

National Institute of Justice

How Radicalization to Terrorism Occurs in the United States: What Research Sponsored by the National Institute of Justice Tells Us

Allison G. Smith, Ph.D.

June 2018

This paper was prepared with support from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, under contract number 2010F_10097. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily represent those of the Department of Justice.



U.S. Department of Justice Office of Justice Programs 810 Seventh St. N.W. Washington, DC 20531

David B. Muhlhausen, Ph.D.

Director, National Institute of Justice

This and other publications and products of the National Institute of Justice can be found at:

National Institute of Justice

Strengthen Science • Advance Justice NIJ.ojp.gov

Office of Justice Programs

Building Solutions • Supporting Communities • Advancing Justice OJP.gov

The National Institute of Justice is the research, development, and evaluation agency of the U.S. Department of Justice. NIJ's mission is to advance scientific research, development, and evaluation to enhance the administration of justice and public safety.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance; the Bureau of Justice Statistics; the Office for Victims of Crime; the Office of Juvenile Justice and Delinquency Prevention; and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking.

Opinions or conclusions expressed in this paper are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Executive Summary

Since its founding in 2012, the National Institute of Justice's Domestic Radicalization to Terrorism program has sponsored research on how radicalization to terrorism occurs in the United States in order to support prevention and intervention efforts. These projects have taken a variety of approaches to examining the process of radicalization to terrorism, but in spite of this there is substantial overlap in their findings, which collectively provide evidence of the importance of several facilitators of radicalization and the need to take into account how this process unfolds within individuals over time.

Facilitators of Radicalization to Terrorism	
Terrorist belief systems or narratives	
Identity processes	
Activities that demonstrate commitment to a terrorist group or cause	
Connections with terrorists in one's offline social network	
Connections with terrorists via the internet and/or social media	
Group dynamics	
Grievances	
Triggering events	

At the individual level, the radicalization process often involves embracing a terrorist belief system or narrative that identifies particular others or groups as "enemies" and justifies engaging in violence against them. Individuals may also begin to identify themselves as terrorists, as well as to engage in activities that highlight their commitments to their new beliefs, identities, and/or others who hold them. It is, however, important to note that while these beliefs and behaviors may facilitate the movement to terrorism, this outcome is not inevitable. Those close to these individuals may become aware of the changes that their friends and family members are undergoing and attempt to address them or seek help from others who can. An important implication of this is that trusted information and resources need to be available to assist in this effort. Another is that prevention and intervention efforts may benefit from addressing beliefs that justify violence and helping individuals to develop identities in which these beliefs are not central.

NIJ-sponsored research also highlights the social nature of radicalization to terrorism and the roles that connections with terrorists (online and/or offline) and group dynamics may play in this process. As individuals' relationships with others who support terrorism become stronger, they may begin separating themselves from those who do not share these beliefs, thus becoming increasingly isolated from people who might challenge their views. This suggests that dramatic changes in the people with whom an individual associates, or increasing insularity among existing groups of friends, may be causes for concern. It also suggests that intervention efforts may need to take into account both the individuals and those with whom they interact, as well as potentially facilitate establishing or re-establishing their relationships with nonextremists.

Finally, there is evidence that events in the larger community and societal contexts may also facilitate radicalization to terrorism. For example, individuals may experience real or perceived grievances — both personal and political — that may help to fuel their movement toward terrorism. Further, in some

cases, specific triggering events associated with these grievances may accelerate this movement. Thus, understanding these grievances and triggering events, as well as helping individuals to develop constructive ways to address them, may be important components of programs developed to prevent and intervene in the radicalization process.

In addition to identifying several common facilitators of radicalization to terrorism, the research sponsored by NIJ provides empirical evidence that individuals' processes of radicalization to terrorism may vary by the extremist ideologies and narratives they embrace, the time periods in which they radicalize, the groups or movements they join (or do not join, in the case of lone actors), and/ or their individual characteristics and experiences. Thus, while community members and practitioners can benefit from the types of evidence-based guidance provided by this research, it will continue to remain important that they take into consideration the specific characteristics and experiences of the individuals about whom they are concerned.

How Radicalization to Terrorism Occurs in the United States: What Research Sponsored by the National Institute of Justice Tells Us

Introduction

Since its founding in 2012, the National Institute of Justice's Domestic Radicalization to Terrorism program has sponsored research on how radicalization to terrorism¹ occurs in the United States in order to support prevention and intervention efforts.² In doing so, it has funded top researchers from around the country — and the world — to examine the process of radicalization using both well-established and cutting-edge social and behavioral science methods. These teams have studied a wide range of groups and individuals who support and commit ideologically motivated violence to further political, social, or religious goals, including Islamist terrorists but also those associated with anti-government, anticapitalist, nativist, and other political and social terrorist movements (often referred to as "left-wing," "right--wing," and "single-issue" terrorism in the literature).

Although many of these projects are ongoing, important findings regarding the process of radicalization to terrorism and the need to consider how this process evolves within individuals over time have begun to emerge. This paper summarizes them and identifies some of their implications for community members and practitioners conducting prevention and intervention efforts.

¹ There are many different definitions of violent extremism, radicalization, and terrorism, but for the purpose of this paper, terrorists are those individuals who support or commit ideologically motivated violence to further political, social, or religious goals; radicalization is the process by which individuals enter into terrorism; and terrorism is an act that involves the threatened or actual use of ideologically motivated violence to further political, social, or religious goals.

² For the purpose of this paper, prevention efforts focus on addressing the broader underlying conditions that may be associated with radicalization to terrorism. (These would be referred to as "primary prevention" efforts in the public health literature.) Intervention efforts focus on either (1) identifying individuals who are potentially at risk for radicalizing to terrorism and developing tailored programs to mitigate this risk ("secondary prevention" efforts) or (2) rehabilitating those who have already radicalized ("tertiary prevention" efforts).

The paper begins by examining the findings from four NIJ-sponsored research projects that have taken different approaches to examining the process of radicalization to terrorism. After discussing the samples used in the projects and some general limitations that need to be considered when interpreting their findings, the paper describes the research conducted by Brandeis University to test whether an existing framework of radicalization was supported by the data the team collected on U.S. homegrown offenders convicted of terrorist acts inspired by or affiliated with al-Qa'ida.3 It then turns to a project conducted by researchers from Indiana State University and Victoria University on lone-wolf terrorism in the U.S. and the model of radicalization to terrorism that emerged from their analysis.4 Next, it describes research conducted by the National Consortium for the Study of Terrorism and Responses to Terrorism (START), based at the University of Maryland, to examine the radicalization processes and trajectories of U.S. terrorists motivated by a range of ideologies.⁵ Finally, it discusses research led by the University of Arkansas that tested whether two theoretical perspectives on radicalization to terrorism were supported in data collected on individuals and groups indicted for terrorism or terrorism-related activities in U.S. federal courts.⁶

After providing a brief scientific overview of these efforts, the paper highlights the collective insights they provide into the process of radicalization to terrorism. It also discusses some of the implications of these findings for community members and practitioners conducting prevention and intervention efforts.

Scientific Overview of Four NIJ-Sponsored Projects That Examine Radicalization to Terrorism

The four projects highlighted in this section focus on different yet overlapping subsets of violent and nonviolent extremists active in the U.S. Table 1 includes some key characteristics of the individuals and groups included in these projects.

As can be inferred from Table 1, it is likely the case that some of the individuals included in the analyses conducted by these four NIJ-sponsored project teams overlap. For example, it may be the case that an al-Qa'ida-inspired lone actor would be included in all four projects and that, because of this, similarities between the projects' findings may be due in part to the fact that they analyzed some of the same individuals. Although this possibility cannot

³ The projects "The Role of Social Networks in the Evolution of Al Qaeda-inspired Violent Extremism in the United States, 1993-2013" (NIJ Award #2012-ZA-BX-0006) and "Prisoner Recollections: The Role of Internet Use and Real-Life Networks in the Early Radicalization of Islamist Terrorist Offenders" (NIJ Award #2013-ZA-BX-0005) are led by Principal Investigator (PI) Jytte Klausen and conducted by a project team that includes Selene Campion, Zachary Herman, Rosanne Libretti, Nathan Needle, Giang Nguyen, Adrienne Roach, Eliane Tschaen Barbieri, and Aaron Zelin.

⁴ The project "Lone Wolf Terrorism in America: Using Knowledge of Radicalization Pathways to Forge Prevention Strategies" (NIJ Award #2012-ZA-BX-0001) was led by PI Mark Hamm (Indiana State University) and conducted in collaboration with Ramon Spaaij (Victoria University, Australia).

⁵ The "Empirical Assessment of Domestic Radicalization Project" (NIJ Award #2012-ZA-BX-0005) is led by PI Michael Jensen and conducted by a project team that includes Patrick James, Kasia Jasko (Jagiellonian University, Poland), Gary LaFree, Daniela Pisoiu (University of Hamburg, Germany), Anita Atwell Seate, John Stevenson, and Herbert Tinsley.

⁶ The projects "Identity and Framing Theory, Precursor Activity, and the Radicalization Process" (NIJ Award #2012-ZA-BX-0003) and "Sequencing Terrorists' Precursor Behaviors: A Crime-Specific Analysis" (NIJ Award #2013-ZA-BX-0001) are led by PI Brent Smith and conducted by a project team that includes Andy Brooks, Kelly Damphousse (University of Oklahoma), Kevin Fitzpatrick, Brent Klein, Paxton Roberts, David Snow (University of California, Irvine), and Anna Tan (University of California, Irvine).

be ruled out, the differences between the specific categories of terrorists included in the various projects (e.g., only those inspired by or affiliated with al-Qa'ida in the Brandeis University project, lone actors who had varied ideologies in the Indiana University project) make it less likely that any similarities in their findings are due exclusively to an overlap in the individuals analyzed.

In addition to the potential overlap in the extremists included in the four projects,

it is also important to keep in mind other limitations associated with collecting and analyzing the types of open source data used in these projects. These include problems with missing data, which occur when researchers are unable to find any information (positive or negative) on the specific characteristics or behaviors they would like to analyze. In the projects discussed below, this often resulted in individuals for whom data were not available being excluded from an analysis,

Table 1: Characteristics of U.S.-Based Extremists Included in Highlighted Efforts

Project Team	Lone Actors/ Group Actors	Ideologies Embraced	Description
Brandeis University	Both	Al-Qa'ida- inspired	This analysis includes 135 homegrown terrorism offenders inspired by or affiliated with al-Qa'ida. The time period covered is from 1993 to 2015.
Indiana State University/Victoria University	Lone Actors	Varied	This analysis includes all 98 individuals who engaged in terrorism but acted alone, did not belong to a group, and were not directed by others.8 The time period covered is from 1940 to 2013.
START	Both	Varied	This project randomly sampled 1,475 individuals from the larger population that met its inclusion criteria. It is the only project that also includes extremists who did not engage in any illegal extremist activity. The time period covered is from 1965 to 2013.
University of Arkansas	Both	Varied	The quantitative analysis conducted for this project includes 465 individuals indicted for violent or nonviolent terrorism-related activities in U.S. federal court between 1980 and 2013. ¹⁰ The qualitative analysis includes 43 organizations indicted for violent terrorism-related activities between 1980 and 2013.

 $^{^{7}}$ These offenders include only individuals who were born and grew up in the U.S. or who arrived in the U.S. before the age of 16 and, thus, were assumed to have radicalized in the U.S. The Western Jihadism Project from which this sample was drawn includes nearly 400 individuals who meet these criteria. Only the 135 individuals for whom sufficient data on their radicalization trajectories could be collected are included in the analysis discussed in this paper.

⁸ The project defined "lone-wolf terrorism" as political violence perpetrated by individuals who act alone, who do not belong to an organized terrorist group or network, who act without the direct influence of a leader or hierarchy, and whose tactics and methods are conceived of and directed by individuals without any direct outside command or direction.

⁹ The project includes individuals who radicalized in the U.S.; who espoused ideological motives and who acted on these motives; and who had (1) been arrested, (2) been indicted, (3) been killed in action, (4) been members of or associated with designated terrorist organizations, and/or (5) been members of or associated with organizations whose leaders or founders had been indicted of ideologically motivated violent offenses.

¹⁰ At the time the project was completed, the research team was tracking 1,062 federal terrorism-related cases involving 2,195 individuals. Only those individuals for whom data on both the legal and geospatial/temporal components of their cases had been collected are included in the quantitative analysis.

and in certain cases, this led to findings that were based on only a portion of the sample. As a consequence, it is not always possible to assess whether the findings would be the same if data were available for all of the individuals included in the project. Further, even when data were available for all individuals, it may be the case that some of the information collected was not accurate. The project teams tried to minimize this possibility by drawing on multiple sources when collecting data, but, given the clandestine nature of many of the activities they examined, some degree of inaccuracy seems inevitable.

It is also important to consider that assessing whether an individual has engaged in certain activities, such as seeking out a new authority figure or joining a clique, may require subjective judgments on the part of researchers. The research teams tried to address this by having multiple individuals make these judgments independently and then comparing their assessments, but it is possible that different research teams might reach different conclusions. It could also be the case that an activity that one team found important to analyze was not viewed as important by other teams and, thus, was not analyzed.

Finally, with one exception — the quantitative analysis conducted by the University of Arkansas — none of the findings highlighted below were based on comparisons between individuals who did and did not engage in terrorism-related activity. Because of this, while the behaviors and processes the teams identify may be considered characteristic of the extremists they studied, it is not clear whether they differ from the behaviors and processes that characterize similar extremists who do not engage in terrorism-related activities. As a consequence, these findings provide information on the process of radicalization to violence, but they cannot identify the causes of terrorism.

With these caveats in mind, the rest of this section describes the findings from four NIJ-sponsored projects that examined different subsets of terrorists and used a range of different methods to analyze the data that they collected. In spite of their differences, the common goal of these efforts was arriving at a better understanding of the process of radicalization to terrorism and how it may unfold over time.

Testing an Existing Framework of Radicalization to Terrorism

Against the background of the growing literature on Islamist terrorism in the West (e.g., Berger, 2011; Klausen, 2012; Nesser, 2014; Sullivan, Freilich, & Chermak, 2014), one of the goals of the completed NIJsponsored research conducted by Brandeis University involved testing whether the framework of radicalization developed by the New York Police Department (NYPD; Silber & Bhatt, 2007) was supported by the more extensive data that the project has collected on U.S. homegrown terrorism offenders inspired by or affiliated with al-Qa'ida (Klausen, 2015b; Klausen et al., 2015). The researchers were particularly interested in examining this framework because it provided an opportunity for them to study how behavioral indicators evolve — and are related to each other — as the radicalization process progresses.

The NYPD outlined a four-stage process of radicalization (Silber & Bhatt, 2007). The first stage, "pre-radicalization," is the period before any radicalization occurs. At this point, individuals have not been exposed to an extremist belief system and lead relatively normal lives, although there may be aspects of their experiences and environments (e.g., isolation, discrimination) that potentially make them more vulnerable to radicalization. The second stage, "self-identification," involves individuals' introduction to and eventual embrace of an extremist

belief system. The authors argue that this is sometimes prefaced by individuals experiencing economic, social, political, or personal crises and that exposure to extremist views and narratives may occur through individuals' existing social networks, including their friends and family, or through movements promoting these beliefs. During the third stage, "indoctrination," individuals' extremist beliefs intensify, and they view violence as necessary to supporting these beliefs. At this stage individuals tend to join groups that embrace the same terrorist views and disassociate from individuals who do not. During the final stage, "jihadization," the terrorist group or movement's goals take complete precedence for individuals, and the final steps are taken toward violence as individuals train, acquire weapons, and ultimately attempt to carry out attacks.

To test the framework, the Brandeis University team created a typology of detectable behavioral indicators associated with each of the four stages included in the NYPD framework: (1) pre-radicalization, (2) detachment (referred to as "selfidentification" in the original framework), (3) peer immersion (referred to as "indoctrination" in the original framework), and (4) planning and execution of violent action (referred to as "jihadization" in the original framework). These indicators, displayed in Table 2 below, were selected based on the broader terrorism literature, as well as the team's previous research. A pilot study was conducted to determine whether it was possible to identify data relevant to the indicators using open-source data, and adjustments to the indicators were made as needed.

Table 2: Behavioral Indicators of Stage Progression in Radicalization Trajectories (Klausen, 2016, 9)

Stage	Pre-Radicalization	Detachment	Peer Immersion and Training	Planning and Execution of Violent Action
Description	Searching behavior indicative of cognitive opening	Detachment from previous life, e.g., by spending inordinate amounts of time with online extremist peers	Leaving home to become closer to a peer group of like-minded individuals	Attempting or enacting violent action — or joining a terrorist group abroad or attempting to join a group
This could include:	Expressions of disillusionment with world affairs or with religious or political authorities	Actively seeking to get closer to new authority figures or proselytizing online or in real life	Attempting to go abroad to join an organization or a network to live as prescribed by the ideology	Actively supporting another person carrying out violent action on behalf of the ideology
	Behavior indicative of a personal crisis in response to personal events, e.g., a family crisis, drug addiction, incarceration, or being arrested Seeking out information in venues outside the individual's established social milieu, either online or in real life, from new authority figures	Experiencing a revelation or making changes in lifestyle such as dropping out of school or work Picking fights with the local mosque or teachers, colleagues, and family — or otherwise trying to convince others to change by starting a blog or a website	Behavior indicative of a desire to permanently join the militant community, e.g., by finding a spouse (or spouses) through the extremist community Seeking out ways to demonstrate commitment to the new ideological community and its mission, e.g., by acquiring practical training in the use of firearms or other skills considered important to the mission of the extremist community	Issuing threats online, in real life, or in other ways Joining a foreign terrorist organization or taking practical steps to carry out an attack, e.g., by acquiring materials needed to fabricate a bomb or purchasing a firearm

For its analysis, the team collected biographical data on 135 U.S. homegrown terrorism offenders inspired by or affiliated with al-Qa'ida between 1993 and 2015 from court documents, online communications posted by the individuals, media interviews, and investigations conducted by the U.S. government and news media. The researchers then examined whether these individuals exhibited any of the behavioral indicators they had identified, and if so, when the behaviors occurred.¹¹ Once this process was completed, the team used a computer algorithm to determine whether the data supported the sequence of stages outlined in the NYPD framework.

The analysis offered support for the sequence of stages outlined by NYPD. As expected, the types of indicators associated with the pre-radicalization stage (e.g., personal crises, traumatic events) were generally observed early in offenders' timelines. In addition, peer immersion indicators (e.g., training, seeking likeminded extremists) tended to occur often and in sequence. At the same time, indicators associated with the detachment stage (e.g., proselytizing online or offline) tended to occur across multiple stages, and a few indicators chosen for the model performed poorly. For example, having an epiphany, or a revelation that one has been called by a higher power to take a particular action, was rarely experienced and, when it was, it did not occur in a specific stage (Klausen, 2015b).

The researchers also found that specific "triads," or sets of three sequential indicators that span at least two stages in the radicalization process, were present in significant percentages of the offenders' timelines (Klausen, 2015b). For example, the combination of any pre-radicalization

indicator followed by offline peer immersion and then expressing a desire for action occurred in 47 percent of timelines. Similarly, the combination of any detachment indicator followed by offline peer immersion and then expressing a desire for action occurred in 34 percent of timelines.

Finally, the team was interested in exploring the time it took individuals to move from their initial exploration of extremist ideas to engaging in a terrorist offense and whether there were differences based on when an individual radicalized. Comparing individuals who radicalized before 2010 with individuals who radicalized in or after 2010, they discovered that those who radicalized before 2010 typically took five to six years to move from initial exploration to a terrorist offense while those who radicalized during or after 2010 typically took 19 months (Klausen, 2015b). While further research is necessary in order to identify the reasons for this apparent acceleration of the radicalization process, the team found that this difference was not exclusively related to an increase in online radicalization; in fact, of the four individuals who radicalized in six months or less (all in 2014 or 2015), none had radicalized solely or even primarily online. Further, to test whether the acceleration was due to more proactive law enforcement efforts, the team compared individuals who were arrested in FBI-directed sting operations with those who were not. Although the radicalization trajectories of offenders who were arrested in sting operations were shorter, this did not account for the entire difference (Klausen, 2015a).

In summary, the Brandeis team found that many, but not all, aspects of the NYPD

¹¹ If the team was unable to find information about a behavioral indicator for a particular individual, the individual was included in the analysis and the behavior was assumed not to have occurred.

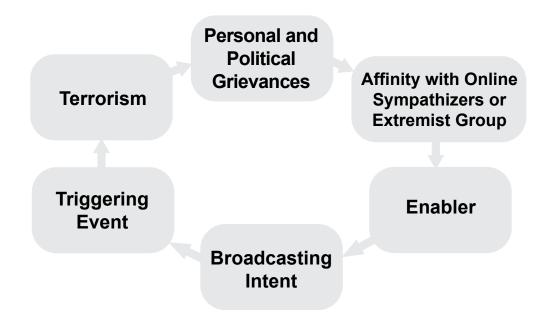
framework were supported by their data on U.S. homegrown terrorism offenders inspired by or affiliated with al-Qa'ida.¹² They also found that it was possible to identify sequences of indicators that were common among numerous offenders. Assuming the promise of these early findings continues to be supported, it would seem that examining the types of behavioral indicators identified by the team — and how these indicators evolve over time — can provide practitioners with a better understanding of how radicalization occurs among U.S. homegrown individuals inspired by or affiliated with al-Qa'ida, as well as possible ways of identifying where someone may be in this process.

Developing a New Model of Radicalization to Terrorism Among Lone Wolves in the U.S.

Rather than testing an existing model, the project conducted by Indiana State University

and Victoria University developed a new model of radicalization to terrorism based on analysis of 98 cases of lone-wolf terrorism that occurred in the U.S. between 1940 and 2013 (Hamm & Spaaij, 2015). For each of these cases, the researchers gathered information from a range of sources, including but not limited to biographies and memoirs, journalistic sources, government reports, and court documents. They then examined all of the information they had collected and entered data on the specific characteristics, experiences, and behaviors of each lone-wolf terrorist into a database. Their analysis of this database, as well as key case studies, produced several findings relevant to the process by which lone wolves in the U.S. radicalize to terrorism and serve to complement other research conducted on lone-actor terrorism in the U.S. and Europe (e.g., Gill, 2015; Horgan et al., 2016; Feve & Bjornsgaard, 2016). The model they developed is presented in Figure 1 and described below.

Figure 1: Model of Radicalization to Terrorism Among Lone Wolves in the U.S. (Hamm & Spaaij, 2015, 26)



¹² This may be due to issues with the framework, issues with the data the team collected, or both.

The researchers found evidence that lone-wolf terrorists frequently combined personal grievances (i.e., perceptions that they had been personally wronged) with political grievances (i.e., perceptions that a government entity or other political actor had committed an injustice). Both personal and political grievances were present in 80 percent of the cases they examined, and there was no difference in their prevalence when comparing lone wolves who attacked before and after September 11, 2001. They argue that this fusion of grievances is a signature of lone-wolf terrorism and usually happens at the beginning of the radicalization process.

As the process of radicalization to terrorism progressed, the researchers found that lone wolves frequently displayed an affinity with online sympathizers or an extremist group, and thus, the assumption that they do not communicate with others is false. The team does, however, note that the percentage of lone wolves who had connections with specific extremist groups (versus more diffuse networks of extremist sympathizers) declined after 9/11: Only 42 percent of the lone wolves who conducted attacks after 9/11 were found to have an affinity with an extremist group, compared with 63 percent of the lone wolves who conducted attacks before 9/11. The researchers attribute much of this change to evolving communication technologies (e.g., the internet, social media).

The data also indicated that lone wolves were often enabled by others who unwittingly assisted them in planning attacks (e.g., by purchasing materials they did not know would be used to conduct attacks) and/or who provided them with inspiration. This was the case among 57 percent of those who conducted attacks before 9/11 and 67 percent of those who conducted attacks after 9/11.

Along the same lines, the researchers found evidence of copycat attacks in one-third of the cases that they examined.

The research showed that as lone wolves continued to radicalize, they tended to broadcast their intent to conduct attacks, e.g., by communicating with outsiders through spoken statements, threats, letters, manifestos and videotaped proclamations. Specifically, 84 percent of the lone wolves who conducted attacks before 9/11 and 76 percent who conducted attacks after 9/11 either explicitly referred to an upcoming attack or implied that an attack was imminent (sometimes more than once).

Finally, the researchers found that lone wolves frequently experienced personal and/or political triggering events (e.g., losing a job, witnessing government actions they opposed) that served as catalysts for their attacks. There was evidence that 84 percent of those who conducted attacks before 9/11 and 71 percent of those who conducted attacks after 9/11 experienced a triggering event. They argue that triggering events may constitute one of the turning points in life that separate the past from the present and allow individuals to develop new relationships that support or encourage radicalization to terrorism.

In summary, based on the research conducted by Indiana State University and Victoria University, there seem to be signatures of the process of radicalization to terrorism among lone-wolf terrorists, at least those who conduct attacks in the U.S. From an intervention perspective, a few points are of particular interest. First, lone-wolf terrorists did communicate and interact with others, meaning that there were other individuals aware that they were radicalizing. Second and along

¹³ When comparing individuals who attacked before and after 9/11, the researchers did not include the 15 post-9/11 cases that were the result of law enforcement sting operations involving confidential informants or undercover agents. They argue that these are not authentic cases of lone-wolf terrorism because they involved more than one person. They did, however, include these cases in the database because sting operations have become a major counterterrorism strategy since 9/11.

the same lines, they tended to broadcast their intent to commit attacks, which may allow for interventions before attacks occur. Finally, many lone-wolf terrorists experienced triggering events, highlighting the importance of considering the role that political and personal events may play in individuals' trajectories to violence.

Examining Radicalization Processes and Trajectories Through Quantitative and Qualitative Analysis

In their ongoing NIJ-sponsored research, a team from START is conducting both quantitative and qualitative analysis to examine the radicalization processes and trajectories of individuals who radicalized in the U.S. between 1965 and 2013 (Jensen, 2015; LaFree, 2015). To do this, the researchers have created the Profiles of Individual Radicalization in the United States (PIRUS) database, which includes information on the characteristics, experiences, and behaviors of a sample of more than 900 terrorists and almost 600 nonviolent extremists, and they are in the process of developing life-course narratives for 110 individuals in the database. These efforts will complement several existing open-source databases that include information on terrorism in the U.S. and internationally (e.g., Canadian Network for Research on Terrorism, Security, and Society, 2016; Freilich et al., 2014; LaFree & Dugan, 2007). The information used to develop both the PIRUS database and the life-course narratives comes from unclassified, secondary sources (e.g., newspaper reports, court records, biographies, government sources).

Several of the variables in the PIRUS database provide information on the radicalization processes of the individuals

it includes. For example, the team found evidence that approximately 60 percent of individuals for whom relevant data were available¹⁴ experienced some kind of grievance, whether against the U.S. government, against a foreign government, or in reaction to a specific political event. The latter type of grievance was particularly common among Islamist terrorists, with the radicalization processes of approximately 72 percent of them affected by a political event (LaFree, 2015). There was also evidence that the internet played at least some role in individuals' radicalization in just under one-half of the cases and that being a member of a clique (i.e., a close-knit, insular, and exclusive group of people) contributed to the radicalization of approximately 42 percent of individuals (Jensen, 2016). Both of these processes were also more common among Islamist terrorists.

While the qualitative component of the project will eventually involve analyzing the life-course narratives of 110 individuals chosen to represent a diversity of ideologies and behaviors, to date the researchers have focused on examining how the narratives of 15 individuals map onto four hypothetical radicalization pathways they have developed (Jenson, 2015). Each of these pathways incorporates mechanisms associated with various existing theories of radicalization to terrorism, including but not limited to the quest for personal significance (e.g., Kruglanski et al., 2009), social identity theory (e.g., Hogg & Adelman, 2013), and rational choice theory (e.g., Taylor & Quayle, 1994).

To do this the team has used processtracing, a method that examines the links between hypothesized causes and effects. A description of the hypothesized pathways and the findings from this

¹⁴ All of the percentages reported exclude individuals for whom relevant data were not available.

preliminary analysis are in Table 3 below. Two individuals' narratives did not map on to any of the pathways.

While additional research remains to be conducted, preliminary qualitative findings from the START project indicate that there are multiple radicalization pathways. Further, in their quantitative analysis of the PIRUS database, the researchers found evidence that grievances, the internet, and small group dynamics play roles in radicalization, although the prevalence of these mechanisms may vary by ideology.

Testing Two Theoretical Perspectives on Radicalization to Terrorism

In their completed NIJ-sponsored research, a team led by the University of Arkansas tested whether role identity theory and framing theory help to explain how individuals and groups radicalize to terrorism (Smith et al., 2016). In doing so, the researchers built on previous research conducted using the American Terrorism Study (ATS) database (e.g., Smith & Damphousse, 2009; Smith, Damphousse, & Roberts, 2006; Smith,

Roberts, & Damphousse, 2013) and focused not on testing a complete model of the radicalization process but rather on testing what they viewed to be a crucial component of it: the construction of a terrorist identity. This process is outlined in Figure 2 on page 11.¹⁵

Several concepts displayed in the figure are central to understanding the analyses the team conducted. The first two are *identity salience* and *identity pervasiveness* — both of which are based on the premise that everyone has multiple identities (e.g., as a parent, teacher, musician). If an identity is salient, it is more likely to be brought to bear in a particular situation. If an identity is pervasive, it is more likely to be brought to bear in numerous situations. The researchers hypothesized that individuals with more salient and pervasive terrorist identities would be more likely to engage in terrorism.

To test this, their analysis drew on data from 217 federal cases (involving 465 unique perpetrators) included in the ATS database, which consists of data derived primarily from the U.S. federal court records of persons indicted for terrorism

Table 3: Hypothesized Radicalization Pathways (Jensen, 2015)

Pathway	Description	Number of Individuals Who Took Pathway (Out of 15)
Trauma	Traumatic experience often produces a need to develop meaningful personal relationships, which are sometimes found in people with extreme views. Grievances play an important role in the development of violent narratives but are not the original impetus for radicalization.	3
Identity- Seeking	Identity-seeking often begins in adolescence and leads to risk-taking behaviors, especially juvenile crime. Extremist narratives and groups may offer a life-changing course, sense of community, and purpose.	6
Material Reward	Economic distress or crisis leads to the desire to increase one's status or material well-being, and extremist groups may offer a means for doing so.	0
Recruitment	Extremist narratives/groups are introduced through close personal relationships. Group dynamics, especially ingroup/outgroup bias, may play an important role in the development of support for violent narratives.	4

¹⁵ Although the figure focuses on the process of identity construction among individuals who are members of formal groups, the researchers argue that a similar process would occur among those who are not.

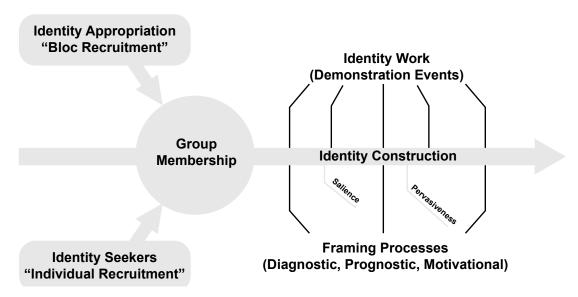
or terrorism-related activities since 1980. They used the number of meetings attended and how long individuals had been group members as proxy measures for identity salience, and they used rank in the group as a proxy measure for identity pervasiveness.¹⁶ In support of their hypothesis, they found that individuals who attended more group meetings and had been group members for longer periods of time committed a larger number of terrorist incidents and were charged with more criminal counts. In partial support of their hypothesis, they found that individuals with higher ranks were charged with more criminal counts; they did not, however, commit a larger number of terrorist incidents (Smith et al., 2016).

The third concept in Figure 2 that is important to understand is *identity work*, which consists of activities that create, present, and sustain specific identities (Snow & Anderson, 1987). In general terms, identity work may involve how a person looks, what he or she says and does, and with whom he or she associates.

One specific component of identity work involves engaging in demonstration events, which are public displays that confirm individuals' commitments to their identities. The researchers argued that, in the context of terrorist groups, the best examples of demonstration events include engaging in preparatory activities associated with terrorist incidents, and they hypothesized that the more demonstration events in which individuals participated, the more likely they would be to engage in terrorism. Again, analysis drew on data from 217 federal cases in the ATS database. In partial support of their hypothesis, the researchers found that individuals who participated in a larger number of preparatory activities had a larger number of criminal counts charged against them. They did not, however, commit a larger number of terrorist incidents (Smith et al., 2016).

Another specific component of identity work is *identity talk*, which involves claiming an identity, as well as framing the issues or situations that a group or movement seeks





¹⁶ If the team was unable to find data related to whether an individual exhibited a particular characteristic or behavior, the individual was removed from any analysis that examined that characteristic or behavior.

to address. Diagnostic framing focuses on who is viewed as responsible or to blame for a situation, *prognostic framing* focuses on what needs to be done to address it, and motivational framing focuses on why it is important to address (Benford & Snow, 2000). There may be competing frames within a group (e.g., members may view different people as responsible for a situation) or, conversely, everyone may agree on the same frames. The latter occurs through the process of frame crystallization. The researchers hypothesized that frame crystallization would be a necessary, although not sufficient, condition for extremist action, including violence.

To test this hypothesis, the team focused on analyzing terrorist groups as opposed to terrorist individuals.¹⁷ Specifically, the researchers conducted qualitative analysis using data from 43 federally indicted organizations included in the ATS database, supplementing this material with additional data based on media reports, police records, and other open-source information (Tan et al., 2015). They coded the levels of these organizations' frame crystallization, as well as other organizational and contextual characteristics, such as organization size and duration, political context, and type of recruitment (open or closed). They then analyzed these data using qualitative comparative and fuzzy-set analysis (Ragin, 2008), which allows for the identification of multiple pathways to the same outcome. In support of their hypotheses, they found that frame crystallization most consistently contributed to violence against people and property across a range of organizations. On the other hand, while characteristics like organization size and duration, political context, and recruitment style also contributed to violent outcomes, they did

not do so as consistently across different organizations or types of violence (against people versus against property) (Smith et al., 2016). In other words, there were some differences in the pathways taken to violence based on the type of violence perpetrated and the organization.

In summary, the findings from this research suggest the importance of the identity construction process in radicalization to terrorism and the need to understand how groups frame their beliefs. They also suggest that the conditions that facilitate radicalization to terrorism may vary by organization and type of violent outcome.

General Insights Into the Process of Radicalization to Terrorism and Their Implications

On the surface, what initially may be most striking about the four NIJ-funded projects discussed above are the different approaches they take to examining the process of radicalization to terrorism. Specifically, they range from efforts that test the relevance of existing theories and frameworks of radicalization to efforts that identify new models and pathways; from research focused on particular types of terrorists to research that includes individuals characterized by varied extremist ideologies, tactics, and relationships to formal groups; from efforts that examine specific aspects of the radicalization process to efforts that attempt to examine the process as a whole; and from research that focuses on the sequence of activities individuals engage in as they radicalize to research that focuses on the prevalence of certain radicalization mechanisms and activities.

¹⁷ It is important to note that it cannot be assumed that all individuals in a particular group embrace the beliefs that are held by the group as a whole, although higher levels of frame crystallization could indicate that this is more likely to be the case.

Given this variation, it should not be surprising that the more specific findings of the projects - e.g., that any preradicalization indicator followed by offline peer immersion and then expression of the desire for action was often observed among U.S. homegrown offenders inspired by or affiliated with al-Qa'ida, and that lone wolves tended to combine personal and political grievances — are likely to be most relevant to practitioners focused on the same particular types of terrorists and/ or aspects of the radicalization process that the researchers examined.

What may be more surprising given the variation in the projects is the significant overlap in their findings regarding the general facilitators of radicalization to terrorism and the importance of examining how the process evolves within individuals, potentially manifesting in changes in behaviors over time. The projects also underline the need to move beyond onesize-fits-all approaches to understanding this process. These collective findings may be particularly important given that they were supported by diverse and rigorous quantitative and qualitative data collection efforts and the analysis of data that covered different subsets of terrorists. These findings, along with some of their possible implications for prevention and intervention efforts, are described below.

Facilitators of Radicalization to **Terrorism**

The findings from the four NIJ-sponsored research teams highlight the importance of several facilitators that may encourage, support, or contribute to the process of radicalization to terrorism. These facilitators are outlined in Table 4 and described below.

The potential role of terrorist belief systems and narratives in the process of radicalization to terrorism was strongly supported by research sponsored by NIJ (Klausen, 2015b; Sawyer, 2016; Smith et al., 2016). For example, in one analysis using the PIRUS database, the START team examined the relationship between measures of the strength of individuals' extremist beliefs and a variety of different extremist behaviors and found that 74 percent of the 675 individuals who trained or engaged in terrorism were deeply committed to a terrorist ideology (Sawyer, 2016). In addition, by demonstrating that frame crystallization (i.e., identifying and agreeing on who is to blame for a situation and what needs to be done to address it) is a facilitator of terrorism, the team led by the University of Arkansas underlined the important role that terrorist group narratives may play in the radicalization process (Smith et al., 2016). At the same time, while the findings from these projects

Table 4: Facilitators of Radicalization Supported by Multiple NIJ-Sponsored **Projects**

Facilitators
Terrorist belief systems or narratives
Identity processes
Activities that demonstrate commitment to a terrorist group or cause
Connections with terrorists in one's offline social network
Connections with terrorists via the internet and/or social media
Group dynamics
Grievances
Triggering events

indicate that individuals' beliefs and narratives are important to understand, they are consistent with other research that has demonstrated that embracing terrorist beliefs or narratives is neither a necessary nor sufficient condition for radicalization to terrorism (e.g., Horgan, 2014; Lloyd & Dean, 2015). As a consequence, practitioners may also need to address other facilitators of this process in prevention and intervention efforts.

The role of **identity processes** in radicalization to terrorism has been highlighted in previous research (e.g., Simi, Bubolz, & Hardman, 2013; Weine & Ahmed, 2012) and was empirically supported in the projects sponsored by NIJ (Jensen, 2015; Smith et al., 2016). Experiencing identity conflict or confusion — whether because of a struggle to adapt to a new culture, one's stage of life (e.g., adolescence), or other challenges — is often viewed as potentially leaving individuals more open to adopting new ideas and behaviors, including those associated with terrorism. The team led by the University of Arkansas (Smith et al., 2016) went one step further by examining how individuals construct their terrorist identities and found some evidence that when these identities are both salient to individuals and pervade numerous aspects of their lives, they were more likely to engage in terrorism. One implication of this is that programs developed to prevent or intervene in the radicalization process may need to consider facilitating individuals' recognition or development of alternate identities, such as their identities as parents, children, or citizens.

Activities that demonstrate commitment to a terrorist group or cause were found to facilitate radicalization to terrorism in two NIJ-sponsored research projects (Hamm & Spaaij, 2015; Smith et al., 2016). The team led by the University of Arkansas found that individuals who participated in a larger number of

demonstration events (i.e., public displays that confirm individuals' commitments to their identities) had more criminal counts charged against them (Smith et al., 2016), while the team from Indiana State University and Victoria University found that lone wolves tended to broadcast their intent before engaging in violence (Hamm & Spaaij, 2015). A key implication of these findings is that a better understanding of these activities, which often occur in public, may provide community members and practitioners with additional opportunities to identify individuals who are radicalizing to terrorism and to intervene before an attack occurs.

Having connections with terrorists in one's offline social network has also been posited as a facilitator of radicalization to terrorism in past research (e.g., McCauley & Moskalenko, 2011; Sageman, 2004), and NIJ-sponsored research provided strong evidence that having friends and family members who embrace terrorism can influence an individual's choice to become (or remain) a terrorist (Hamm & Spaaij, 2015; Klausen, 2015b; LaFree, 2015; Sawyer, 2016). For example, in the PIRUS data, the START team found that there was an extremely strong correlation between the radicalization outcomes of individuals and those in their close social networks, with a third of individuals engaging in the same extremist behaviors as someone else in their network (Sawyer, 2016). Further, although familial and romantic relationships were related to these outcomes, friends were much more likely to end up engaging in the same kinds of extremist behaviors. One implication of this is that when trying to identify individuals who may radicalize to terrorism or when designing intervention programs, it may be important to pay attention to individuals' offline social networks, and particularly their friends.

Similarly, a growing body of research has highlighted the role that having connections with terrorists via the

internet and social media may play in radicalization to terrorism (e.g., Neumann, 2013; Von Behr et al., 2013). In addition to potentially leading individuals to become more accepting of violence and fostering feelings of closeness with those who perpetrate it, virtual connections may provide practical guidance that facilitates terrorism. NIJ-sponsored projects provided empirical evidence of the importance of this facilitator (Hamm & Spaaij, 2015; LaFree, 2015; Klausen, 2015b; Klausen et al., 2013). For example, the Brandeis University team discussed the changes that social media have wrought among those inspired by or affiliated with al-Qa'ida in the U.S. and demonstrated that shifts in where recruitment occurs — away from geographic locations and toward social media sites — have led to U.S. recruits being better integrated with their international counterparts (Klausen et al., 2013).¹⁸ On the one hand, this may make it more difficult for community members and practitioners to identify individuals who are radicalizing to terrorism, as they may no longer be co-located in geographic clusters. In this sense, the development of robust international partnerships among practitioners becomes even more important. On the other hand, assuming that at least some of these connections occur on open social media, they may serve as an additional means of identifying individuals who may be radicalizing to terrorism.

The findings from NIJ-sponsored research also provided empirical evidence that **group dynamics** may serve as a facilitator of the process of radicalization to terrorism (Jensen, 2015; Klausen, 2015b). This supports previous research that has argued that belonging to a tight-knit group may lead to individuals being more likely to (1) accept their fellow group members'

views and (2) consider those inside of their group more positively (ingroup favoritism) and those outside of their group more negatively (outgroup derogation) (McCauley & Moskalenko, 2011; Sageman, 2004; Smith, 2008). The important role that group dynamics may play in the process of radicalization to terrorism is perhaps clearest in the Brandeis University team's research, which documented the role of peer immersion (i.e., becoming closer to a peer group of like-minded individuals) in the radicalization process (Klausen, 2015b). Importantly, the team also found evidence that individuals detach from their previous lives as they radicalize, which has implications for identifying those who may be at risk. Specifically, it highlights that those who know an individual's typical behaviors (e.g., those close to him or her) may be best positioned to identify changes in behaviors that are possibly linked to radicalization to terrorism. The role of group dynamics in radicalization also implies that prevention and intervention programs might benefit by adapting existing approaches aimed at reducing other forms of ingroup bias and outgroup derogation (e.g., prejudice and discrimination).

Numerous researchers have argued that **grievances** play a role in radicalization to terrorism (e.g., Borum, 2003; McCauley & Moskalenko, 2011; Moghaddam, 2005), and this view was empirically supported in NIJ-sponsored research (Hamm & Spaaij, 2015; LaFree, 2015; Smith et al., 2016). Feeling that one (or one's group) has been treated unfairly, discriminated against, or targeted by others may lead individuals to seek justice or revenge against those they blame for this situation. For example, the researchers from Indiana State University and Victoria University (Hamm & Spaaij, 2015) discussed the particular nature that

¹⁸ It should be noted that the finding that recruitment occurs less frequently in specific geographic locations may be somewhat unique to the U.S., as there is evidence that the same shift may not be occurring in Europe (Neumann, 2015).

these grievances may take among lone wolves. Specifically, they argued that lone wolves are often socially excluded, leading them to (1) feel that they are being deprived of what is their due and (2) form grievances against those they view as responsible for this injustice. Along the same lines, the researchers noted that lone wolves often combine personal and political grievances, with one implication being that the grievances of lone wolves may sound different — and perhaps more idiosyncratic — than those of group actors.

Finally, the role of **triggering events** (i.e., crises or events that may lead individuals to feel pressured to act) in the process of radicalization to terrorism was empirically supported by NIJ-sponsored research (Hamm & Spaaij, 2015; LaFree, 2015; Klausen, 2015b). For example, in their research on lone wolves, the team from Indiana State University and Victoria University found that triggering events occurred in the vast majority of the cases they examined and that these events ranged from personal to political to some combination of the two (Hamm & Spaaij, 2015). They also noted that, in some cases, triggering events were immediate catalysts for action, and in others they slowly accumulated over time. While it may be difficult to identify which specific events may contribute to an individual engaging in terrorism, these findings highlight the need for practitioners to take into account aspects of individuals' larger personal, political, and social contexts in their prevention and intervention efforts.

The Diversity of Radicalization Processes and Pathways

As discussed above, the research sponsored by NIJ found empirical support for several facilitators of the process of radicalization to terrorism. In addition, both of the projects that focused on specific subsets of terrorists identified commonalities in how these individuals radicalized, as

well as in their observable behaviors. The Brandeis University team found that U.S. homegrown offenders inspired by or affiliated with al-Qa'ida tended to engage in specific sequences of behaviors associated with radicalization to terrorism (Klausen et al., 2015; Klausen, 2015b), and the team from Indiana State University and Victoria University observed specific, albeit somewhat different, patterns of behaviors in U.S. lone wolves (Hamm & Spaaij, 2015). These findings all provide initial guidance for community members and practitioners attempting to identify individuals who may be radicalizing to terrorism, as well as those developing programs focused on preventing and intervening in this process.

At the same time, another important common finding — both explicit and implicit — across the projects examined in this paper is that there are multiple pathways to terrorism and that these pathways may vary by the extremist ideologies and narratives individuals embrace, the time periods in which they radicalize, the groups or movements they join (or don't join in the case of lone wolves), and/or individuals' characteristics and experiences.

For example, the quantitative analysis conducted by the START team using the PIRUS database identified differences in the prevalence of particular radicalization mechanisms based on the particular extremist belief system (LaFree, 2015). Specifically, the team found that, compared with those who embraced other belief systems, Islamist terrorists were more likely to be radicalized through the internet, through tight-knit cliques, and/or through grievances related to particular events.

Importantly, however, the START team also cautioned that some of these findings may be impacted by the time periods in which these terrorists tended to be active (LaFree, 2015). The fact that the Islamist terrorists included in the database tended to have

radicalized since 2001 may help to explain the finding that Islamist terrorists were more likely to be radicalized through the internet. Similarly, the team from Indiana State University and Victoria University found differences in the radicalization processes of lone wolves in the U.S. based on whether they radicalized before or after 9/11 (Hamm & Spaaij, 2015). Compared with those who committed attacks before 9/11, those who committed them after 9/11 were less likely to have an affinity with an extremist group and more likely to be enabled by individuals who assisted them in planning attacks and/or who provided them with inspiration. Finally, the Brandeis team found that individuals who radicalized before 2010 typically took five to six years to move from initial exploration of extremist ideas to a terrorist offense, while those who radicalized during or after 2010 typically took 19 months (Klausen, 2015b). These findings all point to the importance of continuing to study the process of radicalization to terrorism, as it may change over time.

It is also the case that whether an individual belongs to a group or is a lone wolf may impact the radicalization process. The most obvious example relates to the types of group dynamics that have been demonstrated to facilitate radicalization to terrorism within terrorist groups and movements (e.g., Jensen, 2015; Klausen, 2015b) but likely have a lesser impact on lone wolves. In addition, there may be differences in some of the commitmentdemonstrating activities in which lone wolves and extremist group members participate (e.g., lone wolves would arguably be less likely to demonstrate their commitment to a cause by participating in group meetings or initiation rituals). Finally, as the team from Indiana State University and Victoria University pointed out, one of the signatures of lone wolves is that they combine personal and political grievances (Hamm & Spaaij, 2015), and it is not clear whether this combination is as prevalent among members of terrorist groups.

Again, however, it is important to keep in mind that just because the radicalization processes of lone actors and extremist group members may differ, this does not mean that the radicalization processes of all group members are the same. As discussed above, there may be variations based on the extremist belief system (LaFree, 2015). Further, based on the research conducted by the University of Arkansas-led team (Smith et al., 2016), there may also be differences in the radicalization processes of different organizations that share similar belief systems.

Finally, while the findings above did demonstrate the possibility of developing frameworks and models that explain how specific subsets of individuals radicalize to terrorism (e.g., U.S. homegrown offenders inspired by or affiliated with al-Qa'ida, lone wolves), it should not be expected that every individual who meets these specific criteria follows the exact same pathway. This is clear in the statistics presented by the Brandeis team (Klausen, 2015b) and the team from Indiana State University and Victoria University (Hamm & Spaaij, 2015). To give a concrete example, the fact that 80 percent of lone wolves in the U.S. combined personal and political grievances is impressive and indicates that the vast majority of lone wolves did so. It also indicates that a small minority did not. This is not intended to diminish this finding or any of the other findings discussed above — they are evidencebased and can provide guidance to those working to identify that radicalization to terrorism is occurring and/or to prevent or intervene in this process. Rather, it serves as a reminder that the radicalization process is complex and varied and, thus, will never be amenable to one-size-fits-all solutions. The implication is that while community

members and practitioners can and should be guided by research and experience, they will still need to consider the characteristics and experiences that may set a particular individual apart.

Overview of Findings and Next Steps

The projects sponsored by NII have taken a variety of approaches to examining the process of radicalization to terrorism. These include testing whether an existing framework of radicalization was supported by new data on U.S. homegrown offenders inspired by or affiliated with al-Qa'ida, developing a new model of radicalization to terrorism among lone wolves in the U.S., using quantitative and qualitative analysis to examine the radicalization processes and trajectories of U.S. terrorists motivated by a range of ideologies, and testing whether two theoretical perspectives on radicalization to terrorism were supported by data on individuals and groups indicted for terrorism or terrorism-related activities in U.S. federal courts.

In spite of these different approaches, there is substantial overlap in the findings from these projects, which collectively provide evidence of the importance of several facilitators of radicalization to terrorism that occur within individuals, in interaction with other individuals, and at the broader community or societal level. At the individual level, the radicalization process often involves embracing a terrorist belief system or narrative that identifies particular others or groups as "enemies" and justifies engaging in violence against them. Individuals may also begin to identify themselves as terrorists as well as engage in activities that highlight their commitments to their new beliefs, identities, and/or others who hold them. It is, however, important to note that while these beliefs and behaviors may facilitate the movement to terrorism, this

outcome is not inevitable. Those close to these individuals may become aware of the changes that their friends and family members are undergoing and attempt to address them or seek help from others who can. An important implication of this is that trusted information and resources need to be available to assist in this effort. Another is that prevention and intervention efforts may benefit by addressing beliefs that justify violence and helping individuals to develop identities in which these beliefs are not central.

The research sponsored by NIJ also highlights the social nature of radicalization to terrorism and the roles that connections with terrorists (online and/or offline) and group dynamics may play in this process. As individuals' relationships with others who support terrorism become stronger, they may begin separating themselves from those who do not, thus becoming increasingly isolated from people who might challenge their views. This suggests that dramatic changes in the people with whom an individual associates, or increasing insularity among existing groups of friends, may be causes for concern and that it may be those close (or previously close) to these individuals who are best positioned to notice these changes. It also suggests that efforts to prevent or intervene in the radicalization process must take into account both the individuals and those with whom they interact, as well as potentially facilitate establishing or re-establishing their relationships with nonextremists.

Finally, there is evidence that events in the larger community and societal contexts may also facilitate radicalization to terrorism. For example, individuals may experience real or perceived grievances — both personal and political — that may help to fuel their movement toward terrorism. Further, in some cases, specific triggering events associated with these grievances may accelerate this movement.

Thus, understanding these grievances and triggering events, as well as helping individuals to develop constructive ways to address them, may be important components of programs developed to prevent and intervene in the radicalization process.

It is, however, important to keep in mind that in addition to identifying several common facilitators of radicalization to terrorism and underlining the need to take into account how this process unfolds within individuals over time, the research sponsored by NII also provides empirical evidence that individuals' processes of radicalization to terrorism may vary by the extremist ideologies and narratives they embrace, the time periods in which they radicalize, the groups or movements they join (or do not join, in the case of lone wolves), and/or their individual characteristics and experiences. Thus, while community members and practitioners can benefit from the evidence-based guidance provided by this research, it will continue to remain important that they take into consideration the specific characteristics and experiences of the individuals with whom they are working.

It will also remain important to conduct additional research into the similarities and differences in the processes of radicalization to terrorism among individuals who vary in all of the ways discussed above. The NIJ-sponsored projects discussed in this paper have highlighted some of these similarities and differences, but there is still much to learn. For example, do additional facilitators of radicalization to terrorism - and sequences of facilitators — emerge from in-depth studies of extremists inspired by or affiliated with anti-government, anti-capitalist, nativist, or other political and social terrorist movements? Do individuals who radicalize outside of the U.S. experience different facilitators than those who radicalize inside the U.S.? Will the facilitators of radicalization to terrorism continue to evolve among lone-wolf terrorists (and others) as technologies and time advance, and, if so, how? Are certain facilitators of the radicalization process associated with a greater likelihood that individuals will go on to commit terrorist offenses? How do individual characteristics and experiences interact with facilitators of the radicalization processes? For example, are individuals with certain characteristics or experiences more or less likely to be exposed to or influenced by specific facilitators of the radicalization process? And, perhaps most importantly, what are the facilitators of moving away from terrorism, and how can they be best supported?

Finally, it will be necessary to conduct more research that compares individuals who radicalize to terrorism with those who do not. In addition to allowing for a deeper understanding of how the radicalization process unfolds, this research will provide essential information on its ultimate causes and how prevention and intervention efforts can best address them.

References

Benford, R., & Snow, D. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology*, 26, 611-639.

Berger, J. (2011). *Jihad Joe: Americans who go to war in the name of Islam*. Washington, D.C.: Potomac Books, Inc.

Borum, R. (2003). Understanding the terrorist mindset. FBI Law Enforcement Bulletin, 72, 7-10.

Canadian Network for Research on Terrorism, Security, and Society (2016). *Canadian Incident Database*.

Feve, S., & Bjornsgaard, K. (2016). *Lone-actor terrorism: Database workshop*. London: Royal United Services Institute.

Freilich, J., et al. (2014). Introducing the United States Extremist Crime Database (ECDB). *Terrorism and Political Violence*, 26, 372-384.

Gill, P. (2015). Lone-actor terrorists: A behavioural analysis. London: Routledge.

Hamm, M., & Spaaij, R. (2015). Lone wolf terrorism in America: Using knowledge of radicalization pathways to forge prevention strategies. Final grant report to NIJ. Available at: www.ncjrs.gov/pdffiles1/nij/grants/248691.pdf.

Hogg, M.A., & Adelman, J. (2013). Uncertainty-identity theory: Extreme groups, radical behaviour, and authoritarian leadership. *Journal of Social Issues*, 69, 436-454.

Horgan, J. (2014). The psychology of terrorism, 2nd edition. Abingdon, England: Routledge.

Horgan, J., et al. (2016). Across the universe? A comparative analysis of violent behavior and radicalization across three offender types with implications for criminal justice training and education. Final grant report to NIJ. Available at: www.ncjrs.gov/pdffiles1/nij/grants/249937.pdf.

Jensen, M. (2015). The empirical assessment of domestic radicalization: A qualitative approach. In J. Picarelli (Chair), *Violent extremism in the U.S. and lessons about combating and preventing it.* Session conducted at the annual meeting of the American Society of Criminology, Washington, D.C., November 2015.

Jensen, M. (2016). Personal communication with the author.

Klausen, J. (2012). Al Qaeda's London branch: Patterns of domestic and transnational network integration. *Studies in Conflict & Terrorism*, *35*, 411-431.

Klausen, J. (2015a). Personal communication with the author.

Klausen, J. (2015b). Tweeting the Jihad: Social media networks of western foreign fighters in Syria and Iraq. *Studies in Conflict & Terrorism*, *38*, 1-22.

Klausen, J., et al. (2013). Mapping Islamist terror networks in the United States: Hamas, Hezbollah, and Jihadist groups — 1993-2013. Unpublished manuscript, Brandeis University.

Klausen, J., et al. (2015). Toward a behavioral model of "homegrown" radicalization trajectories. *Studies in Conflict & Terrorism*, *39*, 67-83.

Kruglanski, A.W., et al. (2009). Fully committed: Suicide bombers' motivation and the quest for personal significance. *Political Psychology*, *30*, 331-357.

LaFree, G. (2015). *Politically-motivated radicalization to violent extremism*. Breakout session conducted at the conference Radicalization and Violent Extremism: Lessons Learned from Canada, the United Kingdom, and the US, Arlington, Va., July 2015.

LaFree, G., & Dugan, L. (2007). Introducing the Global Terrorism Database. *Terrorism and Political Violence*, 19, 181-204.

Lloyd, M., & Dean, C. (2015). The development of structured guidelines for assessing risk in extremist offenders. *Journal of Threat Assessment and Management*, 2, 40-52.

McCauley, C., & Moskalenko, S. (2011). Friction: How radicalization happens to them and us. New York: Oxford University Press.

Moghaddam, F. (2005). The staircase to terrorism: A psychological exploration. *American Psychologist*, 60, 161-169.

Nesser, P. (2014). Islamist terrorism in Europe. London: C. Hurst & Co. Publishers.

Neumann, P. (2013). Options and strategies for countering online radicalization in the United States. *Studies in Conflict & Terrorism*, *36*, 431-459.

Neumann, P. (2015). ISIS's social media campaign: Myth and reality. In S. Hughes (Chair), *Can we identify radicalization as it happens?* Plenary session conducted at the conference Radicalization and Violent Extremism: Lessons Learned from Canada, the United Kingdom, and the US, Arlington, Va., July 2015.

Ragin, C. (2008). *Rethinking social inquiry: Fuzzy sets and beyond*. Chicago: University of Chicago Press.

Sageman, M. (2004). *Understanding terror networks*. Philadelphia: University of Pennsylvania Press.

Sawyer, J.P. (2016). What makes them do it?: Individual-level predictors of terrorism. Unpublished manuscript, University of Maryland.

Silber, M., & Bhatt, A. (2007). *Radicalization in the West: The homegrown threat*. New York: New York City Police Department.

Simi, P., Bubolz, B., & Hardman, A. (2013). Military experience, identity discrepancies, and far right terrorism: An exploratory analysis. *Studies in Conflict & Terrorism*, *36*, 654-671.

Smith, A. (2008). The implicit motives of terrorist groups: How the needs for affiliation and power translate into death and destruction. *Political Psychology*, *29*, 55-75.

Smith, B., & Damphousse, K. (2009). Patterns of precursor behaviors in the lifespan of an American eco-terrorist group. *Criminology & Public Policy*, 8, 475-496.

Smith, B., Damphousse, K., & Roberts, P. (2006). *Pre-incident indicators of terrorist incidents: The identification of behavioral, geographic, and temporal patterns of preparatory conduct.* Final grant report to NIJ. Available at: https://www.ncjrs.gov/pdffiles1/nij/grants/214217.pdf.

Smith, B., et al. (2016). *Identity and framing theory, precursor activity, and the radicalization process.* Final grant report to NIJ. Available at: https://www.ncjrs.gov/pdffiles1/nij/grants/249673.pdf.

Smith, B., Roberts, P., & Damphousse, K. (2013). *Update on geospatial patterns of antecedent behavior among perpetrators in the American Terrorism Study (ATS)*. Report to the Resilient Systems Division, Science and Technology Directorate, U.S. Department of Homeland Security. College Park, MD: START.

Snow, D.A., & Anderson, L. (1987). Identity work among the homeless: The verbal construction and avowal of personal identities. *American Journal of Sociology*, *92*, 1336-1371.

Sullivan, B., Freilich, J., & Chermak, S. (2014). Financial crime and material support schemes linked to al-Qa'ida and affiliated movements (AQAM) in the United States: 1990 to June 2014. Report to the Resilient Systems Division, Science and Technology Directorate, U.S. Department of Homeland Security. College Park, MD: START.

Tan, A., et al. (2015). Facilitative conditions for "domestic terrorism": Extremist political violence in the United States, 1980-2012. Unpublished presentation.

Taylor, M., & Quayle, E. (1994). Terrorist lives. London: Brassey's.

Von Behr, I., et al. (2013). Radicalisation in the digital era: The use of the internet in 15 cases of terrorism and extremism. Washington, D.C.: Rand.

Weine, S., & Ahmed, O. (2012). Building resilience to violent extremism among Somali-Americans in Minneapolis-St. Paul. Final report to the Human Factors/Behavioral Sciences Division, Science and Technology Directorate, U.S. Department of Homeland Security. College Park, MD: START.