The Empirical Study of Terrorism: Social and Legal Research

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Abstract

Social science research on terrorism has grown rapidly in recent years, aided by social and legal studies. In this review, we examine research on the causes of terrorism and the effectiveness of strategies for countering it. We define terrorism as the threatened or actual use of illegal force directed against civilian targets by nonstate actors in order to attain a political goal through fear, coercion, or intimidation. Our review of causes is divided by level of analysis into sections on individual-, group-, and macro-level explanations. Our evaluation of counterterrorism strategies includes reviews of legal, criminal justice, military, and legitimacy campaigns. Psychopathological approaches have been largely discredited; however, evidence suggests that certain experiences, attitudes, and behaviors are overrepresented among terrorists. The potential impact of ideology, leadership, popular support, Diasporic communities, and socialization on group dynamics all provide fertile areas for additional research. Terrorism feeds on the ability of groups to portray governments and their agents as illegitimate. There is also evidence for high rates of terrorism in countries that are in democratic transition or are described as failed states. Research on connections between religious motives and terrorism is mixed. Although research on the efficacy of counterterrorism methods has grown rapidly in recent years, it is still rarely evaluated with strong empirical methods. All of these conclusions are qualified by the fact that both individual- and group-level empirical data on terrorism are in short supply.

INTRODUCTION

Law and social science scholars have been making important contributions to the research literature on terrorism and responses to terrorism for many years, and several decades ago scholars such as Kittrie (1978) and Turk (1982) included terrorism in their research on political crime. However, much of this early work was isolated, piecemeal, and done without federal research funding. It took the Murrah Federal Building bombing in Oklahoma City in 1995 and the September 11, 2001, attacks in New York City, Washington, DC, and Pennsylvania before major funding to support social science research on terrorism in the United States became available. After these events, funding through the National Memorial Institute for the Prevention of Terrorism, terrorism research solicitations by the National Science Foundation, the National Institute of Justice, and the Bureau of Justice Administration, and the creation of the Department of Homeland Security's academic Centers of Excellence program all strengthened support for social scientific studies of terrorism and responses to terrorism. The recent announcement of the Minerva program (Glod 2008), funded by the Department of Defense, promises to further increase levels of support. Moreover, spurred by brutal attacks such as the Madrid bombings of March 11, 2004, and the London bombings of July 7, 2005, funding of social science research on terrorism and responses to terrorism has also expanded greatly in Europe in recent years (Eder & Senn 2008).

These funding increases have encouraged the rapid growth of such social science research. Even before the 1990s, however, Schmid & Jongman (1988) were able to identify more than 6000 published works on terrorism from the social sciences. More recently, Lum et al. (2006) found more than 20,000 articles on terrorism published between 1971 and 2004. Although the scientific rigor of this rapidly expanding literature has been seriously questioned (Silke 2001, Turk 2004), few dispute the contention that research on terrorism represents one of the major growth areas in social science scholarship over the past two decades, and the nexus of law and social science research has figured prominently in these developments.

In this review, we examine two research questions that are arguably the central organizing features of the law and social science literature on terrorism: What are the causes of terrorism and how effective are strategies for countering terrorism? Our review of the causes of terrorism is divided by level of analysis into separate sections on individual-, group-, and macro-level explanations. Our evaluation of counterterrorism strategies is divided by type and includes reviews of legal, criminal justice, military, and legitimacy campaigns.

DEFINITIONS AND CONCEPTUALIZATION

Compared with most types of criminal violence, terrorism poses special conceptual and methodological challenges. To begin with, the term terrorism yields varying definitions, often loaded with political and emotional implications. As PLO Chairman Arafat famously noted in a 1974 speech before the United Nations, "One man's terrorist is another man's freedom fighter." In their influential review of terrorism research, Schmid & Jongman (1988, p. 5) found 109 different definitions of terrorism. Indeed, the first chapter of many influential books on terrorism (Hoffman 1998, Laqueur 1977, Smelser 2007) is devoted to exploring and defending competing definitions. We have drawn on several recent sources (especially LaFree & Dugan 2007, LaFree et al. 2008a) to develop the following operational definition: the threatened or actual use of illegal force directed against civilian targets by nonstate actors in order to attain a political goal through fear, coercion, or intimidation. In particular, we exclude research on state terrorism or genocide, topics that are important and complex enough to warrant their own separate reviews.

Although we refer to causes throughout this article, we use the term advisedly. After Weber (1948), we assume that a complex

phenomenon such as terrorism is likely the result of multiple causes (Crelinsten 1987, pp. 5–6; Hudson 1999), and most of the relationships we report on in this review are based on simple associations rather than necessary and direct effects.

Establishing causal connections in terrorism research is complicated by the fact that research on the topic is rarely limited exclusively to the decision by its perpetrators to engage in terrorist acts, but rather extends to such varied aspects of behavior as joining terrorist groups or selecting specific targets or tactics. It is at least tenable that these very different outcomes have distinct causes that make monolithic causal treatments problematic. Moreover, the connections to terrorism reviewed here vary in terms of how proximate or distal they are to the phenomenon. For example, in a particular context, it might be heavy government repression of a minority ethnic group, the decision by a university professor to found a militant organization with a radical separatist ideology, or the provision of weapons to an established organization by a foreign government that eventually leads to a subsequent act of terrorist violence. All might legitimately be referred to as causes of the terrorist attack, but this does not mean that all are necessary, are sufficient, or carry equal weight in determining the outcome. In this we agree with Laqueur (2003, p. 22) that "the endeavor to find a 'general theory' of terrorism, one overall explanation of its roots, is a futile and misguided enterprise."

CAUSES OF TERRORISM: INDIVIDUAL-LEVEL ANALYSIS

Individual terrorists are often nested within larger organizational structures (i.e., groups) that are in turn nested in broader sociopolitical contexts (the macro-level system). We begin, however, with an individual-level analysis, which can be further subdivided into two parts, based on whether it emphasizes psychological or demographic explanations.

Psychological Approaches

Psychopathology. Scholars have postulated many psychopathological theories to explain terrorism, ranging from ethology and psychoanalytic models of hostility to imitative social learning and cognitive maladaptations (for surveys, see Borum 2003, Victoroff 2005). However, thus far psychopathological explanations have received little empirical support. At present, there is no convincing empirical basis for concluding that terrorists as a group are psychopathological or that they evince a greater predilection for clinically diagnosable mental disorders than other individuals or groups (Friedland 1992, Silke 1998, McCauley 2002, Ruby 2002, Victoroff 2005). This is true even for the most violent forms of terrorism such as suicide bombings. For example, Bond (2004) reports on a large sample of suicide bombers in the Middle East since 1983 and finds that the majority lacked any of the risk factors traditionally associated with suicide, such as mood disorders, schizophrenia, substance abuse, or previous suicide attempts.

Personality profiles. While granting that terrorists as a group do not display any specific form of psychopathology, many researchers have sought to identify a terrorist personality, that is, a specific constellation of personality characteristics that would allow authorities to prospectively identify terrorists from within some broader population. After decades of fruitless attempts, several leading scholars (Reich 1990b, Horgan 2003, McCormick 2003) have concluded that the search for a terrorist personality is misguided and that personality traits may at most contribute to the decision to turn to terrorist violence. However, Miliora (2004) points out that the absence of a general terrorist profile does not mean that individual terrorists do not display standout psychological features. She provides analysis concluding that Osama bin Ladin displays archaic narcissism and paranoia. Similarly, after administering 90 psychological tests and 57 semistructured

interviews with Palestinian and Israeli terrorists, and comparing them with control groups, Gottschalk & Gottschalk (2004) report that the terrorists tested significantly higher than the controls on the dimensions of authoritarianism and pathological hatred.

Trauma, injustice, and alienation. Although there may be no unique set of personality traits common to all (or even most) terrorists that would allow authorities to distinguish reliably between terrorists and nonterrorists, nevertheless, certain experiences, attitudes, and behaviors may be overrepresented among terrorists, relative to their occurrence in the general population. Significant trauma, linked especially to the loss of loved ones, has been found to be a major precipitant of militant behavior among suicide terrorists in Chechnya (Speckhard & Akhmedova 2006), Israel, and Sri Lanka (Bloom 2005). Similarly, Pyszczynski et al. (2006) found in experimental studies of Iranian college students that those reminded of death were more supportive of martyrdom attacks, suggesting that a higher mortality salience (such as that resulting from the death of a close relative) is connected to a stronger propensity to engage in terrorism. Akhtar (1999) argues that many terrorists have been exposed to some form of abuse and humiliation in their formative years. Unsurprisingly, perceived injustice and concomitant calls for vengeance are a common refrain among terrorists. della Porta (1992) argues that periods of detention and imprisonment may foster or exacerbate feelings of injustice and humiliation (see also Ferracuti & Bruno 1981, Post et al. 2003). Henry et al. (2005), when testing social dominance orientation (SDO) among a sample of Lebanese respondents, found a "counterdominance effect": Unlike a matched American sample, those in the Lebanese sample who obtained low SDO scores were more likely to support violence against the West.

Several researchers also note that those who participate in terrorism are commonly associated with a profound sense of alienation, whether as a result of social exclusion (e.g., from residing in a foreign Diaspora) or a personal sense of shame (Hoffer 1951, Atran 2006, Sageman 2004, Weatherston 2003). Thus, participation in terrorism is often linked to a search for meaning and belonging (della Porta 1992).

Much of the above discussion alludes to frustration-aggression theory (Berkowitz 1989). While empirical research has demonstrated that frustration is neither a necessary nor a sufficient condition for aggression, the basic frustration-aggression dynamic, when mediated by anger, has been supported by some empirical research on terrorism (Ciampi 2005). It has also influenced several more developed theories of terrorism, including relative deprivation (discussed in the groups section below). Therefore, while not genuinely causal in nature, trauma, perceived injustice, and alienation can be termed facilitative variables in that they may act to make individuals more antagonistic toward outgroups, more vulnerable to terrorist recruitment and ideologies, or more open to mechanisms of self-justification for the use of violence.

Personal status and reward. Terrorists are not created only through adverse circumstances; scholars of terrorism have contemplated a variety of self-satisfying or -aggrandizing motivations for engaging in terrorist behavior, including the excitement of the combative lifestyle (Crenshaw 1990b), a sense of empowerment through violence, and a boost in personal status for those whose actions are supported by their communities, or at least by their fellow terrorists. For example, by examining the social histories of 40 neo-Nazi males, together with two case studies, Hamm (2004, p. 337) concludes that his subjects sought celebrity within their subculture and that "this insatiable need to be famous was, in fact, so strong that it outweighed every other motivational factor."

Disinhibition of moral restraints on killing. In addition to situational and social prompting (discussed below), another mechanism by which would-be terrorists can overcome moral barriers to violence is to redefine their cognitive

landscape. This can be accomplished through dehumanizing or blaming victims (Bandura 1990), by reframing violent actions as being divinely ordained (Schbley 2003), or by viewing the victims as sacrificial instruments of divine will (Schbley 2004).

Summary. Kruglanski et al. (2009, p. 13) have encapsulated many of these psychological variables under the rubric "quest for personal significance." According to the authors, an aversive psychological state initiated by such factors as alienation, deprivation, and perceived injustice leads individuals to seek to restore their personal significance and prevent further significance loss—with terrorism, and its attendant retributive and cathartic violence, being one means to this goal. Conversely, some individuals who are not in a negative psychological state may still seek the gains in personal significance that joining a terrorist group and engaging in thrilling acts of daring can provide.

Demographic Explanations

We group demographic explanations into four categories: gender and age, employment and education, marital status and parenthood, and military service.

Gender and age. The conclusion that men are disproportionately responsible for common crimes is probably the best-supported assertion in all of criminology (for reviews, see Wilson & Herrnstein 1985, pp. 104–25; Braithwaite 1989, pp. 44–45). Arrest, court, and prison statistics for the United States consistently show massive overrepresentation of men. Similar disproportionality has been documented for countries around the world (Adler 1981, Rutter et al. 1998). This conclusion is likewise supported by both self-report (Elliott et al. 1989, Junger-Tas et al. 1994) and victimization surveys (Van Dijk et al. 2008).

Similarly, men are generally also overrepresented in acts of terrorism (Laqueur 1977, p. 21; McCauley & Segal 1987, pp. 232–33). However, compared with gender variation for common crimes, there appears to be greater gender variation for terrorism. Pape (2005) assembled data on 462 suicide bombers whose attacks occurred between 1980 and 2003. Fifty percent of the cases involved Arab attackers in Lebanon and Palestine who were associated with al Qaeda, and most of the rest were Kurds, Chechens, and Tamils. Pape found that percentages of women involved varied considerably across these groups, ranging from no women among the al Qaeda terrorists to more than half women for the Chechens and Kurds. Similar to Pape's findings for al Qaeda, Bakker (2006) found that only 5 of 242 jihadi terrorists operating in Europe since 2001 (2.1%) were women. Forst (2008, p. 24) offers several possible explanations for differences in the distribution of gender between common crime and terrorism: Terrorist actions (e.g., detonating bombs) may require less physical prowess than many ordinary crimes (e.g., mugging); women may have strategic value because they can get close to targets without receiving the same level of scrutiny as men; and women may be more inclined than men to see themselves as martyrs rather than as self-interested criminals. These differences suggest that, with respect to gender, terrorism may bear a closer relationship to white-collar crime than to other crime types.

The idea that violent crime is closely associated with young people is also one of the most widely held empirical claims in criminology (for reviews, see Marvell & Moody 1991, Farrington 2003). The relationship between age and crime (known as the age-crime curve) is perceived to be so strong that Matza (1964, p. 22) equates crime desistance with "maturational reform." Gottfredson & Hirschi (1990) argue that because the connection between age and crime is invariant across cultures, historical periods, and types of crime, it can be considered a natural phenomenon that need not be explained by intervening processes. The same patterns hold for terrorism research, where there is consistent evidence that participation in terrorism is disproportionately the work of young men (McCauley & Segal 1987, pp. 232–33;

Russell & Miller 1977; Silke 2008). 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 Chechens. Part of this difference in age appears to be due simply to median age differences in the populations from which suicide terrorists were drawn: The median ages of the Lebanese and Palestinian populations were about ten years younger than that of the Chechen population. In short, compared with the results for ordinary crime, the connection between age and terrorism appears to be stronger than the connection between gender and terrorism.

There is also evidence that, compared with men, women who participate in terrorism are on average older. For example, the 48 women suicide terrorists in the Pape study were significantly older than the 213 men in the survey. More than 60% of the men were in the 19 to 23 age group, and only about 25% were 24 years of age or older, whereas only 40% of the women were in the 19 to 23 year age group and nearly half were 24 years of age or older. Part of the age difference in participation rates for men and women might be explained by the fact that women who engage in suicide terrorism are sometimes widows of men killed by the government being opposed by the terrorists. This is common enough among female Chechen suicide bombers that they are colloquially known as the Black Widows.

Employment and education. Criminology research has generally confirmed a positive connection between individual-level crime rates and employment and educational status (Glaser 1964, Uggen 2000). Studies of individuals in gangs also frequently cite the impact of gang life on employment opportunities as a motivating factor for leaving the gang (Hagedorn 1998). Similar arguments have been applied to discussions of the causes of terrorism (Arnold 1988, pp. 135–36). But thus far empirical tests of these expectations have received little support when applied to those who commit terrorist acts.

Thus, much prior research (e.g., Krueger & Maleckova 2003, Pape 2005, Krueger 2007, Piazza 2006, Silke 2008) shows that those who participate in terrorist actions are, if anything, somewhat better educated and more prosperous than the populations from which they are drawn. An early study by Russell & Miller (1977, p. 110) compiled profiles of more than 350 individual terrorist cadres and leaders across 18 different Palestinian, Japanese, German, Italian, Turkish, Irish, Spanish, Iranian, Argentina, Brazilian, and Uruguayan terrorist groups active during the 1966 to 1976 time span. The prototype derived from their composite described young men with middle-upper-class backgrounds and some university education (and included being an urban resident and holding an extremist political philosophy).

Much of the recent work has been based on those who have studied jihadi-related terrorism. Thus, Krueger & Maleckova's (2003) study of 129 members of Hezbollah who died in action in the Middle East from 1982 to 1994 found that the terrorists were better educated and less impoverished than nonterrorist Lebanese of comparable age and regional origin. Sageman's (2004) survey of 172 members of Islamic terrorist groups found that, compared with their countrymen, they were generally well educated. More than 60% had some education beyond high school. Similarly, Sageman found that about three-quarters of the members of Islamic extremist groups in his study could be classified as coming from upper- or middle-class backgrounds. A relatively small proportion (27%) came from working-class or poor backgrounds. Pape's (2005) study of suicide terrorists showed that they were significantly more likely to come from middle- and upper-class families. Poorer individuals accounted for a larger proportion of Bakker's (2006) sample, but there was still a very large middle-class contingent. Furthermore, at the time of joining the organization, most of the radical Islamists in Sageman's study had professional occupations (e.g., physicians, teachers), had semiskilled employment (e.g., police, civil service), or were

students. Less than a quarter were unemployed or working in unskilled jobs.

In general, the research on nonjihadi terrorist groups provides similar results. Hewitt (2003) found considerable economic variation among the terrorists and violent extremists that he studied: Ku Klux Klan operatives were mostly working class but also included small business owners, the self-employed, and white-collar workers, and members of the Weatherman came mostly from privileged backgrounds. Similarly, Russell & 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 the vast majority of group members were well educated, with about two-thirds having at least some university education and upper- or middle-class backgrounds. Kepel (2005, p. 112) concludes that contemporary jihadi terrorists are not so much drawn from the downtrodden and ill educated as they are "the privileged children of an unlikely marriage between Wahhabism and Silicon Valley."

While an empirical connection between economic deprivation and terrorism has not been well supported to this point, we should temper this conclusion by noting that there have been very few systematic empirical studies of the characteristics of terrorist group membership (as opposed to studies of the subset of individuals who commit terrorist acts). Moreover, the conclusion that there is little evidence that, as a group, terrorists are poorer and less well educated than the mainstream of people in the regions from which they are drawn does not mean that poverty and lack of opportunity cannot be an indirect motivation for terrorism. For example, Moghadam (2006, p. 96) argues that country-level poverty may have an indirect effect on terrorism by providing safe havens (an idea that is closely related to the section on failed states presented below), by encouraging ethnic and religious conflicts that in turn foster terrorist violence, and by providing economic grievances that can be exploited by terrorist movements.

It may also be that relative measures of economic well-being are more useful than absolute measures. In fact, an interesting and thus far largely untested proposition is that terrorists are disproportionately drawn from well-educated middle-class individuals who are employed in positions that are lower in status than those that might be warranted by their credentials. Drawing on his influential early work from the 1960s, Smelser (2007, p. 23) argues that relative economic deprivation may play a part in producing terrorist movements. In this case, individuals become frustrated not because of their absolute level of economic deprivation but in relation to their perceptions of others' relative fortunes. The rise of the Shining Path in Peru in the 1960s, where government economic reforms initially raised expectations but then failed, might be seen as an example of these developments (Palmer 1995; see also discussion of group grievances below).

Marriage and parenthood. The strength and social organization of families has long been a major predictor of crime and juvenile delinquency (Nettler 1984, Hirschi 1969). In criminology, the major theoretical argument for findings such as these has been social bonds/informal social control perspectives. These perspectives presuppose that the motivation or impulse to offend is ubiquitous, but that individuals refrain from offending if they have strong bonds to conventional society, or what Toby (1957, p. 16) refers to as a "stake in conformity." The relationship between social bonds and delinquency has been tested extensively (Agnew 1991, Hindelang 1973, Hirschi 1969, Laub & Sampson 1988, Liska & Reed 1985), but with mixed results and varying methodological rigor (Kempf 1993).

Building on social control theory and the age-crime curve Sampson & Laub (1993, p. 7; Laub & Sampson 2003) have developed a theory of age-graded informal social control that claims that crime rates are associated with key life turning points, including especially marriage and family. They find that desisting offenders are those for whom "structures,

situations, and persons offered nurturing and informal social control" that encouraged and supported a move away from crime (Laub & Sampson 2003, pp. 279–80), whereas their persistent counterparts lacked these meaningful relationships at each phase of the life course. Other research has confirmed a connection between individual-level desistance from crime and marriage (Gibbens 1984, Knight et al. 1977).

Similarly, studies of individuals leaving gangs frequently cite, in addition to the intolerable threat of violence, turning points such as marriage (Decker & Lauritsen 2006, Spergel 1990, Vigil 1988) and parenthood (Decker & Lauritsen 2006, Moore & Hagedorn 1996) as the impetus for departure. These patterns are consistent with the informal social control perspective (S. Boonstoppel, unpublished manuscript; Laub & Sampson 2001). In short, there is support for the argument that, compared with others, individuals with stronger social bonds to significant others not already involved with crime are more likely to desist from crime, especially if these bonds are linked to key life turning points such as marriage, employment, and parenthood. But despite the proven connections between marriage, parenthood, and reduced participation in common crime, connections between family measures and participation in terrorism appear to be more complex.

Russell & Miller's (1977, p. 110) study of terrorist profiles in 18 countries concluded that the typical offender was an unmarried male. By contrast, Sageman (2008, p. 60) finds that three-quarters of the jihadi-style terrorists in his study were married. And in stark contrast to the social control prediction that marriage reduces criminal and deviant behavior, many of the subjects of Sageman's study married into jihadi organizations. In fact, Sageman concludes that those joining these organizations were frequently not fully trusted unless their wives were daughters or sisters of other terrorists. Bakker (2006) also reports relatively high levels of marriage among jihadists. Perhaps one of the most alarming contradictions to the general assertion that marriage and parenthood will reduce participation in terrorism is the example of suicide terrorism by women who had children when they took their own lives (Bloom 2005).

These differences may be due to the fact that, compared with more common criminals, terrorists are more likely to see themselves as altruists striving to achieve important, even noble, political goals. However, while preliminary evidence suggests that terrorists differ from other criminals in terms of their likelihood of being married or having children, we should emphasize that there is relatively little careful empirical research in this area, and the studies that do exist have typically lacked control groups. For example, it is not clear how the marriage rate among Sageman's subjects differs from the marriage rate among the general population from which these individuals are drawn. Moreover, the fact that Muslim marriage practices differ substantially from Western-style marriages has not received sufficient attention—including the impact of arranged marriages (Silke 2008). And even less research has addressed the impact of marriage and parenthood on nonjihadist terrorist groups.

Military service. Military service has also been linked to crime and delinquency reduction in some criminology research. For example, Sampson & Laub (1996) show that military service was associated with desistance from crime for the men in their sample. However, so far at least, military service does not seem to be associated with declining participation in terrorism. In fact, for jihadist-style terrorism, there is widespread fear that military training increases rather than diminishes participation in terrorism (Cooley 2000; Hafez 2008, p. 7).

Summary. In general, there have thus far been relatively few systematic individual-level demographic studies of terrorists. The research that does exist supports the conclusion that terrorists are very likely to be young and fairly likely to be male. By contrast, marriage, parenthood, education, employment status, and military service—variables that generally

insulate individuals from crime—do not consistently insulate offenders from participating in terrorism. Several researchers (Rosenfeld 2004, LaFree & Dugan 2004, LaFree & Miller 2008) have pointed out that individual-level explanations of terrorism based on demographic characteristics have thus far been undertheorized, despite the fact that individual-level theories from criminology and the sociology of law seem to have obvious relevance.

More generally, prior research suggests that it is risky to develop individual-level demographic profiles to identify potential terrorist threats: Most individuals who fit the general description are not terrorists, and many of those who do not fit the profile may nonetheless represent serious risks. Silke (2003, p. 112) warns that "the belief that profiling can provide an effective defense also seriously underestimates the intelligence of terrorist organizations." Indeed, sophisticated terrorist groups, such as al Qaeda, actively seek to know the type of person who will attract suspicion and then scout for and use operators who defy that preconception. Gunaratna (2007) has documented that al Qaeda recruits members from 74 different countries and among at least 40 different nationalities.

CAUSES OF TERRORISM: TERRORIST GROUPS

Terrorists may have individual grievances, but they are typically aligned with specific groups or at least broader social movements that share a set of relatively well-defined goals. Explanations for why terrorists should want to congregate rather than operate alone are varied, ranging from the expedient of strength in numbers to the precepts of social identity theory (Tajfel & Turner 1979, Louis & Taylor 2002). In his pioneering work, Asch (1954) highlighted the importance of having allies in terms of facilitating the transition from conformity to deviance. As such, terrorist collectivities can range from large, hierarchical, paramilitary organizations to loosely structured, self-actualized cells, but all such terrorist groupings bestow upon their members both the operational advantages of coordinated action and the social empowerment of shared beliefs and experiences.

The terrorist organization itself can usefully be viewed as a conduit between disaffected individuals and the broader society, though one that works bidirectionally in the sense that not only do individuals seek outgroups to facilitate their violent goals, but also groups actively seek recruits to further the ends of their members and leaders.

Although researchers from business management (Armstrong 2005, Hirschhorn 1988, French & Vince 1999, Tsai et al. 2007) to organizational psychology (Bion 1961, Follett 1925 [2004], Lewin 1948, Brown 1988) have demonstrated that group characteristics and processes can significantly impact the behavior of individuals within groups, these influences have not always been emphasized in the literature on the causes of terrorism. For example, in Lia & Skjølberg's (2000) survey of the causes of terrorism, group variables do not receive the same emphasis as psychological and societal variables. Indeed, we maintain that, in many cases, reductionist approaches that reify terrorist groups behind their leaders or otherwise treat groups as unitary actors are likely to obscure potentially illuminating causal dynamics.

We explore empirical results relevant to group-level causes of terrorism first in terms of those factors that can result in the group becoming an organized collectivity (formative factors or "preconditions"; Lia & Skjølberg 2000, p. 15) and then in terms of those factors that can lead to the decision by leading members of the group to engage in terrorist acts as a means of fulfilling the group's objectives (or "precipitants"; Lia & Skjølberg 2000, p. 15). Accordingly, in the next two sections we discuss causes of terrorist group formation and the decision to engage in terrorism, which can, but do not necessarily, occur simultaneously.

Terrorist Group Formation

Although in practice formative elements rarely function independently of one another, most

terrorist groups originate in the nexus between a shared grievance, an ideology that articulates solutions to the grievance, and some form of mobilization, which may include the support of wider ethnic, national, or belief communities.

Group grievances. Although not every member of a terrorist group necessarily adopts the group ethos completely or in precisely the same manner, an initial requirement for a terrorist group to coalesce is some sort of shared disaffection with the status quo, one that manifests in the form of one or more articulated grievances against the current state of perceived social reality (Ben-Yehuda 1993; Turk 2004, p. 271). The focus here is on those grievances that are at least to some degree shared by a number of individuals and those that are perceived to operate at the group or societal rather than at a purely personal level.

The notion that group grievances are a primary cause of terrorism (or at least a cause of the formation of those groups that perpetrate terrorism; Hacker 1976, Ross 1993) has its roots in psychological theories linking frustration and aggression (Berkowitz 1989), which manifested in the contentious politics subfield of political science as the idea of relative deprivation (Gurr 1968, 1971). According to relative deprivation theory, actors engage in social comparison of their own group with other groups in their observable environment and feel aggrieved if they perceive themselves to be economically, legally, politically, or in some other way worse off than other groups. This apparent deviation from actual (or expected; see Davies 1962) social equity is posited to lead to feelings of injustice and of being discriminated against that can in turn result in acts of rebellion and violence, including terrorism. The basic theory has been extended and refined and is now captured under the rubric of social movement theory (McCarthy & Zald 1977, McAdam et al. 2001), which builds on the relative deprivation argument by combining it with the requirements of mobilizing group resources, having political opportunity space for dissension, and creating informational frames that resonate with intended audiences.

There is little direct empirical evidence linking relative deprivation theory to terrorism, but Sageman's (2004) data on 172 jihadists suggest that, as Muslim youth in European Diasporas, most felt alienated from their larger societies and aggrieved against the West. However, because many people the world over feel frustrated and aggrieved at their positions in society, yet only a miniscule proportion actually become terrorists, grievances are at most a necessary, but certainly not sufficient, antecedent of terrorism (Smelser 2007).

Ideology. The source of the shared reality within a terrorist group is to be found in its ideology, which can be described as a comprehensive framework of beliefs that influence behavior, through a consequent set of rules or norms (Horgan & Taylor 2001). The content of the ideologies espoused by terrorist groups (or, more precisely, their elites and entrepreneurs) spans almost the entire gamut of human religious, social, and political belief systems, but there appear to be some common structural elements. While providing a focal point for its members' grievances, ideology is more than just a collection of collective grievances; ideology performs several important motivational functions, including providing a superordinate explanation for the circumstances that underlie grievances, identifying offending parties, and providing overarching plans for redressing grievances.

Some researchers downplay the role of ideology as little more than window dressing for deeper, often solipsistic, motivations for engaging in terrorist violence. This view is best summed up by Post's (1990, p. 35) early contention that "the cause is not the cause." But empirical results suggest otherwise. A recent study that analyzed suicide terrorists' farewell videos and interviews with mothers of successful suicide bombers for personal and ideological/collectivistic motives found that stated reasons for suicide terrorism were almost universally ideological—that is, religious and/or nationalist (Kruglanski et al. 2009). Similarly, Hassan's (2001) study of 250

Palestinian terrorists and recruiters found that all of those accepted for suicide missions believed that their actions were "sanctioned by the divinely revealed religion of Islam." By conducting psychological autopsies of 34 Chechen suicide terrorists, Speckhard & Ahkmedova (2006) found that, even in the absence of widespread social support for suicide terrorism in Chechnya, ideology played a crucial role in galvanizing already traumatized individuals to explode themselves.

Moreover, it is clear that ideology can be a powerful tool for dehumanizing enemies and achieving moral disengagement (Bandura 1990, Moghaddam 2005). For example, Gottschalk & Gottschalk (2004) discovered that both Palestinian and Israeli terrorists use stereotypes and racism as a means of dehumanizing the other group.

The facilitating role of ideology in recruitment efforts has also been confirmed. While Sageman (2004) argues that ideological indoctrination follows recruitment into a terrorist organization, Atran (2004) reports that debriefings with captured al Qaeda operatives at Guantanamo and with Jemaah Islamiyah prisoners in Singapore indicate that ideology rather than grievances drives recruitment into these organizations. Similarly, based on interviews with Kashmiri militants, Stern (2003) found that ideology played an important role in recruitment, although she found that grievances were also important.

There has thus far been little research on the extent to which members of terrorist groups, especially leaders, genuinely embrace group ideologies, or whether ideologies are used cynically and instrumentally by group leaders and advisors to facilitate recruitment into groups and to manipulate the rank and file into committing acts of violence.

There is some evidence that ideology influences the type and scale of violence perpetrated by terrorists. Asal & Rethemeyer (2008) show that, compared with other terrorist organizations, those possessing either religious ideologies or a mix of religious and ethnic ideologies are more lethal than other terrorist organizations. In support, Pedahzur et al. (2003) report that, among Palestinian terrorists, a larger percentage of those who engaged in suicide attacks, as opposed to those who did not, were educated in religious schools and fundamentalist organizations. This relationship possibly stems from the potential for the content of an ideology to offer historical or doctrinal referents for action, especially as these relate to permissible means and targets. More research is needed to establish whether it is simply the presence of an ideology that is indicative of certain behaviors, or whether specific elements of the content or structure of an ideology are salient. In sum, by galvanizing terrorists and potential recruits and providing prescriptions and proscriptions on the type of actions allowed, ideology may constitute a key enabling component in the terrorist use of violence.

Recruitment. Whereas individuals can be drawn to seek out and join or form terrorist organizations (a bottom-up process), one of the core functions of many terrorist groups is active (top-down) recruitment in order to sustain or grow the organization. For example, in the case of Nazi skinheads, Blazak (2001) found through ethnographic research and guided interviews that older Nazi skinheads manipulated alienated teenagers and indoctrinated them into becoming terrorists. Borum (2004) argues that even though recruitment is crucial for terrorist groups that simultaneously pursue guerilla-type strategies [e.g., the FARC (Revolutionary Armed Forces of Colombia) or Hezbollah in Lebanon], recruitment has thus far received little research attention. Social connections through family members, friends, teachers, or romantic partners who are already members of terrorist organizations are among the most common routes into terrorist groups, supported by a wide variety of group-level research, including the cases of Hezbollah (Schbley 2003), the Basque ETA (Reinares 2001), the Provisional Irish Republican Army (IRA) (Horgan 2005), the Red Brigades in Italy (Weinberg & Eubank 1987), and Islamic jihadists (Sageman 2004).

As discussed above, ideology can lubricate the recruitment process, but there still must be mechanisms for disseminating it. Based on extensive interviews with 35 incarcerated Palestinian terrorists, Post et al. (2003) find that social institutions, in this case mosques, featured prominently in recruitment to jihadist groups. Institutions such as places of worship or educational facilities may provide a climate of shared experience and a degree of isolation from outgroups where "epistemic authorities" (Kruglanski & Fishman 2009, p. 22), which include religious figures and other revered personages, can propound the terrorists' ideology and bring other social forces to bear on potential recruits. Similarly, in her study of Italian militants, della Porta (1992) found that the infusion of a sense of urgency into potential recruits, together with preexisting social relationships, was instrumental in individual decisions to join terrorist organizations.

Community support. Recent conceptual models have attempted to contextualize terrorists within broader social structures using the metaphors of a "pyramid" (McCauley 2002, 2006) or "staircase" (Moghaddam 2005) to describe terrorism as a dynamic process rooted in a broad base of popular sympathy or support. Members of this broad base are then conceived of as becoming more committed in belief and deed to violent action, with only a relatively small proportion actually being willing to formally join the organization and carry out attacks. The level of popular support (whether local or Diasporic) can then be expected to influence the size of the pool of potential recruits as well as the resources available to terrorist groups, at least for those groups who lack alternative sources of members and materiel, such as the assistance of a foreign state.

On the one hand, some research confirms a link between popular support and the actions of terrorist organizations, at least in the Middle East. In particular, Pape's (2005) analysis of secondary-source data indicates that increased levels of popular support for suicide terrorist attacks in the West Bank and Gaza have coincided with increases in the use of this tactic by terrorist organizations, whereas systematic interviews suggest that family support or at least acquiescence is one factor prevalent among incarcerated Israeli and Palestinian terrorists (Post et al. 2003). On the other hand, when popular support wanes, terrorist organizations can rapidly wither and disappear. For example, Dugan et al. (2008) found that the Armenian Secret Army for the Liberation of Armenia (ASALA), a group operating mostly in Turkey, disappeared rapidly after losing support from its Diasporic community following a strategic decision no longer to focus their attacks exclusively on Turks.

The influence of community support has also been linked to issues of social duty and honor. The notion that individuals are acting altruistically on behalf of larger groups can be a powerful legitimator of violence and even martyrdom (Pedahzur et al. 2003, Post 2005, Bloom 2005, Stern 2003). The support and endorsement of the wider community, especially if the community openly reveres the terrorist as a hero in a collective struggle, can be expected to strengthen the terrorist's resolve. This effect might be even more acute in societies that place great value on honor and dignity, as in the Middle East, where, for example, Palestinian suicide bombers are venerated on posters and by rallies (Moghadam 2003). Cultural factors may also play a role. Some survey data show that individuals in collectivist cultures display strong support for attacks on foreigners (Weinberg & Eubank 1994; S. Fishman, E. Orehek, M. Dechesne, A. Kruglanski, B. Blanka Rip, unpublished manuscript). However, we must remember that popular support is not a necessary factor for terrorism, because organizations that are supported by states (e.g., Palestinian Islamic Jihad) and those whose concerns are solipsistic and insular (e.g., Aum Shinrikyo) do not depend on the approval or assistance of the broader communities in which they are located.

The Decision to Engage in Terrorism

Rational choice. The rational choice approach views terrorism instrumentally, as a tool by which objectives are met (Dugan et al. 2005, Kruglanski et al. 2008) through symbolic, anxiety-producing violence. The cause of terrorism in this case is the subjective perception by the terrorist group's decision maker(s) that engaging in terrorist violence is the best possible means among the alternatives by which to accomplish the organization's goals (Crenshaw 1990a). This perception may result from a belief that other options are closed off to the group or that the only route to success is to act asymmetrically against a more powerful opponent (DeNardo 1985). Under this rational calculus conception of terrorism, the group might cease engaging in terrorist activities if its members perceive that the costs of using terrorism exceed the benefits or if group goals are perceived to be substantially achieved. Empirical findings support this approach in the case of terrorist bargaining in hostage situations (Atkinson et al. 1987), bombings by the IRA (Silke 2003), and suicide terrorism, for which Pape (2005) describes the resort to suicide tactics as a rational response to foreign occupation and to limited alternative opportunities to change the status quo.

Socialization. Once an individual has become a member of a terrorist organization, other social psychological processes can promote violence. For example, terrorist groups can bestow upon their members a sought-after sense of belonging in which the individual's identity is subsumed to some extent within the collective identity of the group (Johnson & Feldman 1992, Post 1987, Post et al. 2003). These processes may trigger more basic psychological processes, such as unquestioning obedience to authority figures in the group (Milgram 1983) and the diminution in moral restraints on violence through diffusion or displacement of responsibility (Bandura 1990) or deindividuation (Zimbardo 2007). In an analysis of Palestinian terrorist attacks from 1993 to 2002, Pedahzur et al. (2003) discovered that terrorists who give their lives during an attack are often so profoundly integrated into the group that their suicide is perceived as a means of helping the group attain its goals. Smith (2004) conducted a content analysis comparing 13 terrorist groups to 13 ideologically similar nonterrorist controls and discovered that, compared with control group members, members of groups who utilize terrorism are significantly more likely to view their own group as superior.

Several researchers have emphasized that the process of socialization into group norms, practices, and moral outlooks is not instantaneous upon joining, but arises incrementally and often unconsciously (Horgan & Taylor 2001; McCormick 2003, della Porta 1992, 1995; Crenshaw 1986). Borum (2003, pp. 7–10) analyzed multiple militant extremist groups across a range of ideologies and concluded that there "do appear to be some observable markers or stages in the process that are common to many individuals in extremist groups."

Group dynamics. Closely related to socialization of members within the group culture is the effect of a variety of group dynamics on the decision to engage in terrorist activities. One example of such dynamics is a posited "action imperative" (Hoffman 1998, p. 234), whereby internal and external pressures mount over time for the terrorist group to conduct attacks in order to justify its existence. Other examples include increased group cohesion under conditions of perceived threat (Post et al. 2002), cognitive dissonance (where the group ignores information that challenges its preconceptions), and "groupthink" (Janis 1982). Whereas these and a host of other group dynamics have been extensively studied in the social and organizational psychology literature, there is a dearth of empirical work on the conditions under which and the extent to which they operate within terrorist groups. Similarly, although almost all commentators agree that leadership plays an important role in terrorist group behavior, including fostering a sense of threat and urgency, and despite

numerous biographies of charismatic terrorist leaders such as the LTTE's (Tamil Tigers') Velupillai Prabhakaran, the PKK's (Kurdistan Workers' Party's) Abdullah Öcalan (Hudson 1999), and al Qaeda's Osama bin Ladin (Bergen 2006), thus far there has been little comparative empirical research on this topic.

Group and social movement structure. Although not a direct cause of terrorism, the structure of a terrorist group can influence its behavior (Drake 1998). Asal & Rethemeyer (2008) found that a group's size correlates positively with its lethality, whereas the age of the group is not significant in this regard. Within a terrorist organization's wider extremist milieu, a group's level of connectedness with other extremist groups is a positive predictor of lethality (Asal & Rethemeyer 2008), and groups can adopt more violent tactics in order to distinguish themselves from erstwhile competitors in a process referred to as "outbidding" (Bloom 2005, Ackerman et al. 2004).

The End of Terrorist Groups

With some important exceptions (Crenshaw 1991, Ross & Gurr 1989), the demise of terrorist groups had not received much scholarly attention until recently. Rapoport (1992) found that 90% of terrorist organizations last for less than one year, and of the remaining groups, more than half disappear within a decade. More recently, LaFree & Dugan (2009) found that of 1769 terrorist groups that operated between 1970 and 1997, nearly three-quarters (N = 1422) disappeared in less than a year as measured by the time between their first and last known strike. Only 24 terrorist organizations in the study (1.3%) had a life span of more than 20 years from 1970 to 1997. Jones & Libicki (2008) examined 648 terrorist groups active between 1968 and 2006 and found that, of those terrorist groups who ended their terrorist activities, 43% joined the political process, 40% ended when police and intelligence officials neutralized key members, 10% ceased their operations because they believed their goals to have been achieved, and 7% were stopped by military force. Dugan et al.'s (2008) research on ASALA and JCAG (Justice Commandos of the Armenian Genocide) suggests that the loss of popular support might be an important cause of a terrorist organization's rapid demise. Finally, terrorist groups might shift to lucrative criminal activity when opportunities for self-enriching behavior arises, as has been demonstrated in the case of Hezbollah (Schbley 2000) as well as the Shining Path in Peru and the FARC in Colombia. Although some earlier research (Alterman 1999) concluded that ethnonationalist terrorist groups achieved the greatest longevity, more recent work (Jones & Libicki 2008) shows that religious terrorist groups are the most difficult to eliminate and that larger groups last longer.

CAUSES OF TERRORISM: MACRO-LEVEL APPROACHES

We group macro-level explanations into four categories: legitimacy, democratization, weak states, and religion.

Legitimacy

Researchers (Crenshaw 2002, Atran 2003, Higson-Smith 2002) have long argued that terrorists frequently rely on the response of governments to mobilize the sympathies of would-be supporters. Weber (1948, 1968) defined legitimate power (or authority) as the probability that commands from a given source will be obeyed, adding that a basic criterion of legitimate power is voluntary submission. Instead of compliance based on power, force, or the fear of these things, Weber argued that legitimate authorities are obeyed because people feel they ought to be. More recently, researchers (Tyler 1990, Sherman 1993) have argued that individuals are more likely to obey laws when those laws, and the legal authorities executing them, are perceived to be legitimate. Studies have found some support for these theories, linking high levels of perceived legitimacy to a range of deviance-related measures, including lower

official crime rates (LaFree 1998), lower self-reported lawbreaking (Tyler 1990, 2003), lower reoffending rates (Paternoster et al. 1997), greater cooperation with and support for authorities (Sunshine & Tyler 2003, Tyler & Wakslak 2004), greater voluntary acceptance of police (Mastrofski et al. 1996, Tyler & Huo 2002) and court (Tyler 1984) decisions, and less tolerance for crime in general (Stille 1996, Sampson & Jeglum-Bartusch 1998).

Perceived legitimacy should be especially important in predicting terrorism because, compared with most ordinary crime, terrorism is an especially public type of deviance. Terrorists, unlike common criminals, actively seek public recognition. Jenkins (1975, p. 16) famously declared that "terrorism is theater" and explained how terrorist attacks are often carefully choreographed to attract the attention of the electronic media and the international press. In fact, terrorist and counterterrorist strategies can be conceptualized as a battle over legitimacy. Crenshaw (1983) argues that those who use terrorism generally deny the legitimacy of the target that they are opposing. For the state to succeed against terrorists it must defend its legitimacy while delegitimizing terrorist challenges. As Crenshaw (1983, p. 25) writes, "The power of terrorism is through political legitimacy, winning acceptance in the eyes of a significant population and discrediting the government's legitimacy." Similar reasoning prompted Kydd & Walter (2006, p. 79) to argue that the problem of responding to terrorism "is not a problem of applying force per se, but one of acquiring intelligence and affecting beliefs."

To the extent that government-based counterterrorist strategies outrage participants or energize a base of potential supporters, such strategies may increase the likelihood of further terrorist strikes. Sharp (1973) refers to this phenomenon as "jujitsu politics," and McCauley (2006) points out that because of this principle responses to terrorism can be more dangerous than terrorism itself. Betts (2002, p. 28) argues that the contest between terrorists and counterterrorists is in effect "tripartite," involving not only insurgents and counterinsurgents but gaining the support of those in the middle (see also, Karstedt 2003). According to Betts (2002, p. 28), "the yet-unmobilized Muslim elites and masses of the Third World—those who were not already actively committed either to supporting Islamist radicalism or to combating it—are the target population in the middle." Bin Laden appears to have understood that the administration of George W. Bush was hawkish in its foreign policy and in its attitude toward the use of military power, and, in a November 2004 videotape, bin Laden bragged that al Qaeda found it "easy for us to provoke the administration" (Kydd & Walter 2006, p. 71).

Legitimacy explanations of terrorism emphasize the fact that counterterrorist policy makers are involved in a battle with opponents over the fairness of governments and their policies. Kenney (2007) points out that the slow-moving, highly bureaucratized organization of most counterterrorist government operations makes it difficult for them to compete with terrorist groups in this struggle over legitimacy.

This reasoning suggests that the best way to respond to terrorist violence may be to provide effective, legitimate alternatives for political expression, such as viable social movements or political parties (Crenshaw 1991). Thus, legitimacy explanations suggest that terrorism is most likely to end when cultural or structural inequality between groups is minimized or when individuals or groups cease to be disproportionately powerless. For example, British efforts to quell terrorist violence in Northern Ireland with harsh military and criminal justice interventions may have been less successful than less forceful alternatives—bigovernmentalism, consociation, and federalizing institutions (O'Leary 2005). Similarly, Ross & Gurr (1989) identify the electoral success of the Parti Québécois, a legitimate, nonviolent political party, as one of the leading reasons that the Front de Libération du Québec experienced a decline in political strength. Along the same lines, a recent U.S. Institute of Peace report (Alterman 1999) concludes that the initiation of political negotiations is an

important way of increasing public support for peaceful solutions to terrorism.

Issues of legitimacy are often connected to perceived grievances. For example, terrorist attacks in South Africa ended rapidly following the first democratic elections at the end of apartheid (Van Brakle & LaFree 2007). Legitimacy explanations assume that terrorism represents a struggle over who has the power to define terrorism. Thus, governments may have many reasons, not all just, for defining particular groups or individuals as terrorists. And as we have already seen, despite the abhorrent nature of terrorist violence, disagreement regarding its definition is more widespread and contentious than the classification of any other type of crime (Hoffman 1998, Schmid & Jongman 1988).

Democratization

One of the most commonly studied political characteristics thought to be connected with terrorist attacks within countries is the strength of democracy (Crenshaw 1981, Eubank & Weinberg 2001, Chalk 1998, Crelinsten 1998, Smelser 2007). However, the empirical connections between democracy and terrorism are far from settled, with some researchers finding that democratic institutions inoculate countries from terrorist strikes (Sandler 1995), others finding that civil rights protections and the rule of law in democracies make it more difficult to prevent terrorist strikes (Eubank & Weinberg 1994, Li 2005), and still others (Eyerman 1998; Pedahzur & Perliger 2006, pp. 6–7) finding that terrorism will be most common in countries transitioning from autocratic to democratic forms of government. A common related argument is that terrorist organizations exploit the openness of liberal democracies to develop and grow (Ganor 2005).

Research from the social movements literature (Tarrow 1996, McAdam et al. 2003) suggests that democratization may be related to terrorism most directly through its role in increasing political opportunities. Smelser (2007, p. 29) points out that in cases of extreme totalitarianism, like Hitler's Germany and Stalin's Soviet Union, governments deny any kind of political protest, including terrorism. In a recent analysis of nearly 70,000 attacks from the Global Terrorism Database, LaFree & Dugan (2007) found that, controlling for a wide variety of rival explanations, a common democracy measure developed by Gurr and his associates (Gurr 1974, Gurr et al. 1990) had a strong curvilinear relationship to terrorist attacks and fatalities from 1970 to 1997. In general, autocracies had the lowest levels of terrorism attacks, and countries transitioning between democracy and autocracy had the highest. Full democracies were intermediate—rates higher than autocracies but considerably lower than countries transitioning to democracy.

Terrorism and Failed States

There has been growing policy interest in recent years in the idea that terrorist operations often arise in and then are able to flourish in failed or weak states (Wilkenfeld 2008). The Political Instability Task Force (PITF), a multidisciplinary group assembled in 1994 to examine international security issues, defines failed states broadly as "civil conflicts, political crises, and massive human rights violations that are typically associated with state breakdown" (Esty et al. 1995, p. 1). LaFree et al. (2008b) examined the connections between failed states and terrorism activity by comparing rates of terrorist attacks and fatalities from the Global Terrorism Database (LaFree & Dugan 2007) for states that had failed according to the PITF data (Goldstone et al. 2005, Wilkenfeld 2008). The analysis included all 162 countries with populations over 500,000 for the years between 1970 and 1997. LaFree et al. (2008a) found strong support for the conclusion that by the 1990s terrorist attacks were strongly concentrated in failed or weak states. Major lethal terrorist attacks involving failed or weak states at the end of the series in 1997 included the terror campaign by Islamic militants in Algeria with more than 4000 deaths and the terror campaign in Colombia that resulted in 1040 fatalities in that year.

Religion

Religion is frequently mentioned as an important cause of terrorism, especially of Islamic terrorism. Juergensmeyer (2003) conducted case studies of religious activists who either used violence or justified its use to advance religious causes. He studied Christians involved in abortion-clinic bombings and militia actions in the United States, Catholics and Protestants involved in terrorism in Northern Ireland, jihadi-style attacks by Muslim groups, Jews who supported the assassination of Yitzhak Rabin and terrorist attacks in Palestine, Sikhs identified with the murder of India's prime minister Indira Gandhi and Punjab's chief minister Beant Singh, and followers of the Japanese Aum Shinrikyo sect involved in the nerve gas attack on Tokyo's subway system. Juergensmeyer identified common elements among perpetrators of religiously justified terrorism, including conceptualizing terrorism as symbolic rather than strategic, striking out against the humiliating forces of modernity, and seeing themselves as heroic agents of change.

Stern (2003) interviewed Muslim extremists in refugee camps in the Middle East, Christian antiabortion activists in the United States, Jewish militants in Israel, and religious extremists in Beirut, Gaza, Pakistan, India, and Indonesia. She found that the primary source of religious terrorism was a combination of humiliation and alienation from the perceived decadence of modern institutions. But others are more skeptical about the connection between religion and terrorism. For example, Pape (2005) claims that more than 95% of the suicide terrorists in his study were motivated by a secular rather than a religious goal: to compel democracies to remove their military forces from the homeland of the terrorists.

In fact, Moghadam (2006, pp. 98–99) argues that distinguishing religious and secular motives is itself complex. For example, several commentators and researchers (Dickey 2002, Reuter 2004) have claimed that "a culture of martyrdom" is a fundamental characteristic of suicide terrorism, and martyrdom has obvious connections to religious motives. But Moghadam (2006, p. 99) points out that martyrdom is also linked to the concept of the hero (see also Hoffman & McCormick 2004, p. 253): "Martyrdom is not merely an act of self-sacrifice that is done for personal reasons, but the self-conscious creation of a model for future emulation and inspiration." Moghadam claims that the concept of martyrdom manifests itself in diverse (and nonreligious) ways, including the Palestinian naming of a soccer tournament after a suicide bomber, the practice in revolutionary Iran of celebrating the death of martyrs at weddings, and the creation and celebration of a Martyr's Day by the Tamils of Sri Lanka.

Summary

In general, there has been a good deal of research linking macro-level measures of legitimacy, democratization, and religion to terrorism but less research looking directly at connections between terrorism and failed or weak states. From the existing research, there is relatively strong support for the conclusion that terrorism feeds on the ability of groups to portray governments and their agents as illegitimate. There is also evidence that democratization exhibits a curvilinear relationship with terrorism—the highest rates of terrorist attacks are in countries that are in democratic transition. Some research also suggests that failed states may be important staging grounds for terrorist organizations. Religious motives have been claimed by or attributed to a large number of contemporary terrorist organizations. However, recent research suggests that it is often difficult to disentangle purely religious and more secular motivations for terrorism.

COUNTERTERRORIST STRATEGIES

Lum et al. (2006), undertaking a Campbell Systematic Review of research on responses to terrorism prior to 2005, found that only 7 out of 20,000 research sources on terrorism provided an empirically based, scientifically

rigorous evaluation of counterterrorism strategies. Although research on the efficacy of counterterrorism strategies has grown rapidly in recent years, it is still rarely evaluated with strong empirical methods. Below, we summarize some of the important recent empirical findings.

Military Interventions

Recent large-scale U.S. military efforts against terrorists in Afghanistan and Iraq, as well as smaller-scale operations in other parts of the world, beg the question of whether such interventions are worth the expenditures of blood and treasure in terms of their long-term impact on terrorism. The empirical results are mixed between showing such measures to have a deterrent effect, where the subsequent frequency of terrorism decreases, and showing them to have a backlash effect, where terrorist mobilization increases and the amount of terrorism actually increases from the status quo ante. Enders & Sandler (1993) found no long-term negative effect on the amount of terrorism from the 1996 U.S. bombing of Libya in retaliation for Libya's alleged involvement in the terrorist bombing of a West Berlin discotheque, whereas Collins (2004) found that, while the number of subsequent Libyan-supported terrorist incidents did decrease, the total number of American casualties associated with such attacks did not. In the Israeli context, research has yielded significant results that military reprisals reduce terrorism, but this effect was temporary, lasting no more than nine months (Brophy-Baermann & Conybeare, 1994). Nevin (2003), in a comparative study of seven counterterrorism campaigns, found that military retaliation leads to either an increase in terrorism, or else a smaller decrease than would otherwise be the case (i.e., a backlash effect). In recent research on British counterterrorism interventions in Northern Ireland (LaFree et al. 2009), quantitative hazard modeling revealed that a large-scale military intervention (known as Operation Motorman) did have a significant, long-term negative impact on terrorism by the IRA, but smaller-scale interventions (such as curfews) had the opposite effect.

Targeted Assassinations

Selectively eliminating terrorists whom authorities believe to be either prominent leaders or crucial operational personnel is a counterterrorism tactic that is controversial on both ethical and political grounds. Two recent quantitative studies have evaluated the practice in Northern Ireland (LaFree et al. 2009) and in Israel during the Second Intifada (Hafez & Hatfield, 2006). Neither of these studies found any significant impact of these targeted assassinations on rates of subsequent terrorist attacks.

Other Operational Counterterrorism Efforts

States also employ their intelligence, military, and law-enforcement assets to disrupt terrorist operations through such measures as infiltration, electronic surveillance, and efforts to track and disrupt terrorist organization finances. We have been unable to locate any systematic empirical studies assessing or comparing the efficacy of such measures. One reason for this might be the nonpublic nature of such interventions, with most data remaining classified and in the hands of the government agencies involved.

Legal and Criminal Justice Measures

This category encompasses a broad range of strategies, from increasing the severity of punishment for terrorist crimes to novel law enforcement measures such as internment without trial. The rash of airline hijackings during the 1960s and 1970s prompted an empirical investigation by Landes (1978), who concluded that increases in the probability of apprehension, the conditional probability of incarceration, and the length of sentence for those convicted were all correlated with significant reductions in hijacking during the 1961 to 1976 period. Further research (Dugan et al. 2005) confirmed that hijackings for the purpose of traveling to Cuba declined after these were criminalized by that country, but the effect only

pertained to nonterrorist hijackings. Enders & Sandler (1993) concluded that the enactment of tougher U.S. laws for terrorist-related acts in 1984 did not have any significant long-term effect on diminishing terrorist attacks against the United States, and neither changes in criminalization policy nor internment in prison by the British of suspected IRA operatives in Northern Ireland could be linked to decreased attacks (LaFree et al. 2009). Barros (2003) concludes that harsher political approaches to terrorism (e.g., banning political parties) do not lead to fewer terrorist attacks. In terms of successfully prosecuting terrorist crimes, a study by Smith & Orvis (1993) revealed that efforts to depict terrorists as common criminals were more effective than those aimed at politicizing terrorist crimes.

When it comes to multilateral legal measures (such as UN antiterrorism resolutions), empirical results are hardly more promising. Collins (2004), in a case study of Libya, does conclude that multilateral sanctions were eventually successful in deterring future Libyan sponsorship of terrorist attacks. However, while Enders et al. (1990) found that a UN resolution against hijacking had a dampening effect on subsequent terrorism in both the short- and long-term, this was only in conjunction with the implementation of metal detectors at airports, and they found that resolutions intended to prevent and punish crimes against internationally protected persons had no statistically significant impact.

Concessions and Antiradicalization Campaigns

Noncoercive measures aimed at "winning hearts and minds" are often touted as valid alternatives to strictly coercive counterterrorist strategies such as military intervention or law enforcement. There has been even less empirical research related to these approaches than to coercive measures, but some researchers have begun to study their effects. Blaydes & Rubin (2008) conclude that ideological reorientation by attempting to change the beliefs of terrorists was most likely effective in curbing terrorism in the Egyptian case, whereas Miller (2007), through a focused case comparison, finds that a combination of concessions, legal measures, and other nonviolent means is most effective, but only against groups with a nationalist-separatist orientation.

Target Hardening and Situational Solutions

Several empirical studies of countermeasures against airline hijackings have been conducted (Landes 1978, Enders & Sandler 2006, Dugan et al. 2005), and all found that more effective screening measures (such as installing metal detectors and increased baggage screening), which represented an increase in the probability of attack interdiction, had a significant deterrent effect on hijacking, although Dugan et al. (2005) found that these measures were only effective for nonterrorist hijackings. Enders & Sandler (1993) detected a similar effect from the fortification of U.S. embassies, but in the case of both airline hijackings and embassy attacks, they found that deterrent measures had a substitution effect whereby terrorists merely shifted to other tactics without affecting the overall rate of terrorism (see also Cauley & Im 1988).

Summary

Results of military interventions are mixed, with preliminary indications being that only massive military interventions rather than smaller-scale efforts (including targeted assassinations) might be effective. Results for criminal justice and legal measures are also mixed, both in national and international contexts. Noncoercive counterterrorism efforts might be effective, at least for certain contexts and terrorist ideologies, but there is insufficient analysis to draw any firm conclusions. While specific target hardening measures have been shown to reduce attacks, this probably applies only to attacks directed at those targets and may induce a shift to other targets and tactics. Moreover, as Miller (2007) points out, different strategies might be more or

less effective depending on the type of terrorist group, something that has not been considered in any of the large-scale empirical studies previously conducted. Lastly, a further warning has been sounded by Donohue (2001), who argues based on empirical studies of counterterrorist measures in the United States and Northern Ireland that these measures tend to accrete and are rarely repealed once enacted, even when the threat level subsides.

CONCLUSIONS

Social and legal research on terrorism and responses to terrorism has a broad but relatively short history. What is desperately needed in formulating policy on terrorism is more and better information on the causes of terrorism and the circumstances under which different types of intervention strategies are likely to be most effective. Early efforts to identify common psychopathological characteristics of terrorists or a terrorist personality have given way to multicausal perspectives that emphasize contributions from individual, group, and macro levels. Taken together, research from these levels has improved our ability to describe the correlates of terrorist etiology. Similarly, early assumptions that rapid military interventions are the only viable response to terrorism have given way to more nuanced approaches that seek to reduce the benefits of joining a terrorist movement by nonmilitary approaches such as addressing grievances or engaging in negotiations. Although there is some evidence that strategies like this might work, without systematic evaluations strong conclusions cannot be drawn. As this review shows, there is a dearth of social science research on how specific antiterrorism and counterterrorism efforts impact the behavior and activities of terrorists or potential terrorists. We need far more information on the impact of counter- and antiterrorism interventions and their expected impact on trajectories of terrorist activities.

Although the operational aspects of terrorist behavior are routine subjects for intelligence and law enforcement analysts, there is quite often little empirical or theoretical grounding for their analyses. The variation in the decisions of terrorists to target or kill, by which tactic, and using what type of weapon is stark. To understand these variations better, we need to integrate research on the influence of ideology on strategy and tactics with theoretical insights gained from formal decision analysis, research on social movements, and collective violence and organizational and social psychology.

This effort is only the beginning. A thorough understanding of the possible policy responses to terrorism requires cooperation across disciplines. By incorporating psychological and demographic variables, the organizational structure, and the situational context, we can expand our set space to better account for a broader and more realistic set of policy alternatives and possible outcomes.

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