grants/249936.pdf.
- Stevan Weine et al., "Evaluating the Safe Spaces Program: Using a Community-Based Public Health Approach To Prevent Violent Extremism," Final report to the National Institute of Justice, award number 2015-ZA-BX-0003, January 2021, NCJ 256025, https://www.ojp.gov/pdffiles1/ nij/grants/256025.pdf.
- 7. The WORDE program is no longer in operation.
- Primary prevention focuses on protecting people from developing a given problem. Secondary prevention focuses on halting progress toward a given problem among those in whom warning signs have been identified.

- See Michael J. Williams, John G. Horgan, and William P. Evans, "The Critical Role of Friends in Networks for Countering Violent Extremism: Toward a Theory of Vicarious Help-Seeking," *Behavioral Sciences of Terrorism and Political Aggression* 8 no. 1 (2016): 45-65, https://doi.org/1 0.1080/19434472.2015.1101147.
- Michael J. Williams et al., "Expansion and Replication of the Theory of Vicarious Help-Seeking," *Behavioral Sciences of Terrorism and Political Aggression* 12 no. 2 (2020): 89-117, https://doi.org/10.1080/19434472.2018.1546217.
- 11. Williams et al., "Expansion and Replication of the Theory of Vicarious Help-Seeking."
- 12. All data in this paragraph come from Williams, Horgan, and Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program," which contains the 15 survey measures referenced in this endnote.
- Williams, Horgan, and Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program."
- 14. Adapted from Caryl E. Rusbult, John M. Martz, and Christopher R. Agnew, "The Investment Model Scale: Measuring Commitment Level, Satisfaction Level, Quality of Alternatives, and Investment Size," *Personal Relationships* 5 no. 4 (1998): 357-387, https://doi. org/10.1111/j.1475-6811.1998.tb00177.x.
- Williams, Horgan, and Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program."
- 16. All data in this paragraph come from Williams, Horgan, and Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program."
- 17. Those comparison groups were further equated via propensity score matching techniques. Propensity score matching is a quasi-experimental technique for equating comparison groups when random assignment to a condition cannot be performed. For a user-friendly overview of this technique, see https://thescienceofpcve.org/ no-control-group-no-big-deal-part-1-of-2-propensity-scorematching-designs/.
- See Williams, Horgan, and Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program."
- 19. Quasi-experiments are those in which participants are not assigned to treatment or control conditions randomly but on the basis of another, predefined characteristic. Two of the most widely accepted quasi-experimental designs are propensity score matching (see https://thescienceofpcve.org/no-control-group-no-big-deal-part-1-of-2-propensity-score-matching-designs/) and regression discontinuity (see https://thescienceofpcve.org/no-control-group-no-big-deal-part-2-of-2-regression-discontinuity-designs/).
- Meta-analysis is a systematic analysis of a collection of results from individual studies to arrive at generalized conclusions.

- 21. For freely licensed measures, see appendix 3 of Williams, Horgan, and Evans, "Evaluation of a Multi-Faceted, U.S. Community-Based, Muslim-Led CVE Program."
- 22. MPAC is a U.S.-based advocacy organization that aims to improve the public understanding and policies that impact American Muslims by engaging the government, media, and communities.
- 23. Ahmed Shaikh, "How to Spot a Future Terrorist At Fajr: A Review of MPAC's New 'Safe Spaces," Muslim Matters, March 3, 2016, https://muslimmatters.org/2016/03/03/how-to-spot-a-future-terrorist-at-fajr-a-review-of-mpacs-new-safe-spaces. MPAC developed the three-pillar PIE (prevention, intervention, and ejection) model, which recognizes that a person's path to violence is unique and gradual and involves many factors, and that the path to violence can be slowed, stopped, reversed, or prevented with proper community support. The "ejection" component of this model was highly criticized and was later removed.
- 24. Weine et al., "Evaluating the Safe Spaces Program: Using a Community-Based Public Health Approach To Prevent Violent Extremism."
- 25. The evaluation study was led by Stevan Weine and his team at the University of Illinois Chicago with support from researchers at the National Consortium for the Study of Terrorism and Responses to Terrorism at the University of Maryland.
- 26. Primary prevention focused on community-level strategies to mitigate risk and leverage protective factors (theoretically and empirically associated with violent extremism). Secondary prevention (intervention) was directed at individuals exhibiting signs of elevated risk for violence (e.g., exposure to violent extremism narratives or proximity to radical networks) and included counseling and mentoring (aimed at decreasing risky behavior and preventing violence by adopting a community intervention team). Tertiary prevention targeted individuals who had committed to extremist causes/organizations or carried out acts of violence through rehabilitation and reintegration. The most recent version of the Safe Spaces toolkit can be accessed at https://archive.mpac.org/safespaces/.
- 27. All data in this paragraph come from Weine et al., "Evaluating the Safe Spaces Program: Using a Community-Based Public Health Approach To Prevent Violent Extremism."
- 28. Weine et al., "Evaluating the Safe Spaces Program: Using a Community-Based Public Health Approach To Prevent Violent Extremism."
- Stevan Weine et al., "What Should Program Designers Consider To Successfully Develop and Implement a Public Health Approach to Preventing Violent Extremism?" Chicago: University of Illinois Chicago, January 2021, NCJ 256027, https://www.ojp.gov/pdffiles1/nij/grants/256027.pdf.

- 30. Stevan Weine et al., "What Does a Community-Based Organization Need To Successfully Implement a Public Health Approach to Preventing Violent Extremism?" Chicago: University of Illinois Chicago, January 2021, NCJ 256028, https://www.ojp.gov/pdffiles1/nij/grants/256028.pdf.
- 31. The only successful implementation site received support from their local leadership. The communities viewed program funds from local leadership more positively than funds from federal agencies.
- 32. Weine et al., "What Should Program Designers Consider To Successfully Develop and Implement a Public Health Approach to Preventing Violent Extremism?"
- "Invent2Prevent: Students Invent To Prevent Violence,"
 Edventure Partners, accessed November 23, 2022, https://www.edventurepartners.com/invent2prevent.
- 34. Based on data shared by the P2P organizers with the research team.
- 35. Hateful messages were defined as verbal or written expressions against specific groups because of their race, religion, disability, sexual orientation, ethnicity, gender, or gender identity.
- Nigel Harriman et al., "Youth Exposure to Hate in the Online Space: An Exploratory Analysis," *International Journal* of Environmental Research and Public Health 17 no. 22 (2020): 8531, https://doi.org/10.3390/ijerph17228531.

- 37. Elena Savoia et al., "Adolescents' Exposure to Online Risks: Gender Disparities and Vulnerabilities Related to Online Behaviors," *International Journal of Environmental Research* and Public Health 18 no. 11 (2021): 5786, https://doi. org/10.3390/ijerph18115786.
- 38. Harriman et al., "Youth Exposure to Hate in the Online Space: An Exploratory Analysis."
- All data in this paragraph come from Elena Savoia et al., "Evaluation of a School Campaign To Reduce Hatred," *Journal for Deradicalization* 21 (2019), https://journals.sfu. ca/jd/index.php/jd/article/view/277.
- "About," Operation 250, accessed November 23, 2022, https://www.operation250.org/about.
- "OP250 Analysis brief," accessed November 23, 2022, https://github.com/esavoia123/OP250.git.
- 42. Helmus et al., *RAND Program Evaluation Toolkit for Countering Violent Extremism;* and Holmer, Bauman, and Aryaeinejad, "Measuring Up: Evaluating the Impact of P/CVE Programs."

NCJ 306126

NIJ BALLISTIC-RESISTANT BODY ARMOR STANDARDS UPDATES



To help inform buyers and ensure officer safety, NIJ has published performance standards for ballistic-resistant police body armor for over 50 years. NIJ is proud to announce the release of revised Standard 0101.07 for ballistic-resistant armor and the new Standard 0123.00 to keep pace with the ever-evolving weaponry that officers could encounter.

What's New in NIJ Standard 0101.07, Ballistic Resistance of Body Armor?

The new standard contains:

- Improvements to the testing methods for armor designed for women.
- Updated testing of an armor's ability to absorb bullet impacts that includes a shot in the center of soft armor panels near the neckline.
- Reconfigured testing of an armor's ability to absorb bullet impacts on hard armor plates, to include striking the crown on curved plates.

What's in the New NIJ Standard 0123.00, Specification for NIJ Ballistic Protection Levels and Associated Test Threats?

This standard defines ballistic threat levels and their associated test ammunition. It lists common ballistic threats in the United States and is meant to be a companion to NIJ Standard 0101.07. Several rifle threats have also been added for expanded testing of hard body armor.



Learn more at https://nij.ojp.gov/topics/ articles/updated-body-armor-standardtakes-aim-new-challenges

What About the Body Armor I Wear Now?

Keep wearing it! NIJ will maintain its current Compliant Products List of armor models certified per the previous standard for several years. This will allow manufacturers and agencies to transition to armor that meets the new standard. Given the large number of ballistic-resistant vests currently worn by law enforcement officers, the NIJ **Compliance Testing Program** anticipates maintaining the NIJ Standard 0101.06 Compliant Products List through at least year-end 2027.





THE ROLES OF TRAUMA AND MENTAL HEALTH IN PREVENTING DOMESTIC RADICALIZATION AND VIOLENT EXTREMISM

BY ALISA B. MILLER, DAVID P. EISENMAN, RYAN A. BROWN, AND STEVAN WEINE

NIJ-supported research shows that trauma exposure and mental health issues can have a significant yet varied impact across the violence prevention spectrum.

he challenges involved in preventing domestic radicalization and violent extremism include the fact that people who are radicalized or engage in violent extremism often have experienced trauma and have mental health conditions. Research suggests that for some individuals, these issues may contribute to their involvement in domestic radicalization or violent extremism. For example, a person's vulnerability may lead them to an ecological niche where recruiters offer a supposed better path. Fortunately, only a small minority of people with trauma exposure and mental health issues have taken such a path, and many others do so without any apparent trauma or mental health concerns. Nonetheless, attending to these issues could prove fruitful in preventing radicalization and extremist acts.

Law enforcement, governments, and communities have increasingly employed innovative approaches when responding to individuals involved in domestic radicalization and violent extremism. They have learned that they can further prevention efforts

by better attending to trauma and mental health. Yet questions remain regarding the effectiveness and scalability of such approaches. Moreover, law enforcement, government, and community responses may inadvertently exacerbate trauma exposure and mental health issues for some individuals in ways that can complicate efforts to prevent radicalization.

Understanding and addressing the complexity of trauma exposure and mental health issues relative to domestic radicalization and violent extremism remains a major challenge. Multidisciplinary research can help unpack this complexity. This article discusses three studies funded by the National Institute of Justice (NIJ) that illustrate how trauma and mental health issues are neither necessary nor sufficient to explain domestic radicalization and violent extremism. However, when present, these factors can have a significant yet varied impact across the violence prevention spectrum. This knowledge — along with additional perspectives based on trauma-informed care — can help strengthen programs and policies and guide recommendations.



Pathways to and Away From Violent Extremism in a Community Sample

In the first NIJ-supported study, researchers from the Children's Hospital Corporation sought to understand the pathways to diverse outcomes among Somali immigrants: Why do some show greater openness to violent extremism while others, with shared life histories, move toward gangs, crime, or resilient outcomes such as civic engagement?2 Using a community-based participatory approach, the researchers conducted a mixed-methods study to explore structural adversity, mental health, and openness to violent extremism among a community sample of 394 ethnic Somali young adults in the United States and Canada. Young Somali adults in North America offer a window into the remarkable potential that refugees and immigrants can realize despite experiences of severe adversity and challenges often encountered when adjusting to life in a new country. In addition, the Somali community in the United States has simultaneously faced gang violence and the threat of youth radicalizing.

The researchers categorized participants into five groups based on key attitudinal and behavioral variables of interest:³ (1) participating in delinquent behaviors, (2) civically engaged, (3) civically unengaged, (4) radical beliefs/civically unengaged, and (5) radical beliefs/civically engaged (see exhibit 1). This initial categorization was made at Time 1. One year later (at Time 2), an analysis revealed similar groupings, suggesting that these groupings were meaningful across time. Importantly, the vast majority of these young Somali adults neither participated

in nor expressed support for the use of violence. In addition, the civically engaged group had the largest proportion of participants at both Times 1 and 2.

The researchers found that the number of participants in each group changed over time, and so they examined how likely it was that participants were still in their initial group one year later (known as stability rates). They found that the presence of a negative event — for example, personal or societal obstacles such as higher levels of depression or anxiety, experience of discrimination, or poor interaction with law enforcement — was associated with less stability and slowed down the transition from the radical beliefs/civically engaged group to the civically engaged group. Without taking into account adverse experiences, 32% of individuals moved from the radical beliefs/civically engaged group to the civically engaged group. The share of people who moved from radical to civically engaged was remarkably lower in the presence of a negative event, declining 32% to 14.5%.

All groups experienced structural adversity (trauma and discrimination). At Time 1, moderate levels of structural adversity were associated with group membership in three of the five groups (all except the delinquent and civically unengaged groups), suggesting that moderate adversity may catalyze a desire for change in some way, whether through legal (civic engagement) or illegal/violent (radical belief) means. Life experiences may play a role in determining group membership. Overall, a strong sense of attachment to one's country of resettlement (in this case, the United States or Canada) was

Exhibit 1. Categories of Participants

Five Categories of Participants Based on Key Attitudinal and Behavioral Variables of Interest

Delinquent Civically Engaged Civically Unengaged Radical Beliefs/ Civically Unengaged Civically Engaged

associated with less openness to violent extremism. One possible interpretation is that exposure to moderate adversity may catalyze a desire for change; the degree to which young adults feel a sense of belonging and attachment to their country may drive, to some extent, whether they seek this change through legal or illegal/violent means.

The findings support the idea that there is no single pathway to openness to violent extremism, nor is there a single type of individual most vulnerable to being open to violent extremism.4 This has implications for policy and programming. For example, individuals who showed openness to violent extremism varied in their behaviors and attitudes. To prevent violent extremism, program developers and policymakers must consider various ways to reach diverse young adults and recognize that the drivers of openness to violence for community members may be different. In addition, efforts to protect young adult community members from negative events may enhance movement toward nonviolence and constructive civic engagement. Community members listed positive interactions with law enforcement at community events — such as officers educating newer immigrants about the law as an example of a protective effort.

"Maybe they're meeting with kids, and discussing safety with them, discussing good things to do. When you think police, people think bad things about them, like getting arrested, but maybe they're giving them a different view of that. And that's good for the kids. If a small kid sees that, that's good for him, he feels good that the police care about him."

Source: "Understanding Pathways to and Away From Violent Radicalization Among Resettled Somali Refugees," award number 2012-ZA-BX-0004.

Sharing Terrorism-Related Information With Authorities

What can people who are close to someone on the pathway to terrorism or targeted violence do to help? The first people to suspect or know that someone is

planning targeted violence or terrorism are often their family, friends, co-workers, and classmates. These people are referred to as "intimates." Information about a planned attack that "leaks" — either intentionally or unintentionally — to these individuals makes them "intimate bystanders" (and distinguishes them from bystanders with no close relationship).⁵

International prevention strategies typically encourage intimate bystanders to report targeted violence or terrorism. In the United States, information and educational resources to support intimate bystander reporting of possible violent extremism have yet to be widely available, and intimate bystander reporting remains more of an exception than the rule. Further, intimate bystanders have their own cognitive factors, mental health concerns, and traumas that pose barriers to reporting. Future programs must address these issues in order to succeed.

NIJ-funded researchers at the University of California, Los Angeles, and the University of Illinois at Chicago studied whether a diverse sample of community members would consider reporting friends or family who they suspected to be planning terrorism or targeted violence. They found that complex emotions, feelings, fears, and traumas greatly influenced reporting. Fears and anxieties about the consequences of reporting weighed against their care and concern for both the individual and the broader community. Along with the common fear of being viewed as a "snitch," intimate bystanders feared family or community backlash, being ostracized, harming their relationship with the individual, and retaliation.

"I would want mental health practitioner support before I make a decision [to report someone,] just because I feel like that's a very serious decision to make and one brain is not enough ... 'What's the best way we can help him mentally, socially, and even personally?' I definitely want support before, and then also during, because if he acts out, I don't think I'd be able to handle that alone."

Source: "Community Reporting Thresholds: Sharing Information With Authorities Concerning Terrorism Activity," award number 2018-ZA-CX-0004.

The researchers particularly found noteworthy the intensity with which intimate bystanders were afraid to involve law enforcement before someone had committed a crime because of the possibility of an overreaction, including police violence. This concern was not limited to those belonging to racial or ethnic minority groups. Intimate bystanders who identified as white also feared this response. They doubted law enforcement's ability to prevent violence and feared the potential for escalation.

The researchers found that community members instead want to get help and advice from other intermediaries without criminalizing or endangering the individual they suspect to be planning terrorism or targeted violence. Intimate bystanders prefer to seek help from mental health or other community professionals, such as a social worker or a faith-based leader, particularly when the individual is a family member or friend (as opposed to a co-worker). They also favored seeking advice from a community-based professional before they report to law enforcement, potentially delaying prevention. Many viewed reporting directly to law enforcement as a last resort.

When intimate bystanders view the potential for violence as a mental health concern, they might seek advice and guidance from mental health practitioners on whether and how to report. In this case, the practitioners could provide counseling to the person at risk and make a formal report to law enforcement on the intimate bystander's behalf, if necessary. Unfortunately, study participants said that accessing mental health services is difficult. A formidable obstacle is the high cost of mental health care. People living in rural and exurban communities also face a shortage of mental health professionals. The lack of mental health professionals trained in how to address someone who might perpetrate violence also likely exacerbates the problem.

Traumatic experiences related to law enforcement are also important. Intimate bystanders hesitate to ask police for help due to experiences with or knowledge of local law enforcement violence and racial discrimination, fearing similar treatment. The researchers found that willingness to report to law

enforcement depended on their reputation for violence and discrimination. Intimate bystanders expected law enforcement to respond more harshly to a person who belongs to a racial minority group. Thus, multiple factors combine to impede reporting.

"In a perfect world, I would really like for there to be a collaboration between authorities and mental health specialists; I do feel that while the authorities have more manpower and more physical tools to stop or mitigate a situation from happening, they might not have the best interpersonal skills to deescalate an individual's emotions."

Source: "Community Reporting Thresholds: Sharing Information With Authorities Concerning Terrorism Activity," award number 2018-ZA-CX-0004.

Given these fears and concerns, the researchers recommended the following set of supports to help facilitate intimate bystanders' willingness to initiate reporting:

- Make counseling and mental health support available from the time someone considers reporting to after they make the report. This can help ease fears as intimate bystanders navigate the emotionally challenging process of reporting a loved one.
- Train community practitioners in targeted violence prevention. These practitioners can partner with law enforcement to form a threat assessment response team that facilitates prevention.
- Establish community outreach and educational initiatives about the availability of these support services.
- Improve reporting in order to confront institutional and societal factors, such as police violence, that shape intimate bystander reporting. A cohesive program for encouraging intimate bystanders to report must confront the fears and mistrust that arise from historical, personal, and community experiences of trauma resulting from racism and law enforcement violence.

Narratives of Radicalization and Deradicalization

Researchers at the RAND Corporation studied the pathways of radicalization and deradicalization among 36 former extremists (28 former white supremacists and eight former Islamic extremists).7 One major takeaway from this NIJ-funded study was that profound and unexpected negative experiences often created a search for meaning that prompted budding extremists to look for new ways of interpreting the world. Such experiences ranged widely — from relationship dissolution to job loss to losing a close friend in military combat. But each created a sense of deep loss, disappointment, and existential crisis that created a desire to find meaning in life again. Former extremists described how "converting" to an extremist mindset helped them achieve clarity and purpose and find a reason (and punishable target) for their unhappiness. In some cases, the traumatic, negative life events led to social isolation; consequently, individuals sought a sense of social belonging and found it in radical groups and ideologies.

"So, if I could pick a spot for somebody to intervene ... the first one would have been during the abusive relationships that my father had with the family."

Source: "Research on Domestic Radicalization to Violent Extremism: Insights From Family and Friends of Current and Former Extremists," award number 2017-ZA-CX-0005.

The study also revealed that recruiters for extremist organizations knew how to recognize and target the signs of social and emotional distress when recruiting new members. For example, recruiters for white supremacist groups recognized individuals who had been bullied and provided both a frame of reference for understanding "white victimization" and the need for whites to rally together. These recruiters even targeted towns that had recently undergone economic transformation and loss of major employers. Moreover, radical organizations often welcomed new recruits with events that featured camaraderie and social

bonding; these ranged from community barbecues to organized involvement in street violence.

Former extremists and their loved ones described how, once they had converted to the radical extremist cause, the sense of being a member of an aggrieved minority group (but nonetheless part of a collective rather than alone or isolated) galvanized further involvement in the cause and provided some immediate relief from psychological distress. However, former extremists also described how extremism itself could sometimes exacerbate distress, such as through involvement in substance use within groups or involvement in traumatic violence.

Although extremist groups seemed sufficiently adept at satisfying the social and emotional needs of individuals in order to gain and retain members, the former extremists also described how their continued distress opened opportunities for deradicalization. The most common feature of successful deradicalization among participants was the experience of love, kindness, and support — often from a member of a hated group. (For example, a Turkish immigrant provided employment and emotional support to a white supremacist.) In some cases, counterradicalization groups orchestrated this exposure (for example, by bringing extremists into contact with former members of gangs who had left a life of violence). Sometimes these experiences of kindness and support blossomed into lifelong friendships or even romantic partnerships, which replaced the support and sense of meaning that radical extremist groups had provided.

"If I had more contact with Black people, with Jewish people, with people of color in general at that point in time, at that juncture [after I had been a crime victim], it would have been a very different thing."

Source: "Research on Domestic Radicalization to Violent Extremism: Insights From Family and Friends of Current and Former Extremists," award number 2017-ZA-CX-0005.

These narratives and other studies⁹ of deradicalization pathways provide hope that knitting together the social and emotional fabric of communities and individuals who have experienced loss and disruption could help decrease radicalization and increase exit from radical extremist groups. In other words, providing social and emotional support after traumatic life events may prevent extremist groups from using such experiences to recruit new group members. Furthermore, providing support and love in a patient and forgiving way may help coax more members out of extremist groups and, in some cases, lead them to help others exit as well.

However, such interventions are often profoundly time- and labor-intensive. The core challenges to implementation will be how to systematize this type of exposure to diversity, kindness, and social and emotional support so that they are features of the socioecology rather than rare, high-cost, reactive solutions. Importantly, such large-scale changes will also naturally decrease other negative outcomes, such as involvement in gangs and criminal violence, substance use, and family violence.

"So when people leave [a radical group] and there's no one or nothing around, typically one of two things happen[s]. Either they become very self-isolated, very depressed, and they just kind of keep moving on with life but it's very lonely ... or they come out, they deal with the isolation and they deal with depression, they realize that this society that begged for them to leave this hate and everything else refuses to accept them because of what they were involved in before, so then they get more angry and they go right back."

Source: "Research on Domestic Radicalization to Violent Extremism: Insights From Family and Friends of Current and Former Extremists," award number 2017-ZA-CX-0005.

Trauma-Informed Practices Across the Prevention Spectrum

Trauma and its mental health consequences are not always part of a person's development to violent

extremism. But when they are involved — as described in these three studies — practitioners and policymakers should be aware so they can appropriately address them through a public health approach with prevention activities at the primary, secondary, and tertiary levels (see exhibit 2).

There are, however, important considerations:

- Trauma exposure is not only manifest in symptoms but also in worldviews, identities, and relationships to communities and organizations in ways that affect trust in institutions, decision-making, and actions.
- Contextual factors shape experiences of trauma and mental health issues. Therefore, researchers need to perform a deeper and more systematic examination of how economic, historical, cultural, and community factors may shape vulnerabilities — and appropriate responses to those vulnerabilities.
- Vulnerabilities associated with trauma exposure and mental health issues are not necessarily unique to violent extremism. They can be associated with many other negative outcomes, such as other criminal activity, suicide, or substance use. Therefore, prevention approaches for domestic radicalization and violent extremism must be integrated with other prevention goals and activities.

How do we take the emerging knowledge about vulnerabilities related to trauma exposure and mental health experiences and translate it into effective, scalable interventions across the prevention spectrum? One approach is to employ and adapt trauma-informed practices that have been designed for and applied in other systems, such as health care, education, and juvenile justice.

According to the Substance Abuse and Mental Health Services Administration within the U.S. Department of Health and Human Services, a trauma-informed approach seeks to "[r]ealize the widespread impact of trauma and understand paths for recovery; [r]ecognize the signs and symptoms of trauma in patients, families,

Exhibit 2. A Public Health Approach To Addressing Domestic Radicalization and Violent Extremism

1

PRIMARY PREVENTION

Reduces violent extremism risk factors and enhances protective factors for populations.

Create public awareness campaigns that highlight that there is no single pathway to extremism, nor is there a single type of individual most vulnerable to extremism.

Provide psychosocial programming aimed at helping young adult community members avoid or cope with negative events, such as exposure to acts of discrimination and hate (enhances movement toward nonviolence and constructive civic engagement).

Recognize that one size does not fit all and create diverse programming designed to reach diverse young adults.

Hold community events with community members and police together, offering opportunities for positive experiences of police interaction.

Seize opportunities for police to play more of an educational role with newer immigrants, helping them understand the law and their rights and responsibilities as citizens.

Implement community-oriented policing programs to improve trust and community relations.

2

SECONDARY PREVENTION

Helps persons at elevated risk of radicalization diminish or end their involvement in violent extremism.

Make counseling and mental health support available from the time someone is considering reporting to after they make the report (crucial in easing the fear and anxiety accompanying the painful and emotionally challenging process of reporting a loved one).

Pay attention to how police violence shapes intimate bystander reporting; confront the fears and mistrust that arise from historical, personal, and community experiences of trauma from racism and police violence.

Train community practitioners in targeted violence prevention.

Bring community practitioners and law enforcement together to form a behavioral threat assessment and management team to facilitate prevention.

Perform community outreach and educational initiatives.

3

TERTIARY PREVENTION

Helps persons with known involvement in violent extremism exit and end further involvement.

Extract and deradicalize (involves tremendous time and effort, serendipity).

Scale up the factors that enable deradicalization; systematize and test at larger scale: exposure to diversity, social support, addiction model of hatred and extremism.

and staff; [i]ntegrate knowledge about trauma into policies, procedures, and practices; and [a]ctively avoid re-traumatization." In the United States, several major institutions — including the National Center for Post-Traumatic Stress Disorder and the National Child Traumatic Stress Network — have developed, evaluated, and disseminated trauma-informed approaches through multiple systems.

There are several ways to expand core traumainformed practices from these other systems into violent extremism prevention. One way is to focus on individual assessment. Individuals who are assessed for possible involvement in extremism and violence should also be assessed for trauma exposure and mental health consequences using widely available, standardized screening instruments and clinical measures. If present, trauma should then be incorporated into the comprehensive formulation of the case, especially as a possible driver for involvement in extremism or violence.

A second way of expanding trauma-informed practices is to focus on the proper management of trauma-related mental health and other behavioral consequences in individuals and families. For example, helping an individual better manage their mental health disorder or symptoms can be crucial to their movement away from extremism and violence.

Additionally, their involvement in extremism and violence often provides them with experiences that compensate for or alleviate their distress, and they cannot give up such involvement without other measures that provide such relief.

A third way to use trauma-informed approaches is to move beyond the realm of disorders and symptoms and instead focus on trauma's impact in broader psychosocial experiences and well-being. For example, Kai Erickson focuses on trauma and communities and defines "communal trauma" as a loss of the social fabric that ties people together in communities. 12 Another example is moral injury, which can occur when, "in traumatic or unusually stressful circumstances, people may perpetrate, fail to prevent, or witness events that contradict deeply held moral beliefs and expectations. "13 Viewed from these perspectives, trauma can powerfully shape collective and individual experiences and identities, a process that needs to be better understood and addressed.

Trauma-informed approaches have been extended into the practices of risk communication, journalism, and memorialization to better acknowledge and process trauma-related disruptions. In the prevention of violent extremism, we need to better understand and address the broader impacts of trauma through public communications by law enforcement, other government agencies, community partners, and the media. We should simultaneously work to integrate trauma-informed practices as has been done in other systems, including juvenile justice and schools, while building the prevention system for violent extremism.

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This article discusses the following awards:

- "Understanding Pathways to and Away From Violent Radicalization Among Resettled Somali Refugees," award number 2012-ZA-BX-0004
- "Community Reporting Thresholds: Sharing Information With Authorities Concerning Terrorism Activity," award number 2018-ZA-CX-0004
- "Research on Domestic Radicalization to Violent Extremism: Insights From Family and Friends of Current and Former Extremists," award number 2017-ZA-CX-0005

Notes

 Of note, each study uses a different term to describe an individual's openness to or involvement in the use of violence (openness to violent extremism, radicalization to violence, targeted violence and terrorism). The difference in terms highlights language shifts in the field over time and also reflects how each study conceptualized and measured openness to or involvement in the use of violence. For more detailed information, see each study report.

- Unless otherwise noted, all data in this section come from B. Heidi Ellis et al., "Understanding Pathways to and Away From Violent Radicalization Among Resettled Somali Refugees," Final report to the National Institute of Justice, award number 2012-ZA-BX-0004, November 2016, NCJ 250415, https://www.ojp.gov/pdffiles1/nij/ grants/250415.pdf.
- Researchers used four key attitudinal and behavioral variables to group participants: gang involvement, openness to violent extremism, delinquency, and civic engagement.
- 4. Ellis et al., "Understanding Pathways to and Away From Violent Radicalization."
- David P. Eisenman et al., "Bystander Reporting To Prevent Violent Extremism and Targeted Violence: Learning From Practitioners," *Behavioral Sciences of Terrorism and Political Aggression* (2022), https://doi.org/10.1080/19434472.202 2.2130960.
- Unless otherwise noted, all data in the remainder of this section come from David P. Eisenman et al., "Community Reporting Thresholds: Sharing Information With Authorities Concerning Terrorism and Targeted Violence," Final report to the National Institute of Justice, award number 2018-ZA-CX-0004, January 2022, NCJ 304119, https://www.ojp. gov/pdffiles1/nij/grants/304119.pdf.
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- 11. Trauma-informed approaches include multiple evidencebased interventions, which can be used in management across the prevention spectrum. These include Psychological First Aid and Skills for Psychological Recovery, which trained laypersons can deliver in community settings, along with other approaches that can be delivered in clinical settings, including Trauma-Focused Cognitive Behavioral Therapy, Cognitive Processing Therapy for women, and Trauma and Grief Component Therapy for those who have experienced traumatic loss. Josef I. Ruzek et al., "Psychological First Aid," Journal of Mental Health Counseling 29 no. 1 (2007): 17-49, https://doi. org/10.17744/mehc.29.1.5racqxjueafabqwp; Glenn N. Saxe, B. Heidi Ellis, and Adam D. Brown, Trauma Systems Therapy for Children and Teens, 2nd ed. (New York: Guilford, 2015); Judith A. Cohen, Anthony P. Mannarino, and Esther Deblinger, Treating Trauma and Traumatic Grief in Children and Adolescents (New York: Guilford, 2006); Patricia A. Resick, Candice M. Monson, and Kathleen M. Chard, Cognitive Processing Therapy for PTSD: A Comprehensive Manual (New York: Guilford, 2017); and William Saltzman et al., Trauma and Grief Component Therapy for Adolescents: A Modular Approach to Treating Traumatized and Bereaved Youth (Cambridge: Cambridge University Press, 2017).
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ADVANCES IN DETECTING AND IDENTIFYING EXPLOSIVES AFTER AN ATTACK

BY JOHN GOODPASTER AND BETH PEARSALL

Two NIJ-funded studies examine new ways to analyze trace evidence in the aftermath of an explosion or bombing.

he investigation following an explosion or bombing plays a vital role in uncovering the truth about the incident. Criminal justice practitioners often need to build cases and attribute involvement in a crime by locating and using trace amounts of evidence remaining at the scene. The evidence recovered can be critical in identifying, charging, and ultimately convicting the person who perpetrated the crime to prevent further attacks.

Investigations around explosives are inherently multidisciplinary, involving law enforcement officers and various specialists including scientists and engineers. Explosives investigations have three stages: prevention, reaction, and reconstruction of the incident (see exhibit 1). Investigators characterize each stage by where it tends to occur — at security checkpoints, during search warrants and at the crime scene, and in the forensic laboratory. During each stage, investigators can use different types of testing, such as presumptive field tests, explosives-detecting canines, portable instruments, and confirmatory testing with advanced laboratory instrumentation.

The National Institute of Justice (NIJ) has a long history of helping to advance the forensic technology used in the aftermath of terrorist attacks. This article highlights findings from two NIJ-funded projects related to the reconstruction phase of explosives investigations. The first project, funded in fiscal year 2017, examines the application of a new analytical tool for explosives traces: gas chromatography-vacuum UV spectroscopy (GC-VUV). The second project, funded in fiscal year 2018, looks at whether isotopic signatures of the residues at a blast site can link an explosive charge to its manufacturing source. Both projects help expand the toolkit investigators have for developing leads from these challenging crime scenes.

The Role of Chemical Analysis in Explosives Investigations

Over the years, forensic chemists have used physical, microscopical, wet chemical, and instrumental methods to identify and compare evidence.

Instrumental methods lie at the heart of the forensic

These NIJ-funded projects show the promise and the challenges in applying advanced analytical methods to the complex aftermath of an explosion or bombing.

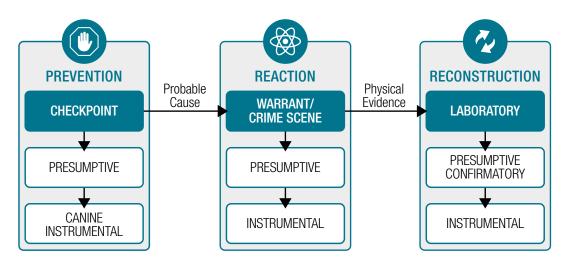
examination of controlled substances, ignitable liquids, explosives, and many other forms of physical evidence. This stems from the ability of modern chemical instrumentation to measure substances with appropriate sensitivity, selectivity, and specificity. However, forensic chemists must understand and consider the strengths and weaknesses of any given instrument.

In general, any instrumental method of analysis for explosives investigations must possess three main qualities:

 Sensitivity is the extent to which the instrument responds to low levels of the substance being analyzed (or the analyte). It is commonly defined as the slope of the calibration curve for an analyte. A highly sensitive method increases the chances of detecting an analyte if it is present, even at low levels, and avoiding false negatives. Highly sensitive methods also decrease the need for sample pre-concentration, which often involves applying heat and a flow of inert gas to a sample or other methods to increase the concentration of the analyte.

- Selectivity is the ability of the instrument to respond to an analyte that is present in a complex mixture, including compounds that have similar chemical structures to the analyte. Instruments often achieve this by chemically separating the mixture of compounds so that they can analyze each compound on its own without other components of the mixture interfering. Increased selectivity allows researchers to analyze highly complex samples without extensive preliminary clean-up steps, which saves time and money. In addition, selective methods can detect an analyte even in the presence of interferences or compounds that may mask the analyte.
- Specificity is the ability of the instrument to unambiguously identify the analyte. Several techniques are capable of discerning differences between similar analytes based on small structural differences. Increased specificity eliminates ambiguity when identifying an analyte. This is particularly valuable when the protocols for a given evidence type rely on the unambiguous identification of specific compounds to reach a

Exhibit 1. Stages of Explosives Investigations



scientific and legal opinion. For example, chemists must identify nitroglycerin in post-blast debris in order to infer that double-base smokeless powder (which contains large amounts of nitroglycerin) was the original explosive.

In forensic analyses, all three of these factors come into play. Sensitivity is important because many evidence types contain the analyte of interest at trace levels (for example, post-blast explosives and ignitable liquid residues). Selectivity is important because most items of evidence are messy and can contain many interferents. And specificity is crucial as laboratory results must be reliable and probative for courts to admit them as evidence.

A New Tool for Explosives Analysis

A relatively recent development in the field of instrumental chemical analysis couples a vacuum UV (VUV) spectrometer to a gas chromatograph (GC).¹ Its application to explosives analysis by NIJ-funded researchers at Indiana University is even newer.

A sample separated by GC may contain hundreds of compounds. The sample is vaporized and travels through a long, thin, coated tube. Each component in the mixture has its own affinity for the walls of the tube compared to the carrier gas, which affects the time it takes to travel through the column. As a result, over the course of a few minutes, the mixture separates — the compounds with low affinity for the column walls emerge first, and the compounds with high affinity emerge last. This allows the instrument to analyze each component of the mixture separately.

VUV spectroscopy can serve as the detector for the GC column. The analytes emerging from the column pass into a flow cell, and the spectrometer measures their ultraviolet absorption in real time. All organic compounds absorb in the VUV (roughly 100-200 nanometers), and small changes in chemical structure can result in significant changes in the VUV spectrum.²

The researchers at Indiana University found that the sensitivity of GC-VUV will differ for various analytes

and under various conditions. In general, some materials require only picograms (10⁻¹² grams) to meet their detection limits. For explosives, the method can readily detect concentrations in the low parts-permillion (0.0001%) range.³

The selectivity of GC-VUV comes from the fact that certain functional groups will reliably absorb in distinct regions of the VUV spectrum. By selectively filtering these regions, chemists can cancel out interferences.

Researchers have demonstrated the specificity of GC-VUV under some conditions using statistical methods.⁵ For example, Cruse and Goodpaster showed that the temperature of the flow cell can strongly influence the VUV spectra of some explosives, yielding complex and highly specific results.⁶ Reavis and Goodpaster have also successfully identified and quantified intact smokeless powder particles from pipe bomb debris.⁷

Future work in this area should include attempts to increase GC-VUV's sensitivity. This is necessary because post-blast residues of high explosives typically yield extracts with concentrations in the parts-per-billion range. It will also be crucial to increase specificity by increasing the level of spectral detail measured in the VUV.

Post-Blast Explosives Attribution

In crimes involving explosives, examining the explosive material itself is preferable when attempting to attribute the source of the device. However, this is not always straightforward. It is sometimes challenging for forensic science practitioners to analyze the residues collected after the blast because the environment may have been contaminated, the amount of explosive remaining after detonation may be too low, and the useful chemical signatures may degrade. These factors limit the analytical methods that they can apply. Currently, there is no established method for forensic science practitioners to link an explosive charge to its manufacturing source by studying the chemical signatures detected in post-blast trace residues.

With support from NIJ, researchers at the Massachusetts Institute of Technology Lincoln Laboratory collaborated with statisticians at South Dakota State University to determine whether isotopic and chemical signatures that might link explosive materials to their manufacturing sources remain preserved after detonation. This includes whether investigators can recover these explosive materials from a blast site, measure them at a detectable level, and match them to pre-blast signatures.8

The team conducted field detonations of several commonly encountered explosives materials, including RDX, TNT, and ammonium nitrate-aluminum (AN-AL). They designed the tests to be as operationally relevant as possible by using an open outdoor environment. For each detonation, they collected trace residues using methods relevant to scenarios that post-blast investigators would encounter, including swabbing surfaces and extracting residues from soil.

Then the team processed the samples of post-blast residue and analyzed them to measure their isotopic and chemical signatures.9 They used statistical analysis to compare these post-blast signatures to those from pre-blast samples to determine if they remained preserved after detonation.

In total, the team collected 108 post-blast samples and three pre-blast samples for each explosive type. They concluded that the results showed some consistency between pre- and post-blast explosive materials that could be relevant for source attribution. AN-AL yielded the most useful post-blast data.

One key limitation to the study was obtaining recoverable amounts of RDX and TNT. These highorder explosives result in detonations that consume all or nearly all the explosive material. Nonetheless, the research team concluded that the overall results show promise in the ability to detect and identify signatures for attribution in post-blast residues. They noted that this study provides the first step in developing a new investigative method to associate an explosives attack to a person suspected of committing the crime (through a manufacturer) to supplement current postblast investigative methods.

Moving Forward

These projects show the promise and the challenges in applying advanced analytical methods to the complex aftermath of an explosion or bombing. Because these difficult trace samples challenge the limits of current technology, the field needs continued research and development to pave the way for the tools of the future. Eventually, those tools may help investigators extract more information from the scene: developing leads, identifying individuals suspected of committing the crime, and confirming the source of a device with greater confidence.

Explore NIJ's full forensic science research and development portfolio at https://nij.ojp.gov/ topics/forensics.

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This article discusses the following awards:

- "Coupling Gas Chromatography (GC) and Vacuum Ultraviolet (VUV) Spectroscopy for Forensic Applications," award number 2017-R2-CX-0018
- "Post-Blast Explosives Attribution," award number DJO-NIJ-19-RO-0002-2

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RESEARCH AND PRACTITIONER PERSPECTIVES ON THE REHABILITATION AND REINTEGRATION OF VIOLENT EXTREMISTS

BY KEVIN D. LOWRY. MUBIN SHAIKH. AND RAVEN A. LEWIS

Research and practitioners' experiences provide insight into building capacity for working with violent extremists and meeting their specialized needs.

he United States has experienced a significant increase in individuals who have radicalized to crime and violence in support of domestic terrorism (see sidebar, "Defining Domestic Terrorism"). These individuals range from those caught up in the moment and criminal opportunists, to those who have meticulously planned and carried out violent acts.

Successful rehabilitation and reintegration of radicalized incarcerated individuals has challenged probation and parole agencies, practitioners, and communities. Their criminal acts were motivated by radicalization, and thus the underlying causes of their radicalization must be addressed to prevent recidivism. However, practitioners and communities often have limited training and guidance on working with these individuals and meeting their specialized needs.

This article aims to overcome these gaps in the current system by offering a full continuum of holistic, evidence-based strategies intended to foster the successful rehabilitation and reintegration of violent extremists into society.

Disengagement and Deradicalization

Practitioners and community stakeholders challenged by working with extremists often ask, "Is deradicalization possible, and if so, how is it accomplished?" To answer this question, consideration should be given to the available evidence.

Researchers from the University of Maryland's National Consortium for the Study of Terrorism and Responses to Terrorism (START), who were sponsored by the National Institute of Justice (NIJ), developed a presentation to help train federal probation and pretrial services officers through a partnership with the Federal Judicial Center. The presentation explains that working with extremists often entails tracking varying levels of success. These levels are defined by the "3 Ds" — desistance from criminal activity, disengagement from extremist associations and behaviors, and deradicalization (a cognitive shift away from beliefs supporting criminal behavior).2 Although desistance and disengagement are more frequently achieved than deradicalization, failure to deradicalize is not a measure of reengagement in violent extremism.3

Defining Domestic Terrorism

Several definitions are used for domestic terrorism. The Homeland Security Act defines terrorism as

any activity that — (A) involves an act that — (i) is dangerous to human life or potentially destructive of critical infrastructure or key resources; and (ii) is a violation of the criminal laws of the United States or of any State or other subdivision of the United States; and (B) appears to be intended — (i) to intimidate or coerce a civilian population; (ii) to influence the policy of a government by intimidation or coercion; or (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping.¹

This statute provides a definition — not a criminal charge. Most individuals charged with domestic terrorism-related offenses are prosecuted for homicide, assault, arson, firearms and explosives offenses, hate crimes, crimes against property, and other offenses that may not have sentence enhancements for crimes related to domestic terrorism. As a result, many domestic terrorism-related crimes are not identified as such or tracked accordingly, thus distorting the true picture of domestic terrorism in the United States and limiting necessary responses. This has led to debates about whether there should be greater federal legislation on offenses related to domestic terrorism and sentence enhancements like those for foreign terrorismrelated offenses.

¹ 6 U.S.C. 101, https://www.govinfo.gov/content/pkg/USCODE-2021-title6/pdf/USCODE-2021-title6-chap1-sec101.pdf.

The START presentation also covers areas critical to the disengagement process, including:⁴

- Reasons why individuals become involved in extremist groups.
- Which extremist groups and ideologies are more likely to have members recidivate.

- Possible barriers to disengagement.
- Push and pull factors that can be incorporated in case planning strategies for individualized supervision and disengagement processes.
- Reasons why people become disillusioned with extremism.
- Triggers or circumstances that contribute to relapse, reengagement, or recidivism.
- Circumstances and factors that affect time frames for disengagement.
- Factors and support services that contribute to the disengagement process.
- The significance of probation and parole personnel building relationships with people under supervision.

Additional NIJ-supported research provides insight into what supports and hinders disengagement. One project revealed that emotional factors — as opposed to intellectual factors — are influential in former extremists' disengagement decisions. Emotional factors include familial support, the discovery of purpose through work, prosocial relationships with others, and connections with prison or probation personnel.⁶ Conversely, barriers to disengagement are linked to having extremist family members and friends, poor social mobility, and prior criminal convictions, among other factors.⁷ A survey of probation officers found most contend that job training, substance use treatment, cognitive behavioral therapy,8 and psychological-behavioral interventions are the most effective strategies for a successful reintegration program.9 Unfortunately, a prominent barrier to reintegration is limited access to both mental health services and practitioners willing or trained to work with violent extremists. 10

Ultimately, these research projects point to a lack of specialized services for violent extremists. 11 Still, they provide guidance for probation and parole agencies and practitioners to consider during case planning.

Educational Materials and Training Resources on Violent Extremism and Terrorism

Although training and treatment modalities for work related to the rehabilitation and reintegration of individuals involved in violent extremism and terrorism remain limited, the following are some available educational materials and training resources in this specialized area:

- 1. The National Counterterrorism Center, *2021 U.S. Violent Extremist Mobilization Indicators Booklet*, https://www.dni.gov/index.php/nctc-newsroom/nctc-resources.
- 2. Joint Counterterrorism Assessment Team, "First Responder's Toolbox: Reentry Service Partnerships Important in Terrorism Prevention," https://www.dni.gov/files/NCTC/documents/jcat/firstresponderstoolbox/127s_-_Reentry_Service_Partnerships_ Important in Terrorism Prevention.pdf.
- 3. U.S. Department of Homeland Security, "Prevention Resource Finder," https://www.dhs.gov/prevention.
- 4. Joint Terrorism Assessment Team, "First Responder's Toolbox: Reporting Suspicious Activity Critical for Terrorism Prevention," https://www.dhs.gov/sites/default/files/2022-11/Reporting%20Suspicious%20Activity%20-%20First%20Responders%20 Toolkit.pdf.
- 5. Federal Bureau of Investigation, "Making Prevention a Reality: Identifying, Assessing, and Managing the Threat of Targeted Attacks," https://www.fbi.gov/file-repository/making-prevention-a-reality.pdf/view.
- 6. Nationwide SAR Initiative, "Suspicious Activity Reporting: Process Implementation Checklist," https://www.dhs.gov/sites/default/files/publications/17 0315 NSI SAR-Process-Implementation-Checklist.pdf.
- 7. Association of Threat Assessment Professionals, https://www.atapworldwide.org/.
- 8. Violence Prevention Training, https://vptraining.org.
- 9. Federal Bureau of Investigation, "Lone Offender Terrorism Report," https://www.fbi.gov/file-repository/lone-offender-terrorism-report-111319.pdf/view.
- 10. United States Senate Committee on Homeland Security & Governmental Affairs, "The Rising Threat of Domestic Terrorism," https://www.hsgac.senate.gov/wp-content/uploads/imo/media/doc/221116_HSGACMajorityReport_ DomesticTerrorism&SocialMedia.pdf.

The Role of Probation and Parole Agencies in Rehabilitation and Reintegration

Probation and parole agencies provide community supervision that contributes to public safety and facilitates the disengagement, rehabilitation, and reintegration of violent extremists. Evidence-based practices related to violent extremism are rare; however, there are strategies and frameworks currently in use that are guided by the experiences of national and international researchers and practitioners. Two strategies for working with violent extremists are: (1) designating specialist probation and parole officers, and (2) adopting a multidisciplinary team approach.

Specialist Probation and Parole Officers

Specialist probation and parole officers receive training and continue to educate themselves on the radicalization process, extremist ideologies, and mobilization behaviors (see sidebar, "Educational Materials and Training Resources on Violent Extremism and Terrorism"). They stay current on the culture, trends, and signs and symbols used by violent extremist groups or individuals. ¹⁴

These officers are trained and experienced in specialized risk and needs assessments, case planning, disengagement practices, rapport building, and interviewing skills, and deliver these services holistically. ¹⁵ Reduced officer caseloads help support this work at the proper engagement levels.

Multidisciplinary Team Approach

Each probation and parole jurisdiction and office has a unit or team working in this specialized area. The team holds regular meetings led by the specialist officers and their immediate supervisors. Mid- to upper-level managers have expertise in working with violent extremists, allowing them to appropriately guide this work and participate in the team's case planning, strategy sessions, and training. ¹⁶

The multidisciplinary, highly-trained team facilitates the disengagement and supervision process in a holistic manner. The team begins the reintegration planning process during the prison pre-release investigation, reviewing the proposed release plan and considering placement in a residential reentry center. The team coordinates a close-knit, individualized case planning and intervention process that may include mental health and substance use counselors, mentors, and halfway house staff, along with input from law enforcement, social services, and concerned family members.¹⁷

The team conducts regular risk and needs assessments. When possible, this process includes use of specialized tools, such as the Extremist Risk Guidance (ERG22+), Violent Extremist Risk Assessment-2 (VERA-2), or Terrorist Radicalization Assessment Protocol (TRAP18), based on the circumstances of the case. 18 Although these tools currently do not offer actuarial level prediction for risk of recidivism, they do offer assistance in addressing issues related to extremism. The risk and needs assessments focus on the underlying motivating factors of radicalization and current levels of engagement, intent, and capability (see sidebar, "Example Elements of the Extremist Risk Guidance (ERG22+)"). The case plan addresses push and pull factors, including developing a new prosocial identity, relationships, and ties to the community; meaning and purpose; significance and status; meaningful employment; and specialized treatment. NIJ's research and the START presentation are helpful with this process and with identifying possible barriers to rehabilitation and reintegration.¹⁹

The team ensures that the proper special conditions of supervision are in place. This may include identifying specialized services to reduce recidivism (for example, drug or mental health treatment, mentors) and enforcing containment measures (that is, restrictions) to enhance public safety (for example, location monitoring, computer monitoring, polygraph, search and seizure)²⁰ (see sidebar, "Special Conditions of Supervision"). These conditions should be used strategically, judiciously, and with parsimony to avoid unintended consequences.

During supervision, the specialist officers collaborate with team members, law enforcement, and stakeholders to monitor for high-risk behaviors and criminal or technical violations. They swiftly intervene to mitigate risk and adjust supervision structures to include reincarceration if necessary.

Although these recommendations focus on supervision, rehabilitation, and reintegration, the team's activities for violent extremists must begin at the time of arrest and continue through pretrial, sentencing, incarceration, and community supervision to align these processes as a full continuum of services.²¹ This will require systematic guidance and training in each of these specialized areas.

Specialized Services Needed

Traditional mental health and other types of services are available to this population. However, there are not enough treatment professionals, social service providers, mentors, nongovernmental organizations (NGOs), and civil society organizations that have specialized or adequate training to work with violent extremists. Recruitment and education initiatives are needed to overcome the concerns of individuals and organizations who have chosen not to work with this population and provide the necessary training and incentives to gain their services.

One specialized service that has grown over the years is using former extremists who have demonstrated significant activity working against extremism²² as peer support workers. These professional "formers"

Example Elements of the Extremist Risk Guidance (ERG22+)

"The team considers four primary categories of factors when assessing defendant/offender risk, as identified through the use of the ERG22+. Through the tool, the team establishes the defendant's/ offender's level of engagement in the group, cause, or ideology; intent level to carry out extremist actions and criminal behavior; capability to carry out acts of violence; and possible protective/ mitigating factors. Extremists with military training, knowledge of explosives and firearms, prison experience, and access to extremist networks and resources bring higher levels of risk, as they have greater capability to carry out acts of violence. In addition, the team utilizes the ERG22+ to identify mitigating factors and positive progress that allows for adjustments in the intensity of the supervision plan. The basic factor areas of the tool are as follows:

Engagement:

- 1. Need to redress injustice and express grievance
- 2. Need to defend against threat
- 3. Need for identity, meaning, and belonging
- 4. Need for status
- 5. Need for excitement, comradeship, or adventure
- 6. Need for dominance
- 7. Susceptibility to indoctrination
- 8. Political/moral motivation
- 9. Opportunistic involvement
- 10. Family or friends support extremist offending
- 11. Transitional periods
- 12. Group influence and control
- 13. Mental health

Intent:

- 14. Over-identification with a group or cause
- 15. Us and them thinking
- 16. Dehumanization of the enemy
- 17. Attitudes that justify offending
- 18. Harmful means to an end
- 19. Harmful end objectives

Capability:

- 20. Individual knowledge, skills, and competencies
- 21. Access to networks, funding, and equipment
- 22. Criminal history
- + Any other factor

When the team has identified the underlying motivating factors of the individual's radicalization, a complete plan addressing each motivating factor is developed to be carried out through the assigned probation/parole officers, practitioners, and other necessary community and social services."

Source: Kevin D. Lowry, "Responding to the Challenges of Violent Extremism/Terrorism Cases for United States Probation and Pretrial Services," *Journal for Deradicalization* no. 17 (2018): 28-88, http://journals.sfu.ca/jd/index.php/jd/article/view/175.

Special Conditions of Supervision

Below are examples of special conditions of supervision. These special conditions may not be entirely applicable for some circumstances and will need to be tailored for pretrial release, probation, and parole. They should be used strategically, judiciously, and with parsimony to avoid unintended consequences.

Computer/Internet Restrictions and Monitoring

You shall not possess or use a computer or have access to any online service without the prior approval of the probation officer. Your cooperation shall include, but not be limited to, allowing installation of a computer and internet monitoring program and/or identifying computer systems, internet-capable devices, and similar memory and electronic devices to which you have access. Monitoring may include random examinations of computer systems along with internet, electronic, and media storage devices under your control. The computer system or devices may be removed for a more thorough examination, if necessary. You shall contribute to the cost of such monitoring services, based on your ability to pay, as deemed appropriate by the probation officer.

You shall not access Internet Relay Chats or newsgroups or participate in any online social environment (i.e., Facebook, Twitter/X, Second Life, LinkedIn, Craigslist, FaceTime, WhatsApp, video/audio) or texting applications that allow user interaction unless preapproved and authorized by the probation officer and Court.

The defendant's written online communications, if any, shall be conducted in the English language unless the defendant receives the approval of the supervising officer.

No Extremist/Terrorist Materials

You shall not possess, view, access, or otherwise use material that reflects extremist or terrorist views or is deemed to be inappropriate by the probation officer.

Media

You shall not have any direct, indirect, or third-party contact with any media personnel, journalist, or reporter unless granted permission from the Court. If you are approached by any media personnel, journalist, or reporter, you are not to give a comment or statement and shall immediately inform the supervising probation officer.

Mental Health Counseling

You shall participate in a mental health counseling program as approved by the probation officer. This program may include psychological/psychiatric counseling or treatment, family counseling, and mentor support.

Polygraph

You shall submit to periodic polygraph testing at the direction of the probation officer to ensure compliance with treatment and the requirements of supervision.

Source: United States Probation and Pretrial Services, District of Minnesota, "Conditions of Supervision for Extremist Cases," unpublished, 1-2.

are considered nongovernmental and are thus viewed as more objective and without lingering hostility toward an institution or related grievances. Peer support interventions may bring an authenticity that is generally unavailable in a correctional context, where staff may be seen as "part of the system." Former extremists are credible messengers who can bridge this gap with radicalized individuals by

sharing personal and inspiring experiences and counter-narratives to guide the disengagement and rehabilitation process.²³

Specialized NGOs that conduct peer mentoring have shown promise in helping defense counsel intervene with radicalized individuals throughout their trajectory from the pretrial period into the post-sentencing phase, up to and including pre-release activities vital for the rehabilitation and reintegration process.²⁴ These organizations can be a powerful tool for intervention services that represent veteran care, religious and cultural sensitivity, and a trauma-informed care approach.

Any mentoring or peer support related to religion or theology should be voluntary and provided by a carefully selected and vetted source. This type of mentoring focuses on changing an individual's commitment to violent extremism rather than changing their religion or theology. This is similar to changing an individual's thinking, beliefs, and attitudes about criminal behavior, which is the goal of correctional treatment and rehabilitation for all individuals who commit crimes.²⁵

Probation and parole agencies could scale up their partnerships with NGOs, such as Life After Hate and Parents for Peace, or at least better understand that these are available resources. More data are needed on interventions involving the use of former extremists in the rehabilitation and reintegration process.

Likelihood of Recidivism and Appropriate Prevention and Intervention Strategies

There is little research to date on recidivism among violent extremists; the research that exists suggests that the recidivism rate is relatively low for most categories of extremists. ²⁶ However, rates are higher for those involved in right-wing or single-issue domestic terrorism like white supremacist, anti-government/militia, and anti-abortion groups — surpassing violent jihadist extremists and other extremist types. ²⁷

NIJ and START's research can help agencies focus on factors that increase risk and lead to better informed prevention and swift interventions for those who reengage in violent extremism and domestic terrorism-related activities during the reintegration process. As previously discussed, specialist probation and parole officers can collaborate with

law enforcement and other stakeholders to monitor for high-risk behaviors and criminal or technical violations, swiftly intervene to mitigate risk, and adjust supervision structures to include reincarceration if necessary. Equally important, NIJ and START's research can help probation and parole agencies allocate resources to the most effective prevention and intervention strategies.

Recommendations

Gaps in the current system have challenged probation and parole agencies and communities throughout the United States as they work to rehabilitate and reintegrate violent extremists. Research and practitioners' experiences offer recommendations on building capacity for working with violent extremists and developing evidence-based practices for meeting their specialized needs. These recommendations provide guidance for a strategic action plan that includes:

- Strengthening interagency communication and partnerships to develop networks of law enforcement, specialized treatment providers, mentors, social services, NGOs, civil society organizations, and a variety of community support and resources.
- Designing a continuum of training modules that can be assembled into curricula that meet the needs of specific stakeholders, including probation and parole agencies.
- Developing practices and policies specific to violent extremists for probation and parole officers to use in pretrial services, pre-sentencing investigations, and community supervision.
- Constructing specialized risk and needs assessments for violent extremists.
- Combining the work of probation and parole officers, practitioners, and researchers to develop evidence-based practices for violent extremists.
- Standardizing competencies and expanding the use of former extremists and specialized NGOs to assist probation and parole agencies with interventions.

- Advancing standardized definitions and terminology for identifying violent extremists that can contribute to a national tracking system.
- Ensuring budgetary resources and staffing are at appropriate levels to support these initiatives.

To accomplish these steps, communities will need to establish initiatives to build partnerships and networks among government agencies and professionals working in this specialized area to help strengthen the work of probation and parole agencies as they reintegrate violent extremists. For example, many federal probation and pretrial services districts in the country are currently involved in the District of Minnesota's National Extremism/Terrorism Networking Group, which meets quarterly to share experiences, strategies for casework, and training. This could be replicated by probation and parole jurisdictions and practitioners throughout the United States.

Additional examples include the Federal Judicial Center's partnership with START to develop training for federal probation and pretrial services officers based on research by NIJ and START. There are also federal agencies that assist criminal justice agencies and their communities with training, educational materials, research projects, and resources through local and regional offices and online resources (see sidebar, "Educational Materials and Training Resources on Violent Extremism and Terrorism"). These agencies include the U.S. Department of Homeland Security, U.S. Department of Justice, National Counterterrorism Center, and the Federal Bureau of Investigation.

Building networks between these and other agencies can contribute to the development of evidence-based practices and training for working with violent extremists to build capacity for probation and parole agencies, practitioners, and their communities. Interagency communication and collaboration are necessary to support public safety and overcome gaps in the current system. Overall, with these strategies, stakeholders will be better positioned to establish a full continuum of holistic services that can lead to an individual's successful rehabilitation and reintegration as a law-abiding citizen.

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This article discusses the following awards:

- "Risk and Rehabilitation: Supporting the Work of Probation Officers in the Community Reentry of Extremist Offenders," award number 2019-ZA-CX-0003
- "Applying a Development Evaluation Approach To Address Community Safety and Health Challenges of Reintegration Programs in the USA," award number 2019-ZA-CX-0001

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 intranet page on extremism: https://fjc.dcn/content/
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- Pull factors are influences that entice vulnerable individuals toward criminal group involvement. Push factors are influences that drive vulnerable individuals toward an interest in criminal group involvement.
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