How Social Science Can Reduce Terrorism

By SCOTT L. PLOUS and PHILIP G. ZIMBARDO

In a press conference several months after the terrorist attacks of September 11, 2001, National Security Advisor Condoleezza Rice said: "I don't think anybody could have predicted that these people ... would try to use an airplane as a missile, a hijacked airplane as a missile."

President Bush expressed similar surprise when he told the press corps on April 13, 2004: "Had I had any inkling whatsoever that the people were going to fly airplanes into buildings, we would have moved heaven and earth to save the country."

Yet long before September 11, social scientists had warned that an attack might occur. According to an overlooked 1999 report on "The Sociology and Psychology of Terrorism," by the Federal Research Division of the Library of Congress, "Al-Qaida's expected retaliation for the U.S. cruise missile attack against Al-Qaida's training facilities in Afghanistan on August 20, 1998, could take several forms of terrorist attack in the nation's capital." Among the possibilities listed in the report: Suicide bombers might crash an aircraft into the Pentagon or other buildings.

As that passage illustrates, social scientists have made substantial progress in understanding and predicting terrorism. Moreover, that progress has accelerated since the attacks of September 11. In psychology, for example, a search of the PsycINFO database (the largest psychology database in the world, with entries dating back to the 1880s) reveals that more research on terrorism has been published since 2001 than in all previous years combined.

In this season of political campaigns, commissions, and controversies, the results of social-science research should be part of any educated and informed discussion of the war on terror. From this new research in the social sciences, as well as earlier scholarship in history and political science, several key findings have emerged.

First, studies suggest that, compared with the general public, terrorists do not exhibit unusually high rates of clinical psychopathology, irrationality, or personality disorders. As John Horgan points out in the opening chapter of *Terrorists, Victims and Society:*
"Psychological Perspectives on Terrorism and Its Consequences" (Wiley, 2003), edited by Andrew Silke, the idea of a "terrorist personality" rests on unsteady empirical, theoretical, and conceptual foundations. Indeed, because terrorist cells require secrecy, terror organizations frequently screen out unstable individuals who might compromise their security.

Nor do terrorists differ greatly from other people in self-esteem, religiosity, socioeconomic status, education, or personality traits such as introversion. Nasr Hassan, who spent years studying Palestinian terrorists, put it this way during a lecture she gave in 2002: "What is frightening is not the abnormality of those who carry out the suicide attacks, but their sheer normality." Thus far, behavioral research has found only one psychological attribute that reliably differentiates terrorists from nonterrorists: a propensity toward anger.

In the words of a recent National Research Council report titled "Terrorism: Perspectives From the Behavioral and Social Sciences": "There is no single or typical mentality -- much less a specific pathology -- of terrorists. However, terrorists apparently find significant gratification in the expression of generalized rage."

Beyond various sociopolitical, economic, and religious objectives, one of the most common motivations for joining a terrorist organization is the desire for revenge or retribution for a perceived injustice. Many terrorists report that acts of violence committed by police officers, soldiers, or others are what led them to join a terrorist group. Studies by Ariel Merari and others have found, for example, that Palestinian suicide bombers often have at least one relative or close friend who was killed or injured by the other side.

In addition to harboring intense anger over perceived injustice, terrorists differ from the general public in their demographic composition. Although exceptions exist, terrorists are usually males between 15 and 30 years of age -- the same population most likely to commit violent crime in general, and the demographic group least likely to be deterred by the threat of physical force.

Perhaps for those reasons, studies suggest that large-scale military responses to terrorism tend to be ineffective or temporarily to increase terrorist activity. To cite just one example, a 1993 time-series analysis by Walter Enders and Todd Sandler in the *American Political Science Review*, "The Effectiveness of Anti-Terrorism Policies: A VAR-Intervention Analysis," examined 20 years of terrorist activity and found a significant rise in terrorism following U.S. military reprisals against Libya. For a general review of the effects of military responses to terrorism, see "Retaliating Against Terrorism," by Silke, who is a United Nations counterterrorism adviser, in *Terrorists, Victims and Society*.

Although every situation is different, researchers have found that military responses to international terrorism can unwittingly reinforce terrorists' views of their enemies as aggressive, make it easier for them to recruit new members, and strengthen alliances among terrorist organizations. Following the invasion of Iraq, for example, Al Qaeda's
influence and ideology spread to other extremist groups not previously linked to the movement, according to Congressional testimony by J. Cofer Black, the U.S. State Department's coordinator for counterterrorism.

The futility of fighting terrorism with large-scale military strikes is perhaps clearest in the case of Iraq, where U.S. troop casualties have steadily increased over time. In May through August 2003, after President Bush declared the end of major combat operations in Iraq, an average of 4.9 military personnel were wounded per day. That climbed to 10.3 in September through December 2003, 15.3 in the first four months of 2004, and 21.4 from May through mid-August.

Even after the capture of Saddam Hussein, on December 13, 2003, suicide bombings and guerrilla attacks in Iraq continued to rise.

Similarly, the average number of suicide attacks per week in Israel was higher in the month after Baghdad fell than in the preceding 14 months. And despite the fact that 70 percent of Al Qaeda's core leadership has been caught or killed, the organization has carried out more attacks since September 11, 2001, than it did in the three years before. According to the U.S. State Department's most authoritative report, "Patterns of Global Terrorism 2003," there was a 27-percent increase in "significant terrorist incidents" worldwide from 2002 to 2003 -- along with a 56-percent increase in casualties -- despite unprecedented spending by the United States to wage a war on terror.

If military responses to terrorism are counterproductive, what can be done? In the short run, the United States can fortify measures that promote self-protection, encourage citizens in likely target areas to be vigilant, and improve training and information sharing among intelligence organizations, law-enforcement personnel, branches of government, and our allies. The report by the National Commission on Terrorist Attacks Upon the United States, released on July 22 and available at [http://www.9-11commission.gov](http://www.9-11commission.gov), offers detailed recommendations on how such goals might be accomplished.

Although self-protective measures will never be foolproof, they have the virtue of being nonprovocative and less costly than war. For example, the cost of safeguarding weapons-grade uranium and plutonium is relatively low, yet according to a recent report from Harvard's John F. Kennedy School of Government ("Securing the Bomb: An Agenda for Action"), less nuclear-weapons material was secured in the two years immediately after September 11, 2001, than in the two years before the attacks.

In the long run, research indicates that at least three priorities are of paramount importance: reducing intergroup conflict, creating incentives for the reduction of terrorism, and socializing young people to reject violence as a means of problem solving.

With respect to the first goal, social-science research suggests that intergroup conflict is reduced when members of each group are equal in status and are mutually dependent on one another. At the level of nations, those conditions can be strengthened by addressing legitimate grievances and developing fair-trade agreements, joint investments of venture
capital, cultural-exchange programs, and respect for human rights, sovereignty, and international law.

In terms of the second goal, the United States can create a sense of shared purpose and incentives for reducing terrorism by increasing its foreign aid, hunger-relief assistance, and medical exports to countries working actively to fight terrorism. Currently, the United States gives a lower percentage of its gross national product to foreign aid than does any other developed nation. Clearly, however, one of the surest ways to win friends and reduce anti-Americanism is by helping those in need.

Finally, any comprehensive strategy to reduce terrorism must ensure that children are not socialized to embrace violence as a means of problem solving. In the Oslo Interim Agreement of 1995, Israel and the Palestinian Authority pledged that they would "ensure that their respective educational systems contribute to the peace between the Israeli and Palestinian peoples and to peace in the entire region, and will refrain from the introduction of any motifs that could adversely affect the process of reconciliation." For the sake of future generations, a similar pledge should be formalized as part of a worldwide multilateral treaty banning educational materials that condone or incite violence. With incentives for compliance and provisions for enforcement, such a treaty would be of considerable value.

Thus far, the Iraq war has cost the United States an estimated $120-billion and is responsible for the deaths of more than 1,000 coalition soldiers and 10,000 Iraqi civilians -- more than triple the number of innocent Americans who died in the September 11 attacks, and a number that grows with each passing day. The time has come to rethink our global strategy on terrorism, apply what we know from social-science research, and find a more effective way to make the world safe.

Scott L. Plous is a professor of psychology at Wesleyan University and editor of Understanding Prejudice and Discrimination (McGraw-Hill, 2003). A research bibliography and links on terrorism are available on the Web site he maintains. Philip G. Zimbardo is a professor emeritus of psychology at Stanford University. Among his books is Violence Workers: Police Torturers and Murderers Reconstruct Brazilian Atrocities (University of California Press, 2002), which he wrote with Martha K. Huggins and Mika Haritos-Fatouros. He served as president of the American Psychological Association for the yearlong term that started shortly after the September 11 attacks.