

CORRELATES OF VIOLENT POLITICAL EXTREMISM IN THE UNITED STATES*

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Although research on terrorism has grown rapidly in recent years, few scholars have applied criminological theories to the analysis of individual-level political extremism. Instead, researchers focused on radicalization have drawn primarily from political science and psychology and have overwhelmingly concentrated on violent extremists, leaving little variation in the dependent variable. With the use of a newly available data set, we test whether variables derived from prominent criminological theories are helpful in distinguishing between nonviolent and violent extremists. The results show that variables related to social control (lack of stable employment), social learning (radical peers), psychological perspectives (history of mental illness), and criminal record all have significant effects on participation in violent political extremism and are robust across multiple techniques for imputing missing data. At the same time, other common indicators of social control (e.g., education and marital status) and social learning perspectives (e.g., radical family members) were not significant in the multivariate models. We argue that terrorism research would benefit from including criminology insights and by considering political radicalization as a dynamic, evolving process, much as life-course criminology treats more common forms of crime.

Although there has been explosive growth in criminological research on terrorism in recent years (for reviews, see Forst, Greene, and Lynch, 2011; Freilich and LaFree, 2015; LaFree and Ackerman, 2009; Lum and Kennedy, 2012), few scholars have drawn on major criminological theories to explain individual-level participation in extremist political violence. More commonly, in the rapidly growing literature on radicalization

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and extremism, researchers have borrowed insights from political science (Abrahms, 2012; Schmid and Jongman, 1988), psychology (Horgan, 2005; Kruglanski et al., 2014), sociology (Boyns and Ballard, 2004; Oberschall, 2004), and communications (Corman, Trethewey, and Goodall, 2008; Matusitz, 2014), as well as from cognate subject areas, such as membership in religious cults (Crenshaw, 2000; Post, Ruby, and Shaw, 2002), and nonideological street gangs (Decker and Pyrooz, 2011). The lack of criminological explanations for individual-level extremism is surprising, considering that “[t]errorism is a form of crime in all essential respects” (Clarke and Newman, 2006: i). Indeed, political violence seems to fall within the domain of criminology famously defined by Sutherland (1947) as encompassing research on “the breaking of laws and reactions to the breaking of laws.”

At the same time, political violence clearly differs in important respects from ordinary crime (LaFree and Dugan, 2004), which may help explain why researchers have rarely used dominant criminological theories to explain extremist political behavior. Most street crimes do not have larger political purposes, whereas the overriding objective of political violence, and its ultimate justification, is the furtherance of a political cause (Crenshaw and Horowitz, 1983; LaFree, Dugan, and Miller, 2015). Similarly, although common criminals vary widely in terms of how they perceive their illegal behavior (cf. Anderson, 2000; Black, 1998; Katz, 1988), few criminals see their crimes as altruistic. By contrast, terrorists frequently believe that they are serving a cause that will achieve a greater good for some wider constituency (Hoffman, 1998; Jaško, LaFree, and Kruglanski, 2016; McCauley and Moskaleiko, 2011). And finally, even though those who commit common crimes usually try to avoid detection, those who commit acts of political violence are often seeking the largest audience possible (Held, 2004; Kydd and Walter, 2006; Pape, 2005).

Although these differences are undoubtedly important, the fact remains that there are fundamental similarities between political violence and more common forms of crime, making perspectives from criminology potentially useful for understanding the characteristics and motivations of political extremists (Hamm, 2007; Kittrie, 1978; Rosenfeld, 2004; Smith and Damphousse, 1998; Turk, 2004). Ordinary crime and political violence are both social constructions that derive meaning from interactions that produce rules and norms (LaFree et al., 2015). Both acts undermine social trust, producing similar deleterious effects on the communities in which they occur (Anderson, 2000; Kirk and Matsuda, 2011). And perhaps most importantly, the individuals who commit ordinary crimes and those who perpetrate acts of terrorism are similar in terms of basic characteristics, with young men engaging in both acts to a far greater extent than other demographic groups (Braithwaite, 1989; DeLisi, Neppl, Lohman, Vaughn, and Shook, 2013; Gendreau, Little, and Goggin, 1996; Wilson and Herrnstein, 1985).

In this article, we draw on several prominent criminological theories of ordinary crime to develop a set of exploratory hypotheses about the determinants of politically motivated violence. We then test these hypotheses on a newly available data set of 1,473 individuals based in the United States who have been publicly involved in ideologically motivated violent and nonviolent criminal acts, or who are known members of foreign or domestic extremist organizations. Although we cannot provide definitive tests of all rival criminology theories, our goal is to assess the extent to which common perspectives from criminology can improve our understanding of individual-level violent extremism. Exploring the strengths and weaknesses of prominent criminological perspectives on crime as they relate to political extremism is important for several reasons.

First, mainstream criminology has paid insufficient attention to violent extremists as an important subgroup of criminals, which raises concerns about the scope limitations of the field's dominant theories. It remains unclear whether key variables from prominent theories maintain their explanatory power when they are applied to political extremists. This analysis allows us to identify where dominant criminological arguments fall short and to provide suggestions for useful theoretical emendations.

Second, the design of this study allows for us to assess the extent to which prominent criminological arguments can be used to explain an uncommon but extreme form of criminal behavior. Theories of crime are of the most use when they can explain not only who engages in criminal acts but also who engages in the most extreme forms of crime. Indeed, a crucial first step in leveraging criminological theory for practical use by law enforcement, intelligence, and countering violent extremism (CVE) practitioners is determining whether prominent arguments can be used to differentiate between those who engage in violence versus those who engage in less extreme forms of crime. By comparing violent and nonviolent political extremists, we provide an initial test of the explanatory reach of key criminological theories.

Finally, a baseline criminological analysis of political extremists is a crucial step toward developing a criminological theory of politically motivated crime. Criminologists and terrorism scholars often reach different conclusions about which variables most strongly correlate to crime and terrorism. To formulate robust theories of terrorism, it is critical to understand how extremists differ from more ordinary criminals.

Through our research, we also respond to two prominent weaknesses in prior research on extremism. First, most researchers (Horgan, 2005; Pape, 2005; Sageman, 2004) have only analyzed individuals who have used violence for an extremist cause but have not considered those who may share similar ideological convictions but have not used violence in their pursuit (Borum, 2011). Thus, the inferential power and external validity of many prior studies have been limited by the fact that there is little variation in the dependent variable. There have been recent attempts to address this limitation (Gartenstein-Ross and Grossman, 2009; Kurzman, 2015; Smith and Damphousse, 2007), but thus far, few researchers have included subsets of radicalized individuals who did not commit violence.

Second, although important work has been done tracing the radicalization pathways of individuals and small groups, variously highlighting the role of psychological processes (Horgan, 2008; Kruglanski, Chen, Dechesne, Fishman, and Orehek, 2009), small group dynamics (De Bie and De Poot, Pisoiu, 2015; Sageman, 2004), and social movement catalysts (della Porta, 2006; Wiktorowicz, 2004, 2005), most of the scholars conducting these studies relied on qualitative case studies to support their claims. Few researchers to date have used systematically collected quantitative data to generate inferences.

The remainder of the article proceeds in four sections. First, we review important concepts derived from prominent criminological theories and extract exploratory hypotheses that explain why individuals may be more likely to engage in acts of political violence as opposed to provide nonviolent criminal support for extremist causes. Second, we detail the data and methodology used to test the hypotheses, including a discussion of how our independent, dependent, and control variables are measured and how we compensate for missing values in our data set. Third, we discuss the results of our analyses, which include several robustness tests of our findings. Finally, we conclude with the implications of the study for advancing both criminological theory and public policy on countering violent extremism.

THEORETICAL DERIVATION

We begin with a review of the variables derived from several influential criminological theories. We pay particular attention to the variables that have received attention from both criminology and terrorism scholars, indicating that they are the most promising for explaining violent political extremism. As we will see, in some cases, existing evidence from terrorism research supports results from criminology; in other cases, there is little support; and in still other cases, there have been few or no quantitative tests.

SOCIAL CONTROL PERSPECTIVES

Social control scholars argue that individuals develop bonds that connect them with prosocial society and shield them from deviance (Hirschi, 1969). Life-course scholars (Laub and Sampson, 1993, 2006) argue that some life events fulfill the role of social bonds and act as “turning points” in the life course to alter or redirect behavioral trajectories. We pay specific attention to key turning points and elements of the social bond that, in addition to criminological work, have also received research attention from terrorism scholars.

EMPLOYMENT HISTORY

The link between various measures of employment and crime is one of the most comprehensively researched areas in criminology, and many (but not all) scholars have concluded that work history is highly correlated with levels of criminal activity (Cantor and Land, 1985; Chiricos, 1987; Smith, Devine, and Sheley, 1992; Uggen, 2000). In particular, social control scholars have provided evidence that stable employment is especially important in establishing prosocial bonds and in redirecting individuals away from crime. Recently, Apel, Bushway, Paternoster, Brame, and Sweeten (2008) attempted to account for an endogenous relationship between employment and crime by using state labor laws as an instrumental variable and found evidence for a robust causal relationship. Similar arguments for a relationship between unemployment and deviant behavior have been applied to discussions of the causes of terrorism (Arnold and Kennedy, 1988; for a review, LaFree and Ackerman, 2009). Nevertheless, thus far, empirical results have been less convincing than the results for unemployment and more ordinary types of crime. Researchers specifically examining the relationship between employment status and participation in terrorism have found that many members of organizations that use terrorism have jobs. For instance, Hewitt (2003) found that members of the Ku Klux Klan had a diverse range of positions, from blue-collar laborers to business owners. Similarly, Sageman (2004) concluded that, at the time extremists joined Islamic terrorist groups, most of them were students, worked as professionals (e.g., doctors and engineers), or performed semiskilled labor.

The results of other research (Berrebi, 2007; Krueger, 2007; Krueger and Malečková, 2003; Pape, 2005; Piazza, 2006; Silke, 2008) show that those who participate in terrorist actions are frequently not the poorest members of their societies. An early study by Russell and Miller (1977) compiled profiles of more than 350 terrorist cadres and leaders across 18 different terrorist groups from the years 1966 to 1976. The authors concluded that most of these individuals had middle-class backgrounds. Sageman's (2004) survey of 172 members of Islamic terrorist groups found that approximately three quarters came from

upper- or middle-class backgrounds. Slightly more than one quarter (27 percent) came from working-class or poor backgrounds. Poor individuals accounted for a larger proportion of Bakker's (2006) sample of jihadi extremists in Europe (54 percent), although the author noted that 61 percent of individuals were fully employed.

Although empirical support for the connection between employment history and participation in political violence has been mixed in terrorism studies, in extant research, scholars do not distinguish between individuals who use violence in pursuit of political goals and those who do not. Instead, in most studies in which the relationship between work history and terrorism has been examined, researchers have limited their analyses to those individuals who have engaged in acts of violence. Given that we are testing the utility of variables derived from criminological theory, we expect that:

H1: Individuals with a poor work history will be more likely to turn to violent extremism.

EDUCATIONAL ATTAINMENT

Although social control scholars (Laub and Sampson, 1993) most commonly emphasize marriage, work, and military services as the key positive turning points that steer individuals from crime, related scholars (Blomberg, Bales, and Piquero, 2012) have found that educational attainment also acts as a mechanism that suppresses crime. Overall, however, the results of criminology research on the link between educational status and violent crime, like the link with work history, have been mixed (Glaser, 1964; Uggen, 2000). Tauchen, Witte, and Griesinger (1994) and Witte and Tauchen (1994) found no significant link between educational attainment and crime after controlling for several individual characteristics. Similarly, Grogger (1998) found no relationship between education and crime after controlling for wages. In contrast, Lochner and Moretti (2004) found that schooling significantly reduced the probability of incarceration and arrest after they examined data from the National Longitudinal Survey of Youth. Other researchers (Farrington, Ohlin, and Wilson, 1986; Gottfredson, 1997; Witte and Tauchen, 1994) found that time spent in school significantly reduced criminal activity—more so than time spent at work—suggesting a contemporaneous link between school attendance and crime.

Arnold and Kennedy (1988) applied similar arguments to their discussion of the causes of terrorism. But, thus far, these expectations have received little empirical support. Indeed, the findings from much prior research (Krueger and Malečková, 2003; LaFree and Ackerman, 2009; Pape, 2005) show that those who participate in terrorist actions are, if anything, somewhat better educated than the general population. For example, Sageman (2004) found that members of Islamist terrorist organizations were generally well educated compared with their compatriots. More than 60 percent had some education beyond high school. Similarly, Russell and Miller (1977) studied 18 non-Muslim terrorist groups (including the Japanese Red Army, Germany's Baader-Meinhof Gang, and Italy's Red Brigades) and found that, overwhelmingly, group members were well educated, with approximately two thirds having at least some university education. Finally, Berrebi's (2007) analysis of Hamas and the Palestinian Islamic Jihad found that both group-affiliated individuals, generally, and suicide bombers, specifically, were far more likely than average Palestinian citizens to have obtained a secondary or postsecondary school education. Again, in most of the prior studies which examined connections between

educational attainment and political violence, scholars did not examine its impact on ideologically motivated individuals who either did or did not engage in violence. Based on criminological consensus, we expect a weak, albeit negative, relationship between educational attainment and participation in violent political extremism:

H2: As educational attainment increases, the probability of engaging in violent political extremism will decrease.

MARITAL STATUS

Social control scholars (e.g., Hirschi, 1969) presuppose that the motivation to offend is ubiquitous but that individuals refrain from offending if they have strong bonds to conventional society, an important source of which is marriage (Hirschi, 1969; Laub and Sampson, 1993). The relationship between marital status and crime has been shown to be robust and consistent in criminology across a variety of methodological approaches (Bersani and Doherty, 2013; Kirk, 2012; Nettler, 1984; Warr, 1998).

In general, preliminary evidence suggests that the negative connection we find between marriage and crime may not be as robust for political violence. Although Russell and Miller (1977), in their study of terrorist profiles in 18 countries, concluded that the typical offender is an unmarried male, and Berrebi (2007) found evidence suggesting married individuals are less likely to participate in Palestinian extremism, other scholars have reached different conclusions. For example, three quarters of the jihadi-style terrorists in Sageman's (2008) study were married. In fact, Sageman concluded that those joining jihadi organizations were frequently not fully trusted unless their wives or daughters were sisters of other terrorist perpetrators. Bakker (2006) also reported high levels of marriage among jihadi-style terrorists. Finally, Shapiro (2013) found that many Islamist groups encourage intermarriage among group members to build intragroup cohesion and trust. Nevertheless, we should emphasize that there is little empirical research on this topic, and in many of the studies that have been done, researchers did not distinguish between offenders who had and had not committed violent political acts. With these caveats, we expect that:

H3: Compared with those who are married, individuals who are unmarried, separated, or widowed will be more likely to turn to violent extremism.

MILITARY EXPERIENCE

Theories of informal social control often include military service alongside marriage and employment as a positive turning point that can disrupt criminal trajectories. This point is generally supported in the empirical literature, with study results showing that military service is positively related to a substantial number of positive outcomes, such as economic well-being, job stability, and desistance from crime (Bouffard, 2003; Bouffard and Laub, 2004; Sampson and Laub, 1996). In contrast, we could not identify any comparable literature in which the reported results show that military service is associated with lower rates of participation in political violence. In fact, preliminary evidence suggests that military service may be *positively* associated with extremist behavior. For example, some government reports (Department of Homeland Security, 2009; Federal Bureau of

Investigation, 2008) have detailed the risk of far-right recruitment activities in the U.S. military. Moreover, there is limited evidence that military training increases rather than diminishes participation in terrorism among extremist Islamists (Cooley, 2002; Hafez, 2008). Indeed, some authors have suggested that individuals with military training are specifically recruited by extremist groups because of their useful skillset, whereas those without military training are deemed to be less desirable (Mendelsohn, 2011). Nevertheless, it should be emphasized that there are comparatively few empirical studies of the link between military service and extremism and none that we could find that test the relationship between military service and political violence. Thus, based on the social control perspective, we propose two related hypotheses that measure past military and active military status:

H4a: Individuals who have had past military experience will be less likely to turn to violent extremism.

H4b: Individuals who are currently active members of the military will be less likely to turn to violent extremism.

SOCIAL LEARNING PERSPECTIVES

In an attempt to build on Sutherland's (1947) differential association theory, a substantial number of criminological researchers have argued that small-group interaction and communication are the primary drivers of criminal behavior (Akers, 1985, 2009; Burgess and Akers, 1966). Although such perspectives have rarely been applied to the study of terrorism, Atkins and Winfree (2017: 136; see also, Akers and Silverman, 2004) have argued that social learning perspectives have "clear implications for the study of terrorists."

RADICAL PEERS

Social learning researchers emphasize the impact of social influences on crime, particularly peers (Akers, 2009; Warr and Stafford, 1991). Within this context, there is an evolving learning process that involves the transmission of behaviors through imitation, modeling, conditioning, and reinforcement (Akers, 2009). Peer influences can occur through mechanisms such as fear of ridicule or the desire for loyalty, which produce compliance and opportunities for status enhancement (e.g., acceptance and reward systems; Warr, 2002). Individuals are influenced according to the frequency, intensity, duration, and priority of their relationships with others, which in turn help create and mold definitions of behavior (Akers, 2009).

This line of criminological research has some similarities to group dynamics models of violent political extremism, which suggests that the in-group/out-group biases that form in small groups can lead to extreme forms of violent expression and groupthink (Allison, 1971; Bion, 1961; Janis, 1972; McCauley, 1989; Post, 1998). The intense bonds experienced within cliques, and the weak bonds tying individual members to those outside cliques, eventually change the calculus of conformity and remove barriers to individual participation in violent extremism. Thus, based on both criminological and group dynamic perspectives, we predict that:

H5: Compared with other extremists, extremists who have radical peers are more likely to participate in violence.

RADICAL FAMILY MEMBERS

Given that family members play a prominent role in socialization, a great deal of criminological research, including studies informed by social learning perspectives, have found evidence of an intergenerational transmission of violence that is consistent with social learning perspectives of modeling and reinforcement (Akers, 1998; Burgess and Akers, 1966).¹ Moreover, researchers (Giordano, 2010; Thornberry and Henry, 2013; Truscott, 1992; Widom and Wilson, 2015) have consistently found that parental criminal behavior is significantly related to a child's aggressive and deviant behavior.

By contrast, the connection between familial extremism and political violence is far less developed. Although in some studies researchers have noted that families have a good deal to gain when a member becomes a martyr because they enjoy economic reward and community praise (Post, 2005), they do not explicitly connect family radicalization with an individual's own violent behavior. Hafez (2016) suggested that many extremist organizations recruit families because they depend on trust and interpersonal connectivity for survival (see also Campana and Verese, 2013). In their interviews with members of the Irish Republican Movement, Morrison and Gill (2016) found that radical family members often facilitated group membership by socializing their relatives to the group, its ideas, and its goals. Even though links between family relationships and political extremism have rarely been tested with empirical data, the results of prior studies reveal that there is such a relationship. Therefore, based on the results of prior criminology research, we anticipate that extremists will be more likely to engage in violence when they have family members who are involved in illegal extremist activities:

H6: Compared with other extremists, extremists who have radical family members are more likely to participate in violence.

MENTAL ILLNESS

Many criminology scholars have concluded that there is a positive relationship between previous mental illness and propensity to commit crime. For example, Coccozza, Melick, and Steadman (1978) compared the arrest rates of those suffering from mental illness, ex-offenders, and the general population and found that individuals with mental illnesses had a higher rate of arrest for violent offenses than did the general population but a lower rate of arrest than ex-offenders. The group differences remained even when arrest histories and age, the two variables most closely associated with recidivism, were controlled. Steadman and Felson (1984) interviewed individuals with a history of mental illness and a random sample of the general community in Albany County, New York, and found that the percentage of ex-patients who reported at least one dispute involving hitting during the past year was 22.3 percent, compared with 15.1 percent for the community sample. For disputes in which a weapon had been used, the figures were 8.1 percent for the ex-patients and 1.6 percent for the community sample. Nevertheless, when demographic variables were controlled, these differences were no longer significant.

1. Radical family members might also be seen as a social control measure in that social control theorists posit a relationship between parental monitoring/attachment and crime (Gottfredson and Hirschi, 1990; Hirschi, 1969; Krohn and Massey, 1980).

Link, Andrews, and Cullen (1992) compared rates of arrest and self-reported violence (including hitting, fighting, weapon use, and “hurting someone badly”) in a sample of adults from New York City who had never been diagnosed with a mental illness or sought help from a mental health professional with rates of arrest and self-reported violence in several samples of individuals who had been treated for mental illness from the same region. The researchers found that the patient groups were two to three times more violent than the untreated community sample. Moreover, these differences remained even after controlling for a wide variety of other variables.

Terrorism researchers have studied mental illness for several decades, but they have thus far failed to reach a consensus on its role in shaping violent political behavior (see Gill and Corner [2016] for a review). For example, McCauley and Moskalenko (2011) and Nijboer (2012) concluded that terrorist perpetrators are psychologically stable. Nevertheless, the results of recent research demonstrate that although extremists may not exhibit psychopathy, mental illness may indeed be related to extremism as an important causal factor that combines with others to produce complex pathways to political violence (Gill and Corner, 2016). Indeed, in several recent studies, researchers have found empirical links between mental illness and violent political behavior, especially for unaffiliated loners (Bakker and de Graaf, 2010; Gill, Horgan, and Deckert, 2014; Spaaij, 2011; but see Corner, Gill, and Mason [2016] for a cautionary methodological note). Gruenewald, Chermak, and Freilich (2013) compared homicides committed by far-right loner extremists with homicides committed by other types of far-right extremists in the United States. The authors found that 40 percent of far-right loners had a reported history of mental illness compared with only 8 percent for other far-rightists. Similarly, Simi, Bubolz, McNeel, Sporer, and Windisch (2015) found that more than half of their sample (57 percent) reported suffering from mental illness at the time of their involvement in extremist groups. Nevertheless, in none of these studies did the authors examine whether mental illness distinguishes violent from nonviolent extremists. On balance, existing criminology evidence suggests that mental disorder may be a consistent, although modest, risk factor for the occurrence of violence. Based on the findings from this prior research, we hypothesize that:

H7: Compared with other extremists, individuals with a history of mental illness will be more likely to turn to violent extremism.

RIVAL GROUPS

Researchers who study criminal gangs have long emphasized the crime-producing impact of gang rivalries and “turf” battles (Hagedorn, 2007). For example, Papachristos (2009) focused on how the structure of gang networks in Chicago influenced the pattern of intra- and intergang violence. Many gangs had strong attachment to the territory under their direct control. Tita and Radil (2011) showed that gang violence in Hollenbeck, a neighborhood in Los Angeles, was expressly tied to the defense of gang territories. Sack (1986) and others (Newman, 2006; Papachristos, 2009) showed that the behaviors associated with the control of territory by gangs, such as communicating and defending turf boundaries and regulating activities within turf, are important determinants of neighborhood violence. In the process of controlling territory, gangs form rivalries that tie them to other gangs and to other territories. The combination of a gang’s

persistent geographic presence and the territorial behaviors required to defend, maintain, and expand turf are directly related to the types of violence that occurs in urban neighborhoods.

Researchers have rarely examined the potential similarities between individuals involved with gangs and those who join terrorist organizations (for exceptions see Decker and Pyrooz, 2011; Pyrooz, LaFree, Decker, and James, 2017), but there has been a good deal of research conducted on competition between terrorist organizations, in most of which, scholars have stressed the role that rival groups play in the escalation of extremist behavior (Bloom, 2004, 2007; Findley and Young, 2012; Kydd and Walter, 2006). These researchers have generally concluded that groups that are in competition with ideologically similar organizations often gravitate toward more violent forms of political expression to win the support of constituents and weaken their rivals. Competition with rival groups often compels individuals to abandon nonviolent forms of political expression in favor of violent acts, which are increasingly viewed by the group as a more effective way to garner attention, obtain resources, and establish leadership within a community. Researchers (Biberman and Zahid, 2016; Bloom, 2007) have argued that the process of “out-bidding” plays an important role in the adoption of extreme forms of political violence, including suicide terrorism and the deliberate targeting of children.

Similarly, Cronin (2011) argued that increasingly extreme behavior is common in organizations that experience infighting over organizational leadership, vision, and routines. Such competition within organizations often leads to dangerous splintering, where individuals who were once allies find themselves in opposing factions vying for support from a common constituency. Through competition, opposing factions are pulled toward increasingly extreme forms of political behavior to outdo each other and establish their dominance within the political movement. Following the logic of outbidding and prior criminological research on gang rivalries, extremists should be more likely to engage in violence when they are members of groups that are in competition with rival organizations or are experiencing splintering within their own organizations:

H8: Compared with other extremists, those who are engaged in competition with rival groups or fellow group members are more likely to participate in violence.

CRIME-RELATED BACKGROUND CHARACTERISTICS

Finally, we consider several background characteristics that are staples of criminological predictions about criminal etiology.

CRIMINAL RECORD

Having a criminal record has long been regarded by criminologists as one of the best predictors of future criminal behavior (Blumstein, Cohen, and Farrington, 1988; Loeber and Le Blanc, 1990). Indeed, most actuarial assessments of sentencing, parole, and probation decisions rely on criminal record (Hoffman and Beck, 1974; Hoffman, Stone-Meierhoefer, and Beck, 1978; Monahan and Skeem, 2015). An influential meta-analysis of the predictors of adult offender recidivism by Gendreau et al. (1996) examined 131 prior studies and found criminal history to be among the strongest predictors of future criminal activity. Similarly, DeLisi et al. (2013) found that prior police contact and arrest

were predictive of future violent crime. But even though the connection between criminal record and ordinary crime is well established, there is far less research on the connection between criminal record and political violence (Cottee, 2016). Specifically, we could identify no prior researchers who measured whether criminal record can distinguish between nonviolent and violent extremists. Assuming that the widespread finding of a connection between a record for ordinary criminal activity and future violent crime holds for political violence, we expect that:

H9: Compared with others, individuals with a criminal record will be more likely to turn to violent extremism after they have radicalized.

GENDER

The conclusion that men are disproportionately responsible for violent crime is probably the best supported assertion in all of criminology (Braithwaite, 1989; DeLisi et al., 2013; Gendreau et al., 1996; Wilson and Herrnstein, 1985). Arrest, court, and prison statistics for the United States all show massive overrepresentation of men. There is also evidence that men are overrepresented in acts of violent terrorism (Laqueur, 1977; McCauley and Segal, 1987; however, see Bloom, 2012; Cunningham, 2003; Speckhard and Akhmedova, 2006; Zedalis, 2004, for studies of women in terrorism). For example, Bakker (2006) found that only 5 of 242 jihadi terrorists operating in Europe since 2001 (2.1 percent) were women. Therefore, we expect that:

H10: Compared with women, men will be more likely to turn to violent extremism.

AGE

The idea that violent crime is closely associated with young people is also one of the most widely held empirical claims in criminology (Farrington, 2003; Marvell and Moody, 1991; Sweeten, Piquero, and Steinberg, 2013). The relationship between age and crime (known as the age–crime curve) is perceived to be so strong in criminology that Matza (1964) equated crime desistance with “maturational reform.” The age–crime curve also indicates that the relationship between age and crime does not have a linear functional form (Hirschi and Gottfredson, 1983) and that involvement in crime declines rapidly from its peak.

Although far less research has been conducted, there is evidence that participation in political violence may also disproportionately be the work of young people (Berrebi, 2007; McCauley and Segal, 1987; Russell and Miller, 1977; Silke, 2008). For example, Pape (2005) found that the average age of offenders in his study of suicide terrorists ranged from a low of 21.1 years for the Lebanese Hezbollah to 29.8 years for the Chechen extremists. Nevertheless, in a study of 600 American Islamist extremists, Klausen, Morrill, and Libretti (2016) found that the median age for commission of violence was older and occurred across a broader age range than was the case for offenders who had committed more typical violent crimes (see also Pyrooz et al., 2017). Nevertheless, the results of the bulk of prior criminological research suggest that:

H11: As individuals age, their chances of engaging in violent extremism declines.

DATA AND METHOD

DATA

Data are drawn from the newly available individual-level database, Profiles of Individual Radicalization in the United States (PIRUS; Jensen et al., 2016), which is based on publicly available sources and contains background, demographic, group affiliation, and contextual information for 1,473 individuals who radicalized in the United States from 1948 to 2013.² The individuals in the database were included for committing ideologically motivated illegal violent or nonviolent acts, joining a designated terrorist organization, or associating with organizations whose leaders have been indicted of ideologically motivated violent offenses. We define these cases as “domestic radicalization” in that most or all of the individuals’ radicalization occurred while they were residing in the United States.

All data were collected in three waves between January 2013 and June 2014. We began by reviewing the publicly available sources, including court documents, online news articles, newspaper archives, open-source nongovernment reports (e.g., the Southern Poverty Law Center), unclassified government reports (e.g., annual FBI terrorist reports), and existing terrorism-related data sets (e.g., the Global Terrorism Database), and compiling a list of approximately 3,700 names of individuals from various ideological milieus and time frames who were suspected or convicted of engaging in acts of extremism. As a result of resource limitations, we drew a random sample of 2,924 names from the list and assessed them according to the following inclusion criteria: 1) the individual radicalized while living in the United States, 2) the individual espoused or currently espouses ideological motives, and 3) the individual showed evidence that his or her behavior was linked to the ideological motives he or she espoused. This process eliminated 1,451 individuals from consideration for inclusion in the database, leaving 1,473 individuals for full coding. Most names were eliminated during the criteria coding stage because of their failure to meet the inclusion requirement that they had radicalized in the United States.³

During the coding phase, researchers double-coded approximately 10 percent of the individuals in the data to allow for iterative reliability tests of the coding instrument for each stage of the coding process, and they used the Krippendorff’s alpha procedure to test for inter-rater reliability across the double-coded cases (Hayes and Krippendorff, 2007). The score for the first wave was .68, the score for the second wave was .73, and the score for the third wave was .76. As a standard for acceptable reliability is .7, these scores indicate that the data are reliable and that the coding procedure improved during the three waves of full coding. After comparing the double-coded cases, researchers debated any discrepant coding results and came to an agreement on the coding decision that best

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2. Each of the 1,473 individuals in PIRUS appears only once in the data set.
 3. Although every effort was made to ensure the representativeness of the data, we cannot rule out the possibility that the sample reflects news reporting trends over time. That is, as reporters shift their focus from one ideology or movement to another, it becomes increasingly easier to identify individuals who are associated with the groups who are under intense media scrutiny, and increasingly harder to identify those who are not. Thus, given the incredible impact of the 9/11 attacks, the post-9/11 PIRUS data may overrepresent Islamist extremists when compared with the frequency of far-right, far-left, and single-issue extremists from this period.

represents the information in the available news sources and most closely aligns with the definitions set out in the codebook.

VIOLENT AND NONVIOLENT BEHAVIOR

The dependent variable (violent/nonviolent) is coded “1” for individuals whose earliest public exposure, that is, the action they undertook that resulted in their initial identification in public sources as an extremist, involved an act of violence against other people, or the intention to commit an act of violence against other people (i.e., not property damage). Likewise, the dependent variable is coded “0” for individuals whose earliest public exposure involved only nonviolent acts. We treat as violent those cases where there is strong evidence that individuals were conspiring to kill or injure even if they failed to do so. We treat as nonviolent all cases where it is clear from source documents that individuals did not intend to harm others, including, but not limited to, acts of vandalism, illegal protest, fraud, and acts of property destruction where the perpetrators took measures to ensure that no one was injured or killed.

INDEPENDENT VARIABLES

To test the hypothesized relationships, we chose the following independent variables and operationalization schemes. *Stable employment* is coded “1” for individuals who worked regularly prior to engaging in acts of extremism and “0” for individuals who were unemployed, alternated between periods of employment and unemployment, or habitually changed careers in the years leading up to their involvement in extremism. *Education* is an ordinal measure that captures the highest level of education attained by individuals at the time they engaged in illegal acts. Individuals were coded “3” if they received a college degree or higher, “2” if they attended college but did not graduate, “1” if they finished high school, or “0” if they did not graduate high school. *Marital status* is coded “1” for individuals with a legally recognized spouse or domestic partner and “0” for divorced or widowed individuals and those who never married. Individuals who were once active in the military but were discharged before they engaged in extremism were coded “1” for *past military experience* and “0” otherwise. Those on active military duty at the time of their public exposure were coded “1” for *active in military* and “0” otherwise.

We coded individuals who were part of close-knit, insular cliques with others who share similar extremist views as “1” for *radical peers* and “0” otherwise. We coded individuals who have immediate or extended family members who participated in illegal nonviolent or violent ideologically motivated behavior as “1” for *radical family* and “0” otherwise.

We coded *mental illness* as “1” if there is evidence that an individual suffered from mental illness of any kind, including schizophrenia, bipolar disorder, posttraumatic stress disorder, or major depression and “0” otherwise. We coded mental illness as positive based on either clinical diagnosis or self-reports and testimony by family or friends.

To test the argument that individuals are more likely to engage in violence when they are members of competing groups, we coded *rival groups* as “1” for individuals who were members of an extremist group that suffered from internal splintering or competed with like-minded organizations for status, prestige, or resources and “0” otherwise. Evidence of internal competition included fractionalization within the group, acts or threats of violence between group members, and leadership turnover resulting from disagreements

about group behavior or goals. We also coded this variable positively if there was evidence of violence between rival groups.

Prior criminal activity is an ordinal measure coded “1” for participation in violent crime, “.5” for participation in nonviolent crime, and “0” for no criminal participation prior to involvement in extremist activities.⁴ We relied primarily on official records for evidence of criminal behavior prior to involvement in extremist activities but also treated self-reporting of criminal activities that did not lead to arrest as positive evidence of criminal behavior.

Gender is coded as a dichotomy (“1” = men; “0” = women) and *age* is a continuous measure recorded at the time at which the individual’s extremist activities first became public knowledge (e.g., they were arrested and their plot materialized). To control for the possibility that the effects of age are curvilinear, we include an *age-squared* term.

CONTROL VARIABLES

To control for violence-justifying beliefs that may be present across the political spectrum, we include several ideology measures. These measures are binary variables that categorize individuals along far-right, far-left, radical Islamist, or single-issue ideological milieus (the categories are mutually exclusive).⁵ For analyses, we use individuals with a single-issue ideology as the omitted reference group. We also include dichotomous variables that capture the decade in which the individuals in the database came to public attention, treating the 2000s, the decade with the highest number of observations, as the reference category.

Descriptive statistics and information on missing values for all variables included in the analysis are shown in table 1. Although our dependent variable—violent/nonviolent—and several other variables (gender, ideology, and exposure year) include no missing values, the remaining variables have a wide range of missing data. At the most extreme, two variables, radical family and mental illness, are missing data in more than 80 percent of the cases.⁶ Three additional variables (employment history, education, rival groups) are missing in more than 60 percent of the cases. Although this situation is common in studies of political violence based on open-source data (Chermak, Freilich, Parkin, and Lynch, 2012; Dugan and Distler, 2016; Safer-Lichtenstein, LaFree, and Loughran, 2017), it raises obvious concerns. Our strategy for dealing with this issue in the analysis is to estimate models using four different methods for handling missing data: expected maximization (Honaker and King, 2010; King, Honaker, Joseph, and Scheve, 2001), regression-based multiple imputation (Rubin, 2004), simple imputation using subgroup means (Tsikriktsis, 2005),

4. We define violent crimes as those encompassed by the Uniform Crime Report (UCR) part I offenses.

5. For details on the coding of this variable, see Jensen et al. (2016).

6. Researchers were instructed to enter a missing value whenever news sources did not make reference to the state of an individual’s mental health. Nevertheless, there are valid reasons to treat these unknown values as evidence that the individuals did not suffer from mental illnesses. A positive indication of mental illness is almost certain to be revealed in open sources, whereas evidence that an individual did not suffer from mental illness is unlikely to be included in a news story. If we transform missing values on mental illness to values of “0,” the effective rate of mental illness in the data set drops to 8.4 percent, which is comparable to rates of mental illness in the general population.

Table 1. Coding and Descriptive Statistics for Independent Variables

Variable	Code	Distribution/ Mean (SD)	N	% Missing Values
Violent	No (0)	48.3%	1,473	0.0%
	Yes (1)	51.7%		
Stable Employment History	No (0)	30.8%	571	61.2%
	Yes (1)	69.2%		
Education	Did not complete high school (0)	15.7%	547	62.9%
	High school diploma (1)	21.4%		
	Some college, no college degree (2)	19.6%		
	College degree or higher (3)	43.3%		
Married	No (0)	57.1%	722	51.0%
	Yes (1)	42.9%		
Past Military	No (0)	85.7%	856	41.9%
	Yes (1)	14.3%		
Active Military	No (0)	95.5%	856	41.9%
	Yes (1)	4.5%		
Radical Peers	No (0)	44.3%	867	41.1%
	Yes (1)	55.7%		
Radical Family Member(s)	No (0)	41.5%	294	80.0%
	Yes (1)	58.5%		
Mental Illness	No (0)	56.3%	284	80.7%
	Yes (1)	43.7%		
Rival Groups	No (0)	64.2%	542	63.2%
	Yes (1)	35.8%		
Criminal Activity	No (0)	45.9%	678	54.0%
	Prior, nonviolent minor crime (0.5)	24.3%		
	Prior nonviolent serious crime or violent crime (1)	29.8%		
Gender	Female (0)	10.0%	1473	0.0%
	Male (1)	90.0%		
Age	Numerical	34.2 (13.2)	1395	5.3%
Islamist Ideology	No (0)	84.9%	1473	0.0%
	Yes (1)	15.1%		
Far-Right Ideology	No (0)	56.5%	1473	0.0%
	Yes (1)	43.5%		
Far-Left Ideology	No (0)	79.4%	1473	0.0%
	Yes (1)	20.6%		
Single-Issue Ideology	No (0)	79.2%	1473	0.0%
	Yes (1)	20.8%		
Exposure 1950s	No (0)	99.1%	1473	0.0%
	Yes (1)	0.9%		
Exposure 1960s	No (0)	92.5%	1473	0.0%
	Yes (1)	7.5%		
Exposure 1970s	No (0)	86.9%	1473	0.0%
	Yes (1)	13.1%		
Exposure 1980s	No (0)	83.6%	1473	0.0%
	Yes (1)	16.4%		
Exposure 1990s	No (0)	79.8%	1473	0.0%
	Yes (1)	20.2%		
Exposure 2000s	No (0)	69.4%	1473	0.0%
	Yes (1)	30.6%		
Exposure 2010s	No (0)	88.9%	1473	0.0%
	Yes (1)	11.1%		

NOTE: % Missing values refers to PIRUS data set untreated by imputation techniques.

ABBREVIATIONS: N = sample size; SD = standard deviation.

Table 2. Bivariate Correlations Between Dependent Variable (Violence) and Independent Variables

Variable	Correlation Coefficient
Stable Employment History	-.125***
Education	-.118**
Married	-.074*
Past Military	.019
Active Military	.057*
Radical Peers	.141***
Radical Family	.096**
Mental Illness	.107***
Rival Groups	-.003
Criminal Activity	.104***
Gender	.104***
Age	-.078**
Age (squared)	-.072**
Islamist	.118***
Far Right	.092***
Far Left	-.171***
Single Issue	-.046
Exposure 1950s	.009
Exposure 1960s	.000
Exposure 1970s	.029
Exposure 1980s	.047
Exposure 1990s	-.082***
Exposure 2000s	-.051
Exposure 2010s	.090***

NOTE: Pooled results of bivariate correlations using the Expected Maximization model ($N = 1,473$).
* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

and simple imputation using fixed values (i.e., cold-deck imputation; Andridge and Little, 2010). We discuss each of these options and their implications in the Results section.

When looking at percentages for individuals with nonmissing data, we find that a strong majority of offenders (87 percent) reported a stable employment history. More than 40 percent were married. More than 14 percent had a military background, and nearly 5 percent were in the military at the time their illegal behaviors were detected. More than half of the offenders reported contact with radical peers, and nearly three fifths reported having a politically radical family member. Slightly more than 8 percent reported a history of mental health problems. Greater than one third reported that the radical group they were involved in had competition from rival groups. More than half had criminal records, and more than a quarter had records that included criminal violence or a nonviolent felony. Ninety percent of the perpetrators were men, and their average age at their dates of public exposure was 34 years old.

RESULTS

First, we present the bivariate relationships between our independent variables and the likelihood of violence in table 2. In this preliminary analysis, we find that variables testing 9 of our 11 hypotheses (81.8 percent) are in the direction predicted and are statistically

significant. Of the social control variables, the bivariate results show that individuals with stable employment, a higher education, and an ongoing marriage were significantly less likely to be engaged in violent radical extremism. Of the two social learning variables, we find that individuals with either radical peers or radical family members were significantly more likely to be engaged in violent political extremism. Among the remaining criminological variables, the results show that individuals with a history of mental illness and a criminal record were more likely to be engaged in violent extremism. Being young and male was positively correlated with engaging in violent extremism.

The only two hypotheses not supported by the bivariate analysis were those related to past or active military records and rival groups. In fact, contrary to our hypothesis, compared with those without current military experience, individuals with current military experience were associated with a significantly higher probability of engaging in violent extremism. Individuals who were part of rival political groups were no more likely than others to engage in violent extremism. Overall, the bivariate results indicate that most of the independent variables included in this study are correlated with individual-level violence in a direction consistent with common criminological theories.

We next estimate a set of four logit models based on different missing data methods to determine which variables remain significant in multivariate analyses with controls. Column one in table 3 shows the results using an imputation method based on an expected maximization method (Honaker and King, 2010; King et al., 2001) in which missing values are estimated using an iterative algorithm that is based initially on maximum likelihood estimation. In the next iteration, the missing values are predicted based on the maximum likelihood estimates, and a subsequent iteration is based on the values from the previous iteration. This process continues until there is convergence on the parameter estimates.

In column two, we present results from regression-based multiple imputation, which uses observed data and multivariate regression methods to predict values that are missing on a particular parameter or set of parameters (Rubin, 2004). Missing values were imputed several times to reflect uncertainty, producing ten “complete” data sets, which were then used to reestimate our initial tests. Imputed values in this data set were predicted using variables that had little or no missing values: age, gender, ideology, previous criminal activity, and violence.

Expected maximization and regression-based multiple imputation are strong methods for handling missing values because they do not downwardly bias variance in the sample and have been shown to produce more accurate results than alternative methods (Gold and Bentler, 2000). At the same time, these methods are based on the assumption that values are missing at random (MAR; see Rubin, 1976)—an assumption that is undermined if open-source reporting of political extremism gravitates toward the most interesting, dramatic, and unique cases. The next two methods for handling missing data, subgroup mean imputation and fixed-value substitution imputation, do not depend on the credibility of the MAR assumption.

In column three, we replaced missing data using mean values for the particular subgroups in which the cases were members. Because individuals within the different ideological milieus and time periods likely share distinct similarities in terms of demographics, life-course events, and radicalization processes, we chose to use ideology and decade as the primary subgroups of which individuals in the data are members (e.g., far left in the 1960s or far left in the 1970s). We then replaced missing values with the mean for the ideological subgroup for each individual.

Table 3. Multivariate Logistic Regression Models, Comparison of Missing Data Strategies

Variable	Expected Maximization Model		Regression-Based Multiple Imputation Model		Subgroup Mean Substitution Model		Fixed Value Substitution Model	
	B	SE	B	SE	B	SE	B	SE
Stable Employment History	-.555**	(.206)	-.527**	(.188)	-.637**	(.207)	-.494**	(.185)
Education	-.086	(.097)	-.100	(.103)	-.091	(.090)	-.059	(.075)
Married	-.326	(.184)	-.366	(.200)	-.196	(.146)	-.230	(.149)
Past Military Experience	.024	(.229)	.000	(.234)	.184	(.218)	.115	(.233)
Active Military	.452	(.322)	.408	(.319)	.413	(.318)	.061	(.308)
Radical Peers Membership	.878***	(.167)	.819***	(.135)	.803***	(.155)	.689***	(.128)
Radical Family	-.492	(.389)	-.408	(.350)	-.285	(.299)	-.005	(.199)
Mental Illness	.750**	(.237)	.747***	(.231)	.776***	(.229)	.666**	(.224)
Rival Groups	-.246	(.251)	-.100	(.293)	-.177	(.206)	-.143	(.177)
Prior Criminal Activity	.471**	(.176)	.428*	(.194)	.550***	(.169)	.564***	(.170)
Gender	.341	(.213)	.330	(.225)	.317	(.204)	.281	(.209)
Age	-.024	(.025)	-.019	(.025)	-.045	(.023)	-.030	(.024)
Age (Squared)	.000	(.000)	.000	(.000)	.000	(.000)	.000	(.000)
Islamist Ideology	1.081***	(.234)	.980***	(.242)	.914***	(.248)	.963***	(.231)
Far Right Ideology	.609***	(.165)	.490**	(.181)	.525**	(.176)	.565***	(.166)
Far Left Ideology	-.754***	(.200)	-.897***	(.217)	-.898***	(.214)	-.774***	(.200)
Exposure 1950s	1.173*	(.564)	1.077	(.569)	1.052	(.550)	1.034	(.558)
Exposure 1960s	1.067***	(.262)	1.004***	(.258)	.979***	(.249)	.884***	(.259)
Exposure 1970s	1.276***	(.223)	1.247***	(.224)	1.213***	(.211)	1.233***	(.218)
Exposure 1980s	1.006***	(.201)	1.002***	(.201)	.951***	(.192)	.869***	(.197)
Exposure 1990s	.191	(.177)	.176	(.180)	.151	(.174)	.131	(.179)
Exposure 2010s	.660***	(.206)	.649***	(.210)	.659***	(.203)	.588**	(.203)
N	1,473		1,473		1,473		1,395	

NOTE: N = 1,473 except in the fixed value substitution model, where N = 1,395 as a result of listwise deletion of cases with unknown value for Age and Age squared.
 ABBREVIATIONS: B = unstandardized coefficient; SE = standard error; N = sample size.
 *p ≤ .05; **p ≤ .01; ***p ≤ .001 (two-tailed significance test).

Finally, in column four, we replaced missing data using fixed values that reflect logical probabilities or researchers' substantive knowledge about the variables under investigation. We used the following fixed-value scheme when data were missing for each of these variables: stable employment = employed; education = finished high school; mental illness = not mentally ill; marital status = not married; radical peers = no evidence of radical peers; radical family members = no evidence of radical family members; and rival groups = no evidence of rival groups.

The results of the logit models are remarkably consistent regardless of the method that is used for treating missing data. Comparing models 1–4 in table 3 shows that without exception, four of the variables identified in our hypotheses have a significant effect on the likelihood individuals engaged in violent extremist behavior. In support of the social control perspective (H1), individuals with a stable employment history were less likely to commit violent political crimes. The negative relationship between stable employment and violent extremism decreases slightly when missing data are replaced with fixed values. Nevertheless, stable employment remains significant and negative across all models, regardless of missing data approach. Likewise, in all four models and in support of social learning theory (H6), individuals who had radical peers were more likely to engage in violent political extremism. In support of H7, individuals who had a history of mental health problems were more likely to engage in violent political extremism. And in support of H9, compared with individuals with no criminal record, those with records were more likely to engage in violent political extremism. Individuals with criminal records had higher odds of committing violent extremism when missing data were replaced with subgroup means or fixed values (odds ratio = 1.73 and 1.76, respectively, as compared with 1.60 in model 1). Nevertheless, criminal record remains significant and positive across all four models.

Contrary to hypothesized expectations, educational status, marital status, past and current military experience, radical family members, group competition, gender, and age had no significant impact on violent behavior in multivariate analyses controlling for the other measures.

We note in passing that we also found strong relationships between several control variables and violent behavior. Across all models, compared with other offenders, individuals classified as far left were significantly less likely to engage in violent behavior. This finding is not surprising, considering that many far-left groups (e.g., Animal Liberation Front and Earth Liberation Front) promote nonviolent political resistance. Similarly, the decade in which individuals radicalized had a significant impact on the likelihood that they engaged in acts of violent extremism. Relative to the 2000s, which is the decade with the largest number of radicalized individuals in the PIRUS data set, earlier decades, in particular the 1970s and 1980s, witnessed more individuals who radicalized to the point of committing violence or intending to commit violence. These results track generally with observed trends toward violent forms of terrorist attacks over time (Enders and Sandler, 2012; LaFree et al., 2015).

DISCUSSION

In the current study, we link criminology to research on political violence by using a database that measures the characteristics of nearly 1,500 U.S.-based individuals who committed criminal acts of political extremism, or were known affiliates of foreign extremist groups or domestic extremist groups. We break with most prior research by

distinguishing nonviolent and violent political extremists using variables derived from prominent criminological theories. Understanding what generates this difference is of concern to both researchers and policy makers. Monahan (2011) argued that there are few prior empirical studies of the predictors of violent extremism. We were able to include variables from several theoretical traditions that are commonly incorporated in etiological studies of crime. Our goal here is to determine the extent to which these commonly examined criminology variables are useful in explaining the differences between violent and nonviolent political extremists.

Taken together, the results allow for several conclusions that provide guidance for theoretical elaboration moving forward. The results of the analyses provided some support for social control theory's utility in explaining violent extremism. As hypothesized (H1), we found a significant and negative relationship between stable employment history and the propensity for violence among individuals. This finding supports the common criminological argument that stable employment is a positive social bonding mechanism that motivates individuals to abstain from violent crime rather than risk sacrificing social capital. Although this finding seems to be at odds with some recent accounts of terrorist perpetrators (Krueger and Malečková, 2003; LaFree and Ackerman, 2009; Piazza, 2006), which generally find a weak or even positive relationship between high socioeconomic status and terrorist activity, it should be reiterated that terrorism researchers are decidedly mixed when it comes to the relationship between economic status and participation in terrorist behaviors. Our results show that there may well be a link between stable employment and the suppression of violence within the context of political extremism in the United States. By contrast, none of the other social control variables included in the analysis had a consistent effect on likelihood of engaging in violent extremism, controlling for the other variables in the analysis. Although educational status (H2) and marital status (H3) were significant in the expected direction in the bivariate analysis, they were not significant in the multivariate analysis. Prior or current military experience (H4a, H4b) was not only insignificant in the bivariate analysis but also showed signs of being significant in a direction opposite of the hypotheses. The fact that these relationships fail to gain significance across all our alternative multivariate models suggests that our chosen method for handling missing data is not driving the null findings.

We also find some support for social learning theory's premise that close social relationships play an important role in the decision to commit extremist violence. As hypothesized (H6), compared with others, individuals who have radical peers are significantly more likely to engage in violent political behavior. In fact, of all the independent variables, radical peers is the strongest predictor of violence, a fact that is robust to model specification. As the results of prior research suggest (Akers, 2009; Warr, 2002), individuals who are embedded in tight, insular groups of like-minded peers are particularly susceptible to biasing dynamics and the results reveal that such individuals are likely to move toward violent behavior. Furthermore, Akers and Silverman (2004) specifically argued that social learning principles are applicable to terrorists, who formulate and shape their identity in response to other individuals' instructions, justifications, and influence. Individuals surrounded by extremist peers who are more likely to reinforce the notion that violence is necessary to resolve perceived conflict are themselves more likely to adhere to those definitions. This finding is interesting in light of the growing literature on the importance of terrorist attacks by lone actors (Gill et al., 2014; Spaaij, 2011), who would seem to be less susceptible to the biasing dynamics of radical social networks. Nevertheless,

as Klausen (2015) argued, lone actors often establish close relationships, both virtual and face to face, with peers who contribute to their movement toward violence.

Although the existence of radical family members was significant and in a positive direction at the bivariate level, it did not attain significance in any of the multivariate models. It could be that observed differences between friends and family members simply indicate that people are more influenced to violent behavior by their peers than by their family. As Jaško et al. (2017) noted, it could also be that in addition to social influence, there is a self-selection process at work such that individuals that become interested in violent extremism search for others with similar ideologies. This process could be self-reinforcing so that increasing radicalization both strengthens one's own radicalization as well as the radicalization of one's peers. Note that this process applies mostly to peers rather than to family members because the latter are generally not chosen.

The different results for H5 and H6 may also be influenced by our data collection strategy. For example, socialization by radical peers may take place in more public settings, whereas family influence may take place in more private locations. As such, openly available sources may not capture the influence of family members as accurately as the influence of peers.

In support of psychology-based theories of crime, we also found that evidence of mental illness was consistently associated with engaging in extremist political violence (H7). As we saw earlier, recent research findings on connections between terrorist behavior and mental illness have been conflicted with some researchers claiming no connection (McCauley and Moskalenko, 2011; Nijboer, 2012) and others (Gill et al., 2014; Simi et al., 2015; Spaaij, 2011) claiming a positive connection. Our results generally support the latter. It could be that these differences are also related to the fact that in contrast to most earlier studies, in which only individuals who engaged in violent political acts were examined, our dependent variable included both violent and nonviolent radicalized individuals.

Although we find a positive relationship, it is difficult to point to the precise mechanism by which mental illness influences violent extremism. It might act as a "pull" factor, where mental illness makes an individual more susceptible to ideological propaganda or extremist group coercion. By contrast, it might act as a "push" factor, as labeling theorists would predict, in which diagnoses of mental illness exclude individuals from conventional society, forcing them to seek acceptance through less prosocial means. In this case, mental illness would not be a cause of violent extremism, but it would act as the mechanism through which individuals are labeled, isolated, and stigmatized.

Given these concerns, we reran our multivariate models from table 3 so that only those individuals with clinical diagnoses of mental illness were treated as having mental illness histories.⁷ Despite the attenuated number of individuals designated as having a mental illness history (which dropped from 127 to 58), the results (available by request) for the relationship between mental illness history and violent extremism were still positive and significant. Nevertheless, even when limited to cases verified by clinical diagnoses, our measure of mental illness does not take into account the tremendous heterogeneity that exists in mental health conditions. Future research should be aimed at seeking more precise data sources to unpack the nuances in the relationship between mental illness and violent extremism, especially when it coincides with other potentially compounding factors such as substance abuse, criminal history, and emotional trauma.

7. We thank an anonymous reviewer for this suggestion.

We also found consistent evidence that criminal activity before radicalization was associated with engaging in violent political activity (H9). Importantly, this association was true regardless of whether the criminal activity itself was violent; our measure of past criminality included nonviolent crimes like drug offenses and larceny. This finding supports the classic criminological notion that past crime is a reliable predictor of future crime, and it suggests that radicalization processes are linked to more common forms of criminality. Indeed, criminal career researchers (Blumstein et al., 1988) have shown that a history of criminal violence is predictive of subsequently more severe behavior.

Finally, we failed to find support for connections between group rivalry, or “outbidding” (H8), gender (H10), or age (H11), and the propensity to engage in violent extremism. Individuals who were members of groups that were in competition with like-minded organizations, or who were plagued by internal strife, were no more likely to engage in acts of violence than were other individuals. Although this finding holds across both the bivariate results and all the multivariate models, it may be that outbidding is more salient to extremist violence outside of the United States where competition over scarce resources is more intense (Bloom, 2004).

Gender and age are among the strongest predictors of ordinary crime, and indeed they were significantly associated with engaging in violent extremism in the bivariate analysis. Nevertheless, when we controlled for the other variables in our model, both became insignificant. The lack of multivariate significance for gender may be a function in part of the skewed distribution—90 percent of our sample were men. The insignificant finding for perpetrator’s age provides an interesting contrast with the mainstream criminology literature. It has been reported in a growing body of research on those who commit extremist political violence (Klausen et al., 2016; Pyrooz et al., 2017; Simi, Sporer, and Bubolz, 2016) that those who engage in political extremism are often older than those who engage in more common types of crime, although the reasons for this difference have not been fully explored.

Taken together, the four significant predictors of violent extremism in the multivariate models—stable employment, radical peers, mental illness, and criminal record—have a substantial impact on participation in violent extremism, and may do so additively. For instance, using our data set that employed fixed-value imputation, we find that individuals with none of these four characteristics have a 41.3 percent ($n = 646$) chance of engaging in violent extremist behavior, those with one of these factors have a 59.8 percent ($n = 827$) chance of violent behavior, those with two factors have a 67.0 percent ($n = 258$) chance, those with three factors have an 84.8 percent ($n = 59$) chance, and those with four factors have a 100.0 percent chance of violent behavior ($n = 6$). Nevertheless, we hasten to add that these estimates are based on measures with varying rates of missing data. In fact, without imputation, no individuals in the sample have all four risk factors. Moreover, with or without imputation, our analysis finds that more than two fifths of the sample engaged in violent behavior despite failing to show evidence of any of the four risk factors.⁸ So although instructive, this set of risk factors should in no way be seen as a complete profile

8. Indeed, the false positive rate, although not as substantial, gradually increases as fewer of the four significant predictors are accounted for. Thus, for individuals who possess three of the four characteristics, the false-positive rate (e.g., the nonviolent extremism rate) is .153; for individuals who possess two of the four characteristics, the rate is .330; and for individuals who possess one of the four characteristics, the rate is .402.

of violent political extremists. Nevertheless, the fact that the four significant variables come from four different theoretical strands of criminology is informative in thinking about ways to advance the criminological understanding of violent extremism.

We acknowledge several weaknesses in the present study. First, missing data are a common feature of open-source studies of political extremism (Dugan and Distler, 2016; Freilich, Chermak, Belli, Gruenewald, and Parkin, 2014; Safer-Lichtenstein et al., 2017). Important information may simply be unavailable in court documents and open-source media. In addition, it is likely that the cases with the least missing data are those most prominently covered by news agencies. In the study of political extremism, like the study of crime more generally, we face methodological trade-offs. Although the limits of open-source data in this area are clear, more traditional methods like surveys and case studies also have corresponding weaknesses. Second, even though we argued earlier that contrasting violent and nonviolent political extremists has advantages, it does not allow for us to distinguish those who radicalize to commit illegal acts of political extremism from the general population. Third, although many theories of radicalization (Borum, 2011; Horgan, 2008; McCauley and Moskalenko, 2011; Neumann, 2013) conceptualize it as the culmination of multiple, dynamic pathways, our data do not allow for us to measure with precision the temporal ordering of the variables we include. Furthermore, the data that we rely on do not allow for us to address important debates in criminology about the mechanisms that link individual causal factors to specific outcomes. Even though it is not the focus of this study, we caution that our results do not reveal whether individual correlates are linked to violent extremism through selection effects, conjunctural dynamics, or another type of causal process.

And finally, given that our sample is limited to U.S.-based extremists, we cannot generalize our results to other countries or regions. Although the theoretical perspectives that we draw from are designed to be broad in explanatory scope, it could be that variation in cultural, legal, and social norms will influence how well individual criminological correlates explain violent extremism outside of the United States.⁹ Future research should be aimed at exploring how well dominant criminological theories explain violent extremism in other geographical contexts, especially those outside the West, to understand better the benefits and limitations of applying criminological theory to the study of extremism.

THEORETICAL IMPLICATIONS

Although criminological theories are focused on identifying the causes of crime, researchers have rarely incorporated insights from the discipline into studies of individual-level political extremism. Although exploratory, this article shows that applying criminological theories to the study of radicalization and political violence may be warranted. Indeed, the results suggest important ways in which criminology can improve research

9. Eldivan (2011) found similar support for the roles of group membership and ideology in his study of violent and nonviolent extremists in Turkey. Nevertheless, he did not find a significant relationship between criminal background and the propensity to engage in extremist violence. Although this suggests that different contexts may amplify or diminish the importance of individual correlates, it is important to note that in Eldivan's study, he drew on different criminological perspectives and variables and was limited to a comparatively small sample ($n = 128$) of al-Qaeda affiliated individuals and thus may not be indicative of how well our findings translate outside of the United States.

and policy on violent extremism. Likewise, they show how the study of extremists could be used to advance criminological theory.

The criminological variables that we analyzed are often excluded from explanations of radicalization to violence in favor of those representing cognitive defects or identity issues. Although cognition and identity are undoubtedly important for understanding political extremism, by placing a greater emphasis on criminological indicators in our studies of political extremism, it may be possible to identify the background conditions that link psychology and emotion to violent outcomes with more accuracy.

Moreover, our finding that mental illness and preradicalization criminal behavior are consistent predictors of postradicalization violence suggests that there is potentially much to be gained from measuring dynamic indicators that may change over the individual's life course. Although there is a near consensus in the radicalization research community on the need to treat the phenomenon as a process that unfolds over an extended period of time, in most studies, scholars take exposure to extremist beliefs as the starting point of radicalization. Future research should be aimed at drawing on developmental perspectives in criminology to show how ideological and nonideological factors work together to shape violent extremist behavior over time. For example, efforts should be made to incorporate the effects of variables that are present in childhood and early adolescence, such as trauma, household disruption, parental criminality, and neglect, into theories of radicalization. Doing so may make it possible to explain with greater accuracy why some extremists engage in violence while others do not.

Although the results indicate that criminological theories are an important tool to leverage for future radicalization research, they also indicate that extant criminological theories may not be inclusive enough. To the extent that the central goal of most criminological theories is to explain all types of crime, our results show that the discipline may be well served by paying more attention to politically motivated crimes. Indeed, an important consideration for theory testing is explanatory versatility. Our failure to find support for variables central to influential criminology theories may be an indication of important knowledge gaps within the discipline. At the least, our results indicate that more work is needed to assess the strengths and limitations of prominent criminology theories as they apply to criminal subgroups like political extremists.

Furthermore, our results show that prominent criminology theories display notable strengths and limitations when they are used to explain differences in criminal behavior. On the one hand, our results confirm that variables from social control, social learning, and psychological perspectives may be important for differentiating violent from nonviolent extremists. On the other hand, a portion of the violent extremists included in our study were not driven by variables from these perspectives, suggesting that other factors are critical to understanding violent extremist behavior. Although addressing these limitations is important for developing more robust theories of crime, it is also critical for generating insights that are useful for law enforcement and CVE practitioners, who are often tasked with identifying the individuals who may be most inclined to engage in violent criminal acts.

POLICY IMPLICATIONS

Aside from leveraging results toward potential risk assessment tools, domestic law enforcement and practitioners involved in CVE in the United States can derive several

potentially useful lessons from this exploratory analysis. Indeed, we argue that CVE programs are most likely to succeed if they reflect an evidence-based understanding of radicalization. First, our finding that stable employment seems to decrease the risk that individuals with extreme views will engage in violent behavior is relevant for several reasons. Stable employment often leads to the development of positive social relationships and places demands on individuals' time and attention that can potentially depress extremist activities. CVE programs that emphasize the acquisition of job-relevant skills may be effective for promoting sustained employment among at-risk individuals.

Second, we find that individuals whose radicalization occurs within virtual and face-to-face networks of like-minded extremists are at a high risk of acting violently.¹⁰ As peers organize into small, insular groups, common biasing mechanisms, such as group-think and in-group/out-group bias, often set in, producing increasingly extreme behaviors. CVE programs and law enforcement interdiction strategies must be created taking into account the vital role that peer relationships play in the radicalization process. Furthermore, CVE programs based on challenging the narratives of extremist groups must be designed with an awareness of the cognitive biases that exist in cliques, most of which make members less responsive to the disconfirming evidence that is often central to counternarrative campaigns.

Third, although documented mental illness is uncommon among extremists (McCauley and Moskalenko, 2011; Nijboer, 2012), our results indicate that mental health conditions may be linked to high propensities for violent behavior. As we noted earlier, researchers must do more to untangle this complex relationship, especially when it comes to resolving issues related to the post hoc labeling of mental illness and the exclusion of potentially compounding factors, such as heavy drug use (Swartz et al., 1998) or a history of physical or emotional abuse (Mueser et al., 1998). Nevertheless, it is an encouraging sign that there is an emerging consensus (Weine et al., 2015) among practitioners and researchers that effective CVE efforts have a need for mental health and social service professionals as stakeholders in prevention and intervention efforts. These experts have an important role to play in working with community leaders to recognize at-risk individuals suffering from mental health issues, building trust between communities and law enforcement, and implementing a holistic approach to countering violent extremism as a public health concern.

Finally, we find that individuals who engage in criminal behavior prior to their adoption of extremist beliefs are significantly more likely to attempt or commit acts of violence postradicalization. Research findings on the links between crime and terrorist behavior have shown some similarities between terrorist groups and criminal organizations (Sanderson, 2004; Shelley and Picarelli, 2002), street gangs and terrorist groups (Benavides, Keyes, and Pulley, 2016; Decker and Pyrooz, 2014), and political radicalization within the criminal justice system (Hamm, 2008; Rappaport, Veldhuis, and Guiora, 2012; Useem and Clayton, 2009). Nevertheless, our finding that having a criminal history is a reliable predictor for engaging in violent extremist behavior suggests that domestic CVE policy should leverage existing programs that are geared toward steering at-risk youth

10. It is important to note that this includes the radicalization of so-called "lone" actors. In fact, Klausen (2015) suggested that even though lone actors may act on their own, they often radicalize within small, close-knit social networks.

away from crime. It also suggests that there may be CVE-relevant benefits to rehabilitation programs for nonideological criminals. Efforts to reduce recidivism among inmates recently released from the criminal justice system may also be useful for preventing the most severe types of behavior among radicalized individuals.

We argued earlier that criminology has paid insufficient attention to violent extremists as an important subgroup of criminals. Our research findings support the conclusion that violent political extremism has much in common with ordinary crime but at the same time is only partially explained by commonly employed criminological variables. We provide consistent evidence that understanding violent political extremism may be advanced by considering variables drawn from influential criminological theories like social control and social learning. At the same time, this support is far from perfect and some variables associated with these perspectives that have been important in explanations of more ordinary forms of crime were not significant in our analysis. By comparing nonviolent and violent political extremists, we hope to provide a platform for researchers to develop more refined theoretical explanations and for law enforcement and intelligence practitioners to counter violent extremism more effectively.

REFERENCES

- Abrahms, Max. 2012. The political effectiveness of terrorism revisited. *Comparative Political Studies* 45:366–93.
- Akers, Ronald L. 1985. *Deviant Behavior: A Social Learning Approach*, 3rd ed. Belmont, CA: Wadsworth.
- Akers, Ronald L. 2009. *Social Learning and Social Structure: A General Theory of Crime and Deviance*. New Brunswick, NJ: Transaction.
- Akers, Ronald L., and Adam L. Silverman. 2004. Toward a social learning model of violence and terrorism. In *Violence: From Theory to Research* (pp. 19–36), eds. Margaret A. Zahn, Henry H. Brownstein, and Shelly L. Jackson. Cincinnati, OH: LexisNexis–Anderson.
- Allison, Graham T. 1971. *Essence of Decision: Explaining the Cuban Missile Crisis*. Boston, MA: Little, Brown.
- Anderson, Elijah. 2000. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: Norton.
- Andridge, Rebecca R., and Roderick J. A. Little. 2010. A review of hot deck imputation for survey non-response. *International Statistical Review* 78:40–64.
- Apel, Robert J., Shawn D. Bushway, Raymond Paternoster, Robert Brame, and Gary Sweeten. 2008. Using state child labor laws to identify the causal effect of youth employment on deviant behavior and academic achievement. *Journal of Quantitative Criminology* 24:337–62.
- Arnold, Terrell E., and Moorhead Kennedy. 1988. *Think About Terrorism: The New Warfare*. New York: Walker.
- Atkins, J. Keith, and L. Thomas Winfree. 2017. Social learning theory and becoming a terrorist: New challenges for a general theory. In *The Handbook of the Criminology of Terrorism* (pp. 1133–1149), eds. Gary LaFree and Joshua Freilich. New York: Wiley.
- Bakker, Edwin. 2006. *Jihadi Terrorists in Europe, Their Characteristics and the Circumstances in Which They Joined the Jihad: An Exploratory Study* (Clingendael Security

- Paper, No. 2). The Hague, the Netherlands: Netherlands Institute of International Relations.
- Bakker, Edwin, and Beatrice de Graaf. 2010. *Lone Wolves: How to Prevent This Phenomenon?* The Hague, the Netherlands: International Centre for Counter-Terrorism. <https://openaccess.leidenuniv.nl/bitstream/handle/1887/16557/ICCT%2520EM%2520Lone%2520Wolves%2520Paper.pdf?sequence=2>.
- Benavides, Abraham David, Laura M. Keyes, and Brittany Pulley. 2016. Understanding the recruitment methods and socialization techniques of terror networks by comparing them to youth gangs: Similarities and divergences. In *Countering Terrorist Recruitment in the Context of Armed Counter-Terrorism Operations* (pp. 40–54), eds. Siddik Ekici, Huseyin Akdoğan, and E. Ragab. Amsterdam, the Netherlands: IOS Press.
- Berrebi, Claude. 2007. Evidence about the link between education, poverty and terrorism among Palestinians. *Peace Economics, Peace Science and Public Policy* 13:1–36.
- Bersani, Bianca E., and Elaine Eggleston Doherty. 2013. When the ties that bind unwind: Examining the enduring and situational processes of change behind the marriage effect. *Criminology* 51:399–433.
- Biberman, Yelena, and Farhan Zahid. 2016. Why terrorists target children: Outbidding, desperation, and extremism in the Peshawar and Beslan school massacres. *Terrorism and Political Violence* 1–16. <http://doi.org/10.1080/09546553.2015.1135425>.
- Bion, Wilfred Ruprecht. 1961. *Experiences in Groups: And Other Papers*. New York: Tavistock.
- Black, Donald J. 1998. *The Social Structure of Right and Wrong*, Rev. ed. San Diego, CA: Academic Press.
- Blomberg, Thomas G., William D. Bales, and Alex R. Piquero. 2012. Is educational achievement a turning point for incarcerated delinquents across race and sex? *Journal of Youth and Adolescence* 41:202–16.
- Bloom, Mia. 2004. Palestinian suicide bombing: Public support, market share, and outbidding. *Political Science Quarterly* 119:61–88.
- Bloom, Mia. 2007. *Dying to Kill: The Allure of Suicide Terror*. New York: Columbia University Press.
- Bloom, Mia. 2012. *Bombshell: Women and Terrorism*. Philadelphia: University of Pennsylvania Press.
- Blumstein, Alfred, Jacqueline Cohen, and David P. Farrington. 1988. Criminal career research: Its value for criminology. *Criminology* 26:1–35.
- Borum, Randy. 2011. Radicalization into violent extremism I: A review of social science theories. *Journal of Strategic Security* 4:7–36.
- Bouffard, Leana Allen. 2003. Examining the relationship between military service and criminal behavior during the Vietnam Era: A research note. *Criminology* 41: 491–510.
- Bouffard, Leana Allen, and John H. Laub. 2004. Jail or the Army: Does military service facilitate desistance from crime? In *After Crime and Punishment: Pathways to Offender Reintegration* (pp. 129–151), eds. Shadd Maruna and Russ Immarigeon. Portland, OR: Willan.
- Boyns, David, and James David Ballard. 2004. Developing a sociological theory for the empirical understanding of terrorism. *The American Sociologist* 35:5–25.
- Braithwaite, John. 1989. *Crime, Shame and Reintegration*. New York: Cambridge University Press.

- Burgess, Robert L., and Ronald L. Akers. 1966. A differential association-reinforcement theory of criminal behavior. *Social Problems* 14:128–47.
- Campana, Paolo, and Federico Varese. 2013. Cooperation in criminal organizations: Kinship and violence as credible commitments. *Rationality and Society* 25: 263–89.
- Cantor, David, and Kenneth C. Land. 1985. Unemployment and crime rates in the post-World War II United States: A theoretical and empirical analysis. *American Sociological Review* 50:317–32.
- Chermak, Steven M., Joshua D. Freilich, William S. Parkin, and James P. Lynch. 2012. American terrorism and extremist crime data sources and selectivity bias. *Journal of Quantitative Criminology* 28:191–218.
- Chiricos, Ted. 1987. Rates of crime and unemployment: An analysis of aggregate research evidence. *Social Problems* 34:187–212.
- Clarke, Ronald V., and Graeme R. Newman. 2006. *Outsmarting the Terrorists*. Westport, CT: Praeger Security International.
- Cocozza, Joseph J., Mary Evans Melick, and Henry J. Steadman. 1978. Trends in violent crime among ex-mental patients. *Criminology* 16:317–34.
- Cooley, John K. 2002. *Unholy Wars: Afghanistan, America and International Terrorism*. Sterling, VA: Pluto Press.
- Corman, Steven R., Angela Trethewey, and H. Lloyd Goodall. 2008. *Weapons of Mass Persuasion: Strategic Communication to Combat Violent Extremism*. New York: Peter Lang.
- Corner, Emily, Paul Gill, and Oliver Mason. 2016. Mental health disorders and the terrorist: A research note probing selection effects and disorder prevalence. *Studies in Conflict & Terrorism* 39:560–68.
- Cottee, Simon. 2016. Reborn into terrorism. *The Atlantic*, January 25. <https://www.theatlantic.com/international/archive/2016/01/isis-criminals-converts/426822/>
- Crenshaw, Martha. 2000. The psychology of terrorism: An agenda for the 21st century. *Political Psychology* 21:405–20.
- Crenshaw, Martha, and Irving Louis Horowitz. 1983. *Terrorism, Legitimacy, and Power: The Consequences of Political Violence: Essays*. Middletown, CT: Wesleyan University Press.
- Cronin, Audrey Kurth. 2011. *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns*. Princeton, NJ: Princeton University Press.
- Cunningham, Karla J. 2003. Cross-regional trends in female terrorism. *Studies in Conflict & Terrorism* 26:171–95.
- De Bie, Jasper L., and Christianne J. De Poot. 2016. Studying police files with grounded theory methods to understand jihadist networks. *Studies in Conflict & Terrorism* 39:580–601.
- Decker, Scott H., and David C. Pyrooz. 2011. Gangs, terrorism, and radicalization. *Journal of Strategic Security* 4:151–66.
- Decker, Scott H., and David C. Pyrooz. 2014. Gangs: Another form of organized crime. In *Oxford Handbook of Organized Crime* (pp. 270–287), ed. Letizia Paoli. Oxford, England: Oxford University Press.
- DeLisi, Matt, Tricia K. Neppel, Brenda J. Lohman, Michael G. Vaughn, and Jeffrey J. Shook. 2013. Early starters: Which type of criminal onset matters most for delinquent careers? *Journal of Criminal Justice* 41:12–17.

- della Porta, Donatella. 2006. *Social Movements, Political Violence, and the State: A Comparative Analysis of Italy and Germany*. Cambridge, England: Cambridge University Press.
- Department of Homeland Security, Office of Intelligence and Analysis. 2009. *Rightwing Extremism: Current Economic and Political Climate Fueling Resurgence in Radicalization and Recruitment*. Washington, DC: United States Government.
- Dugan, Laura, and Michael Distler. 2016. Measuring terrorism. In *The Handbook of the Criminology of Terrorism* (pp. 189–205), eds. Gary LaFree and Joshua D. Freilich. New York: Wiley-Blackwell.
- Eldivan, Ibrahim Sevki. 2011. Pathway from tranquility to violent radicalization. PhD Dissertation. Rutgers, the State University of New Jersey.
- Enders, Walter, and Todd Sandler. 2012. *The Political Economy of Terrorism*, 2nd ed. New York: Cambridge University Press.
- Farrington, David P. 2003. Developmental and life-course criminology: Key theoretical and empirical issues—The 2002 Sutherland Award Address. *Criminology* 41: 221–25.
- Farrington, David P., Lloyd E. Ohlin, and James Q. Wilson. 1986. *Understanding and Controlling Crime: Toward a New Research Strategy*. New York: Springer.
- Federal Bureau of Investigation. 2008. *White Supremacist Recruitment of Military Personnel since 9/11*. Washington, DC: U.S. Government Printing Office.
- Findley, Michael G., and Joseph K. Young. 2012. More combatant groups, more terror? Empirical tests of an outbidding logic. *Terrorism and Political Violence* 24:706–21.
- Forst, Brian, Jack R. Greene, and James P. Lynch. 2011. *Criminologists on Terrorism and Homeland Security*. New York: Cambridge University Press.
- Freilich, Joshua D., Steven M. Chermak, Roberta Belli, Jeff Gruenewald, and William S. Parkin. 2014. Introducing the United States Extremist Crime Database (ECDB). *Terrorism and Political Violence* 26:372–84.
- Freilich, Joshua D., and Gary LaFree, eds. 2015. *Criminology Theory and Terrorism: New Applications and Approaches*. New York: Routledge.
- Gartenstein-Ross, Daveed, and Laura Grossman. 2009. *Homegrown Terrorists In The U.S. And The U.K.: An Empirical Examination Of The Radicalization Process*. Washington, DC: FDD Press.
- Gendreau, Paul, Tracy Little, and Claire Goggin. 1996. A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology* 34:575–608.
- Gill, Paul, and Emily Corner. 2016. Lone-actor terrorist target choice. *Behavioral Sciences & the Law* 34:693–705.
- Gill, Paul, John Horgan, and Paige Deckert. 2014. Bombing alone: Tracing the motivations and antecedent behaviors of lone-actor terrorists. *Journal of Forensic Sciences* 59:425–35.
- Giordano, Peggy C. 2010. *Legacies of Crime: A Follow-Up of the Children of Highly Delinquent Girls and Boys*. New York: Cambridge University Press.
- Glaser, Daniel. 1964. *The Effectiveness of a Prison and Parole System*. Indianapolis, IN: Bobbs-Merrill.
- Gold, Michael Steven, and Peter M. Bentler. 2000. Treatments of missing data: A Monte Carlo comparison of RBHDI, iterative stochastic regression imputation, and expectation-maximization. *Structural Equation Modeling: A Multidisciplinary Journal* 7:319–55.

- Gottfredson, Denise. 1997. School-based crime prevention. In *Preventing Crime: What Works, What Doesn't, What's Promising: A Report to the United States Congress* (pp. 224–249), eds. Lawrence Sherman, Denise Gottfredson, Doris MacKenzie, John Eck, Peter Reuter, and Shawn Bushway. Washington, DC: National Institute of Justice.
- Gottfredson, Michael R., and Travis Hirschi. 1990. *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- Grogger, Jeffery. 1998. Market wages and youth crime. *Journal of Labor Economics* 16:756–91.
- Gruenewald, Jeff, Steven Chermak, and Joshua D. Freilich. 2013. Distinguishing “loner” attacks from other domestic extremist violence. *Criminology & Public Policy* 12: 65–91.
- Hafez, Mohammed M. 2008. Radicalization in the Persian Gulf: Assessing the potential of Islamist militancy in Saudi Arabia and Yemen. *Dynamics of Asymmetric Conflict* 1:6–24.
- Hafez, Mohammed M. 2016. The ties that bind: How terrorists exploit family bonds. *CTC Sentinel* 8:15–17.
- Hagedorn, John. 2007. *Gangs in the Global City: Alternatives to Traditional Criminology*. Chicago: University of Illinois Press.
- Hamm, Mark S. 2007. *Terrorism as Crime: From Oklahoma City to Al-Qaeda and Beyond*. New York: NYU Press.
- Hamm, Mark S. 2008. Prisoner radicalization: Assessing the threat in U.S. correctional institutions. *National Institute of Justice Journal*, 261:14–19.
- Hayes, A. F., and K. Krippendorff. 2007. Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures* 1:77–89.
- Held, Virginia. 2004. Terrorism and war. *The Journal of Ethics* 8:59–75.
- Hewitt, Christopher. 2003. *Understanding Terrorism in America: From the Klan to Al Qaeda*. New York: Routledge.
- Hirschi, Travis. 1969. *Causes of Delinquency*. Berkeley: University of California Press.
- Hirschi, Travis, and Michael R. Gottfredson. 1983. Age and the explanation of crime. *American Journal of Sociology* 89:552–84.
- Hoffman, Bruce. 1998. *Inside Terrorism*. New York: Columbia University Press.
- Hoffman, Peter B., and James L. Beck. 1974. Parole decision-making: A salient factor score. *Journal of Criminal Justice* 2:195–206.
- Hoffman, Peter B., Barbara Stone-Meierhoefer, and James L. Beck. 1978. Salient factor score and releasee behavior: Three validation samples. *Law and Human Behavior* 2:47–62.
- Honaker, James, and Gary King. 2010. What to do about missing values in time-series cross-section data. *American Journal of Political Science* 54:561–81.
- Horgan, John. 2005. *The Psychology of Terrorism*. New York: Routledge.
- Horgan, John. 2008. From profiles to pathways and roots to routes: Perspectives from psychology on radicalization into terrorism. *The ANNALS of the American Academy of Political and Social Science* 618:80–94.
- Janis, Irving Lester. 1972. *Victims of Groupthink: A Psychological Study of Foreign-Policy Decisions and Fiascoes*. Boston, MA: Houghton Mifflin.

- Jaško, Katarzyna, Gary LaFree, and Arie Kruglanski. 2017. Quest for significance and violent extremism: The case of domestic radicalization. *Political Psychology* 38: 815–31.
- Jensen, Michael, Patrick James, Gary LaFree, Anita Atwell-Seate, Daniela Pisoiu, and John Stevenson. 2016. *Empirical Assessment of Domestic Radicalization (EADR)* (Final Report National Institute of Justice, Award Number 2012–ZA–BX–0005). College Park, MD: National Consortium for the Study of Terrorism and Responses to Terrorism (START). <https://www.ncjrs.gov/pdffiles1/nij/grants/250481.pdf>.
- Katz, Jack. 1988. *Seductions of Crime: Moral and Sensual Attractions in Doing Evil*. New York: Basic Books.
- King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. Analyzing incomplete political science data: An alternative algorithm for multiple imputation. *American Political Science Review* 95:49–69.
- Kirk, David S. 2012. Residential change as a turning point in the life course of crime: Desistance or temporary cessation? *Criminology* 50:329–58.
- Kirk, David S., and Mauri Matsuda. 2011. Legal cynicism, collective efficacy, and the ecology of arrest. *Criminology*. 49:443–72.
- Kittrie, Nicholas N. 1978. A new look at political offenses and terrorism. In *International Terrorism in the Contemporary World* (pp. 354–375), eds. Marius H. Livingston, Lee Bruce Kress, and Marie G. Wanek. Westport, CT: Greenwood.
- Klausen, Jytte. 2015. Tweeting the jihad: Social media networks of Western foreign fighters in Syria and Iraq. *Studies in Conflict & Terrorism* 38:1–22.
- Klausen, Jytte, Tyler Morrill, and Rosanne Libretti. 2016. The terrorist age-crime curve: An analysis of American Islamist terrorist offenders and age-specific propensity for participation in violent and nonviolent incidents. *Social Science Quarterly* 97:19–32.
- Krohn, Marvin D., and James L. Massey. 1980. Social control and delinquency behavior: An examination of the elements of the social bond. *The Sociological Quarterly* 4: 529–43.
- Krueger, Alan B. 2007. *What Makes a Terrorist: Economics and the Roots of Terrorism*. Princeton, NJ: Princeton University Press.
- Krueger, Alan B., and Jitka Malečková. 2003. Education, poverty and terrorism: Is there a causal connection? *Journal of Economic Perspectives* 17:119–44.
- Kruglanski, Arie W., Xiaoyan Chen, Mark Dechesne, Shira Fishman, and Edward Orehek. 2009. Fully committed: Suicide bombers' motivation and the quest for personal significance. *Political Psychology* 30:331–57.
- Kruglanski, Arie W., Michele J. Gelfand, Jocelyn J. Bélanger, Anna Sheveland, Malkanthi Hetiarachchi, and Rohan Gunaratna. 2014. The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Political Psychology* 35:69–93.
- Kurzman, Charles. 2015. Terrorism cases involving Muslim-Americans, 2014. PhD Dissertation. Department of Sociology, University of North Carolina, Chapel Hill. http://sites.duke.edu/tcths/files/2013/06/Kurzman_Terrorism_Cases_Involving_Muslim-Americans_2014.pdf.
- Kydd, Andrew H., and Barbara F. Walter. 2006. The strategies of terrorism. *International Security* 31:49–80.
- LaFree, Gary, and Gary Ackerman. 2009. The empirical study of terrorism: Social and legal research. *Annual Review of Law and Social Science* 5:347–74.

- LaFree, Gary, and Laura Dugan. 2004. How does studying terrorism compare to studying crime? In *Terrorism and Counter-Terrorism: Criminological Perspectives* (pp. 53–74), ed. Mathieu Deflem. London, England: Emerald Group.
- LaFree, Gary, Laura Dugan, and Erin Miller. 2015. *Putting Terrorism in Context: Lessons from the Global Terrorism Database*, 1st ed. Abingdon, England: Routledge.
- Laqueur, Walter. 1977. *Terrorism*. Boston, MA: Little, Brown.
- Laub, John H., and Robert J. Sampson. 1993. Turning points in the life course: Why change matters to the study of crime. *Criminology* 31:301–25.
- Laub, John H., and Robert J. Sampson. 2006. *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70*. Cambridge, MA: Harvard University Press.
- Link, Bruce G., Howard Andrews, and Francis T. Cullen. 1992. The violent and illegal behavior of mental patients reconsidered. *American Sociological Review* 57:275–92.
- Lochner, Lance, and Enrico Moretti. 2004. The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. *The American Economic Review* 94:155–189.
- Loeber, Rolf, and Marc Le Blanc. 1990. Toward a developmental criminology. In *Crime and Justice: A Review of Research*, vol. 12 (pp. 375–473), ed. Michael Tonry. Chicago, IL: University of Chicago Press.
- Lum, Cynthia, and Leslie W. Kennedy, eds. 2012. *Evidence-Based Counterterrorism Policy*. New York: Springer.
- Marvell, Thomas B., and Carlisle E. Moody, Jr. 1991. Age structure and crime rates: The conflicting evidence. *Journal of Quantitative Criminology* 7:237–73.
- Matusitz, Jonathan. 2014. *Symbolism in Terrorism: Motivation, Communication, and Behavior*. Lanham, MD: Rowman & Littlefield.
- Matza, David. 1964. *Delinquency and Drift*. New York: Wiley.
- McCaughey, Clark R. 1989. The nature of social influence in groupthink: Compliance and internalization. *Journal of Personality and Social Psychology* 57:250–60.
- McCaughey, Clark R., and Sophia Moskalenko. 2011. *Friction: How Radicalization Happens to Them and Us*. New York: Oxford University Press.
- McCaughey, Clark R., and M. E. Segal. 1987. Social psychology of terrorist groups. In *Group Processes and Intergroup Relations: Review of Personality and Social Psychology*, vol. 9, eds. Dominic Abrahms and Michael A. Hogg. Newbury Park, CA: Sage.
- Mendelsohn, Barak. 2011. Foreign fighters—recent trends. *Orbis* 55:189–202.
- Monahan, John. 2011. *The Individual Risk Assessment of Terrorism* (Virginia Public Law and Legal Theory Research Paper, No. 34). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1928722.
- Monahan, John, and Jennifer L. Skeem. 2015. Risk Assessment in Criminal Sentencing (Virginia Public Law and Legal Theory Research Paper, No. 53). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2662082.
- Morrison, John F., and Paul Gill. 2016. 100 years of Irish Republican violence. *Terrorism and Political Violence* 28:409–16.
- Mueser, Kim T., Lisa B. Goodman, Susan L. Trumbetta, Stanley D. Rosenberg, Fred C. Osher, Robert Vidaver, Patricia Auciello, and David W. Foy. 1998. Trauma and post-traumatic stress disorder in severe mental illness. *Journal of Consulting and Clinical Psychology* 66:493–499.
- Nettler, Gwynn. 1984. *Explaining Crime*. New York: McGraw-Hill Ryerson.

- Neumann, Peter R. 2013. The trouble with radicalization. *International Affairs* 89: 873–93.
- Newman, David. 2006. The resilience of territorial conflict in an era of globalization. In *Territoriality and Conflict in an Era of Globalization* (pp. 85–110), eds. Miles Kahler and Barbara F. Walter, Cambridge, England: Cambridge University Press.
- Nijboer, Matthijs. 2012. A review of lone wolf terrorism: The need for a different approach. *Social Cosmos* 3:33–9. <http://dspace.library.uu.nl/handle/1874/237585>.
- Oberschall, Anthony. 2004. Explaining terrorism: The contribution of collective action theory. *Sociological Theory* 22:26–37.
- Papachristos, Andrew V. 2009. Murder by structure: Dominance relations and the social structure of gang homicide. *American Journal of Sociology* 115:74–128.
- Pape, Robert. 2005. *Dying to Win: The Strategic Logic of Suicide Terrorism*. New York: Random House.
- Piazza, James A. 2006. Rooted in poverty? Terrorism, poor economic development, and social cleavages. *Terrorism and Political Violence* 18:159–77.
- Pisoiu, Daniela. 2015. Subcultural theory applied to jihadi and right-wing radicalization in Germany. *Terrorism and Political Violence* 27:9–28.
- Post, Jerrold M. 1998. Terrorist psycho-logic: Terrorist behavior as a product of psychological forces. In *Origins of Terrorism: Psychologies, Ideologies, Theologies, States of Mind* (pp. 25–40), ed. Walter Reich. Washington, DC: Woodrow Wilson Center Press.
- Post, Jerrold M. 2005. When hatred is bred in the bone: Psycho-cultural foundations of contemporary terrorism. *Political Psychology* 26:216–36.
- Post, Jerrold M., Keven G. Ruby, and Eric D. Shaw. 2002. The radical group in context: 1. An integrated framework for the analysis of group risk for terrorism. *Studies in Conflict & Terrorism* 25:73–100.
- Pyrooz, David C., Gary LaFree, Scott Decker, and Patrick A. James. 2017. Cut from the same cloth? Comparing gangs and violent political extremists. *Justice Quarterly*, 1–32.
- Rappaport, Aaron J., Tinka M. Veldhuis, and Amos N. Guiora. 2012. Homeland security and the inmate population: The risk and reality of Islamic radicalization in prison. In *Special Needs of Offenders in Correctional Institutions* (pp. 431–458), ed. L. Gideon. Thousand Oaks, CA: Sage.
- Rosenfeld, Richard. 2004. Terrorism and criminology. In *Terrorism and Counter-Terrorism: Criminological Perspectives*, ed. Mathieu Deflem. Bingley, England: Emerald Group. <http://www.emeraldinsight.com/doi/abs/10.1108/S1521-6136%282004%290000005004>.
- Rubin, Donald B. 1976. Inference and missing data. *Biometrika* 63:581–92.
- Rubin, Donald B. 2004. *Multiple Imputation for Nonresponse in Surveys*. Hoboken, NJ: Wiley-Interscience.
- Russell, Charles A., and Bowman H. Miller. 1977. Profile of a terrorist. *Terrorism* 1: 17–34.
- Sack, Robert David. 1986. *Human Territoriality: Its Theory and History*. Cambridge, England: Cambridge University Press.
- Safer-Lichtenstein, Aaron, Gary LaFree, and Thomas A. Loughran. 2017. Studying terrorism empirically: What we know about what we don't know. *Journal of Contemporary Criminal Justice* 33: 273–291.
- Sageman, Marc. 2004. *Understanding Terror Networks*, 1st ed. Philadelphia: University of Pennsylvania Press.

- Sageman, Marc. 2008. *Leaderless Jihad: Terror Networks in the Twenty-First Century*. Philadelphia: University of Pennsylvania Press.
- Sampson, Robert J., and John H. Laub. 1996. Socioeconomic achievement in the life course of disadvantaged men: Military service as a turning point, circa 1940–1965. *American Sociological Review* 61:347–67.
- Sanderson, Thomas M. 2004. Transnational terror and organized crime: Blurring the lines. *SAIS Review of International Affairs* 24:49–61.
- Schmid, Alex P., and Albert J. Jongman. 1988. *Political Terrorism: A New Guide to Actors, Authors, Concepts, Data Bases, Theories, And Literature*. New Brunswick, NJ: Transaction.
- Shapiro, Jacob N. 2013. *The Terrorist's Dilemma: Managing Violent Covert Organizations*. Princeton, NJ: Princeton University Press.
- Shelley, Louise I., and John T. Picarelli. 2002. Methods not motives: Implications of the convergence of international organized crime and terrorism. *Police Practice and Research* 3:305–18.
- Silke, Andrew. 2008. Holy warriors exploring the psychological processes of jihadi radicalization. *European Journal of Criminology* 5:99–123.
- Simi, Pete, Brian Bubolz, Hillary McNeel, Karyn Sporer, and Steven Windisch. 2015. Trauma as a precursor to violent extremism: How non-ideological factors can influence joining an extremist group. *START Newsletter*, April. College Park, MD.
- Simi, Pete, Karyn Sporer, and Bryan F. Bubolz. 2016. Narratives of childhood adversity and adolescent misconduct as precursors to violent extremism: A life-course criminological approach. *Journal of Research in Crime and Delinquency* 53: 536–63.
- Smith, Brent L., and Kelly R. Damphousse. 2007. *American Terrorism Study, 1980–2002*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Smith, Brent L., and Kelly R. Damphousse. 1998. Terrorism, politics, and punishment: A test of structural-contextual theory and the “liberation hypothesis.” *Criminology* 36:67–92.
- Smith, M. Dwayne, Joel A. Devine, and Joseph F. Sheley. 1992. Crime and unemployment: Effects across age and race categories. *Sociological Perspectives* 35:551–72.
- Spaaij, Ramon. 2011. *Understanding Lone Wolf Terrorism: Global Patterns, Motivations and Prevention*. New York: Springer Science & Business Media.
- Speckhard, Anna, and Khapta Akhmedova. 2006. Black widows: The Chechen female suicide terrorists. In *Female Suicide Bombers: Dying for Equality* (pp. 63–80)?, ed. Yoram Schweitzer. Tel Aviv, Israel: Jaffee Center for Strategic Studies.
- Steadman, Henry J., and Richard B. Felson. 1984. Self-reports of violence. *Criminology* 22:321–42.
- Sutherland, Edwin H. 1947. *Principles of Criminology*, 4th ed. Philadelphia, PA: Lippincott.
- Swartz, Marvin S., Jeffrey W. Swanson, Virginia A. Hiday, Randy Borum, H. Ryan Wagner, and Barbara J. Burns. 1998. Violence and severe mental illness: The effects of substance abuse and nonadherence to medication. *American Journal of Psychiatry* 155:226–31.
- Sweeten, Gary, Alex R. Piquero, and Laurence Steinberg. 2013. Age and the explanation of crime, revisited. *Journal of Youth and Adolescence* 42:921–38.

- Tauchen, Helen, Ann Dryden Witte, and Harriet Griesinger. 1994. Criminal deterrence: Revisiting the issue with a birth cohort. *The Review of Economics and Statistics* 76:399–412.
- Thornberry, Terence P., and Kimberly L. Henry. 2013. Intergenerational continuity in maltreatment. *Journal of Abnormal Child Psychology* 41:555–69.
- Tita, George E., and Steven M. Radil. 2011. Spatializing the social networks of gangs to explore patterns of violence. *Journal of Quantitative Criminology* 27:521–45.
- Truscott, Derek. 1992. Intergenerational transmission of violent behavior in adolescent males. *Aggressive Behavior* 18:327–35.
- Tsikriktsis, Nikos. 2005. A review of techniques for treating missing data in OM survey research. *Journal of Operations Management* 24:53–62.
- Turk, Austin T. 2004. Sociology of terrorism. *Annual Review of Sociology* 30:271–86.
- Uggen, Christopher. 2000. Work as a turning point in the life course of criminals: A duration model of age, employment, and recidivism. *American Sociological Review* 67:529–46.
- Useem, Bert, and Obie Clayton. 2009. Radicalization of U.S. prisoners. *Criminology & Public Policy* 8:561–92.
- Warr, Mark. 1998. Life course transitions and desistance from crime. *Criminology* 36:183–216.
- Warr, Mark. 2002. *Companions in Crime: The Social Aspects of Criminal Conduct*. Cambridge, England: Cambridge University Press.
- Warr, Mark, and Mark Stafford. 1991. The influence of delinquent peers: What they think or what they do? *Criminology* 29:851–66.
- Weine, Stevan M., B. Heidi Ellis, Ron Haddad, Alisa B. Miller, Rebecca Lowenhaupt, and Chloe Polutnik. 2015. *Lessons Learned from Mental Health and Education: Identifying Best Practices for Addressing Violent Extremism* (Final Report). Washington, DC: Office of University Programs, Science and Technology Directorate, U.S. Department of Homeland Security.
- Widom, Cathy Spatz, and Helen W. Wilson. 2015. Intergenerational transmission of violence. In *Violence and Mental Health* (pp. 27–45), eds. Jutta Lindert and Itzhak Lelav, Amsterdam, the Netherlands: Springer.
- Wiktorowicz, Quintan ed. 2004. *Islamic Activism: A Social Movement Theory Approach*. Bloomington: Indiana University Press.
- Wiktorowicz, Quintan. 2005. *Radical Islam Rising: Muslim Extremism in the West*. Oxford, England: Rowman & Littlefield.
- Wilson, James Q., and Richard Herrnstein. 1985. *Crime & Human Nature*. New York: Simon & Schuster.
- Witte, Ann Dryden, and Helen Tauchen. 1994. *Work and Crime: An Exploration Using Panel Data* (Working Paper No. 4794). Washington, DC: National Bureau of Economic Research. <http://www.nber.org/papers/w4794>.
- Zedalis, Debra D. 2004. *Female Suicide Bombers*. Carlisle, PA: Strategic Studies Institute, U.S. Army War College.

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