An Introduction to "9/11: Ten Years Later"

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decade has passed since the terrorist attacks of September 11, 2001. Most of us remember where we were when we learned of the attacks, although our memories of the event and of our feelings that day may not be as accurate as we suspect (Hirst et al., 2009). The attacks of 9/11 did far more than destroy buildings and kill thousands of innocent people. They interrupted routine patterns and tugged at our social fabric, not simply in New York City, Washington, DC, and Shanksville, Pennsylvania, but across the country as well. They shattered a sense of security and perceptions of invulnerability among residents of the United States and the Western world (Silver, 2004). Even those individuals who did not know anyone who died that day have been touched by the tragedy. We are different now. Most of us willingly tolerate long lines at the airport, empty our pockets, and remove our shoes, belts, and jackets, sending them through X-ray machines for scrutiny. We open our bags before entering sporting events, theaters, and musical performances. We sometimes gaze askance at young men carrying backpacks on public transportation.

Only in retrospect can we clearly see how the attacks of 9/11 have shifted the direction of our country. Of course, the goals of terrorism are inherently psychological in nature. Terrorists seek to create disruption by instilling fear and anxiety that leads to wide-ranging social, political, psychological, and economic consequences (Silver & Matthew, 2008). Thus psychologists have much to contribute to an analysis of that day and its short- and long-term effects on both individuals and society at large. Over the past decade, thousands of empirical articles, commentaries, editorials, and books have been published on terrorism in the aftermath of the attacks (as is evident from a search of the PsycINFO database). Many psychologists have explored the direct and indirect impact of 9/11, whereas others, although affected, may never have considered how the attacks have shaped their work or their environment (both of which may have been altered in ways that deserve examination).

In this special issue of the *American Psychologist*, a distinguished team of scholars across all subdisciplines within the field of psychology address—through literature reviews and/or conceptual position pieces—several questions stemming from the attacks: How has the past decade been shaped by the events of 9/11 and their aftermath? What lessons have been learned from examining individual, community, and national responses to 9/11? What new results have psychologists produced directly as a result of

engaging these issues? What has been the uptake of this work? Finally, what questions remain unanswered despite all the work directed toward them over this decade? Although each of the following articles addresses a specific facet of psychology's answers to these questions, this special issue is perhaps best considered as a whole in order to appreciate how much psychological science has contributed to an understanding of 9/11's aftermath and of terrorism in general.

The first half of this issue specifically considers the immediate and intermediate effects of both direct and indirect exposure to the 9/11 attacks across the United States. First, Neria, DiGrande, and Adams (2011) review the dozens of articles that have examined the psychopathological consequences of the attacks on those most closely affected by the events of that day. As they note, most research has considered the burden of posttraumatic stress disorder on individuals who were proximal to the attacks, lost a loved one, or engaged in cleanup or recovery. But as Neria et al. point out, the psychological impact "spilled over" beyond those directly exposed, affecting those who merely witnessed the attacks indirectly (usually via the media). Indeed, this spillover went far beyond posttraumatic stress responses. As Morgan, Wisneski, and Skitka (2011) make clear, there were many social consequences in the aftermath of the 9/11 attacks, both positive (e.g., an increase in charitable donations) and negative (e.g., discrimination against individuals of Middle Eastern descent). Huddy and Feldman (2011) analyze the political aftermath of the attacks, highlighting the role fear and anxiety associated with terrorism played in the political discourse over the past decade. Of course, millions of young people today also grew up in the shadow of 9/11, and Eisenberg and Silver (2011) discuss how this collective trauma may have influenced their coping, their sociopolitical attitudes, and their overall beliefs about the world. Finally, Watson, Brymer, and Bonanno (2011) address the important ways in which 9/11 and other recent large-scale disasters have shaped the evidence base for effective psychological treatment and mental health intervention over the past decade.

The second half of this special issue addresses a closely related topic: What have we learned and what do we still need to know as a field and as a country regarding

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terrorism more generally (questions stimulated, of course, by the 9/11 attacks and their aftermath)? As Brandon (2011) argues, the field of psychology has a great deal to contribute on this score, although perhaps our potential for contributing has to date not yet been realized in terms of actual influence. Of course, research on terrorism is constrained by access to sensitive information and to the perpetrators themselves. Nonetheless, Ginges, Atran, Sachdeva, and Medin (2011) apply theories of group dynamics and draw upon both experimental and field methods to further our understanding of political acts of self-sacrifice and violent extremism. Fischhoff (2011) discusses the need for experts to effectively communicate the risks of terrorism to the public and highlights the ways in which psychological science could help describe, evaluate, and improve terror-risk communications if experts enlisted psychologists' assistance in achieving these goals.

Understanding these risks, of course, is predicated on the solicitation of accurate and actionable intelligence information. Loftus (2011) draws on a body of literature on memory distortion, false confessions, and deception to highlight the ways in which investigators' efforts to gather information and draw conclusions can be inadvertently tainted. Tetlock and Mellers (2011) examine the consequences of the inevitable failures of the intelligence agencies to predict and explain terrorist activities accurately, which has led to a cyclical "blame game" between intelligence agencies and policymakers. Ultimately, the authors propose a psychological solution—one of "adversarial collaboration"—that can assist in the effective analysis of intelligence-gathering efforts. Nickerson (2011) highlights the role that human factors and ergonomics research could play in preventing terrorism or in dealing with the consequences of a successful attack. Finally, Silver and Fischhoff (2011) use what we have learned so far to predict individual and social behavior in the aftermath of the next terror attack.

Thus, this special issue of the *American Psychologist* summarizes much of the conceptual and empirical work that psychological science has offered when considering two closely related questions: What have we learned about the individual and societal impacts of 9/11 specifically, and what have we learned about understanding, preventing, and responding to the threat of terrorism more generally? Several of the authors acknowledge the challenges of working

on these issues but encourage other psychologists to consider the importance of doing so. Although many questions remain unanswered, psychological research conducted over the past decade has made impressive contributions toward addressing these topics of great consequence.

REFERENCES

- Brandon, S. E. (2011). Impacts of psychological science on national security agencies post-9/11. American Psychologist, 66, 495–506. doi: 10.1037/a0024818
- Eisenberg, N., & Silver, R. C. (2011). Growing up in the shadow of terrorism: Youth in America after 9/11. *American Psychologist*, 66, 468–481. doi:10.1037/a0024619
- Fischhoff, B. (2011). Communicating about the risks of terrorism (or anything else). *American Psychologist*, 66, 520–531. doi:10.1037/a0024570
- Ginges, J., Atran, S., Sachdeva, S., & Medin, D. (2011). Psychology out of the laboratory: The challenge of violent extremism. *American Psychologist*, 66, 507–519. doi:10.1037/a0024715
- Hirst, W., Phelps, E. A., Buckner, R. L., Budson, A. E., Cuc, A., Gabrieli, J. D., . . . Vaidya, C. J. (2009). Long-term memory for the terrorist attack of September 11: Flashbulb memories, event memories, and the factors that influence their retention. *Journal of Experimental Psychology: General*, 138, 161–176. doi:10.1037/a0015527
- Huddy, L., & Feldman, S. (2011). Americans respond politically to 9/11: Understanding the impact of the terrorist attacks and their aftermath. American Psychologist, 66, 455–467. doi:10.1037/a0024894
- Loftus, E. F. (2011). Intelligence gathering post 9/11. American Psychologist, 66, 532–541. doi:10.1037/a0024614
- Morgan, G. S., Wisneski, D. C., & Skitka, L. J. (2011). The expulsion from Disneyland: The social psychological impact of 9/11. American Psychologist, 66, 447–454. doi:10.1037/a0024772
- Neria, Y., DiGrande, L., & Adams, B. G. (2011). Posttraumatic stress disorder following the September 11, 2001, terrorist attacks: A review of the literature among highly exposed populations. *American Psychologist*, 66, 429–446. doi:10.1037/a0024791
- Nickerson, R. S. (2011). Roles of human factors and ergonomics in meeting the challenge of terrorism. *American Psychologist*, 66, 555– 566. doi:10.1037/a0024474
- Silver, R. C. (2004). The myths of healing. *Families, Systems & Health*, 22, 61–63. doi:10.1037/1091-7527.22.1.61
- Silver, R. C., & Fischhoff, B. (2011). What should we expect after the *next* attack? *American Psychologist*, 66, 567–572. doi:10.1037/a0024893
- Silver, R. C., & Matthew, R. (2008). Terrorism. In V. N. Parrillo (Ed.), Encyclopedia of social problems (Vol. 2, pp. 926–929). Thousand Oaks, CA: Sage.
- Tetlock, P. E., & Mellers, B. A. (2011). Intelligent management of intelligence agencies: Beyond accountability ping-pong. American Psychologist, 66, 542–554. doi:10.1037/a0024285
- Watson, P. J., Brymer, M. J., & Bonanno, G. A. (2011). Postdisaster psychological intervention since 9/11. *American Psychologist*, 66, 482–494. doi:10.1037/a0024806