Science now

3 March 2003

Emotions Sway View of Terrorism Risk

Two different emotional reactions to the 11 September 2001 terrorist attacks--anger versus fear--led to divergent beliefs about the risk of further attacks and how the government should respond, a new study finds. People who are primarily angry generally rate the risks of further attacks lower and support tougher policies than those who are mainly afraid.

Day of terror. People's emotional reactions to 9/11 helped shape their risk assessment.
CREDIT: ROBERT ESSEL/CORBIS

Research in the past decade has shown that people's perceptions of risk are guided not only by rational judgments--for example, calculations of events' certainty and controllability--but also by emotions. In laboratory work, psychologist **Jennifer Lerner** of Carnegie Mellon University in Pittsburgh and colleague Dacher Keltner of the University of California, Berkeley, found that anger tends to prompt perceptions of lower risk, whereas fear tends to elicit pessimism.

A few weeks after the 2001 terrorist attacks, **Lerner**, Carnegie Mellon psychologist Baruch Fischhoff, and co-workers assessed fear and anger in a nationally representative group of 973 Americans. Two months after the attacks, they experimentally manipulated these emotions in the same participants. They asked the participants to describe what about the attacks made them most angry

or afraid, then presented news articles and images designed to further evoke either fear or anger.

The results, published in the March issue of *Psychological Science*, confirm the previous studies: People who were angry--the dominant response overall--were more optimistic that further attacks could be prevented, that the likelihood of Americans being injured was low, and that they personally would remain safe. In contrast, fear--more prevalent among women than men--bred pessimism about the risk of future attacks and about participants' own likelihood of being hurt or dying, even from causes unrelated to terrorism. Fear and anger also colored opinions on policy. Even when participants' political bent was taken into account, anger prompted greater support for deporting foreigners with invalid visas; fear led people to favor more conciliatory foreign policies.

This kind of research fills a needed gap, comments psychologist Shelley Taylor of the University of California, Los Angeles: "The specific roles that emotions play in people's beliefs and decisions has been a relatively ignored topic."

--SIRI CARPENTER