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A policy maker's dilemma: Preventing terrorism or preventing blame

A. Peter McGraw [a,*], Alexander Todorov [b], Howard Kunreuther [c]

[a] Leeds School of Business and the Department of Psychology and Neuroscience, UCB 419, University of Colorado, Boulder, CO 80309, United States
[b] Department of Psychology and the Woodrow Wilson School of Public and International Affairs, 2-N-7 Green Hall, Princeton University, Princeton, NJ 08540, United States
[c] Decision Sciences & Public Policy at the Wharton School, 563 Huntsman Hall, 3730 Walnut St., University of Pennsylvania Philadelphia, PA 19104, United States

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ABSTRACT

Although anti-terrorism policy should be based on a normative treatment of risk that incorporates likelihoods of attack, policy makers' anti-terror decisions may be influenced by the blame they expect from failing to prevent attacks. We show that people's anti-terror budget priorities before a perceived attack and blame judgments after a perceived attack are associated with the attack's severity and how upsetting it is but largely independent of its likelihood. We also show that anti-terror budget priorities are influenced by directly highlighting the likelihood of the attack, but because of outcome biases, highlighting the attack's prior likelihood has no influence on judgments of blame, severity, or emotion after an attack is perceived to have occurred. Thus, because of accountability effects, we propose policy makers face a dilemma: prevent terrorism using normative methods that incorporate the likelihood of attack or prevent blame by preventing terrorist attacks the public find most blameworthy.

Introduction

The events of September 11, 2001 led to unprecedented changes to US government anti-terror policy. In the largest government restructuring in recent history, the United States created the Department of Homeland Security (DHS) primarily to "(A) prevent terrorist attacks within the United States; (B) reduce the vulnerability of the United States to terrorism; and (C) minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States" (Homeland Security Act of 2002). One of the many responsibilities of the DHS is the allocation of funds for the prevention of and response to terrorist attacks.

Normative approaches to anti-terror policy

The DHS promotes a risk-focused approach to its budgeting activities by consulting experts regularly about the likelihood, vulnerability and consequences of various terrorist acts and how threats can be reduced. To assist in that endeavor the DHS, for example, has funded an interdisciplinary research center, the Center for Risk and Economic Analysis of Terrorism Events, at the University of Southern California. To guide a course of action, normative methods, such as decision analysis, weight the (dis)utilities of various terrorist acts by perceived likelihoods (Edwards, Newman, Snapper, & Seaver, 1982; Keeney, 1977, 1988). Game theory also provides methods for modeling not only the strategies of the terrorists but also how those strategies would change based on the government's anti-terror strategies (Bier, 2006; Keohane & Zeckhauser, 2003; Sandler & Arce, 2003; Sandler & Lapan, 1988).

Although we expect that in principle the public supports a normative approach to anti-terror policy, as we detail below, we suspect that in practice the public will largely neglect normative likelihood considerations when judging the actions of policy makers.

Probability neglect and anti-terror policy

A substantial literature documents how people tend to underweight or wholly neglect likelihoods in their risk judgments. For instance, people have particular difficulty dealing with probabilistic information for small likelihood events, like those for terrorist attacks. They have a hard time gauging how concerned to feel about a 1 in 100,000 likelihood of death without a context to evaluate the likelihood, and thus, people do not know whether the risk is large or small. People, for instance, could not distinguish the relative safety of a chemical plant that had an annual chance of experiencing a catastrophic accident that varied from 1 in 10,000 to 1 in 1 million (Kunreuther, Novemsky, & Kahneman, 2001).

* Corresponding author.
E-mail addresses: peter.mcgraw@colorado.edu (A.P. McGraw), atodorov@princeton.edu (A. Todorov), kunreuther@wharton.upenn.edu (H. Kunreuther).

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Further, people underweight likelihood information when faced with emotionally arousing judgments and choices (Kahneman, Ritov, & Schkade, 1999; Loewenstein, Weber, Hsee, & Welch, 2001; Slovic, Finucane, Peters, & MacGregor, 2002). Changes in probabilities, for instance, have little influence on emotional reactions to a variety of events, from receiving electric shocks (Bankahart & Elliot, 1974; Monat, Averill, & Lazarus, 1972; Snortum & Wilding, 1971) to winning lotteries (Loewenstein et al., 2001). Moreover, increasing the emotional salience of an event can reduce the influence of likelihoods on choice decisions (Rottenstreich & Hsee, 2001; but see McGraw, Shafir, & Todorov, 2010). For instance, people will pay more for flight insurance that compensates for losses due to terrorism than for flight insurance that compensates for losses due to any reason – even though the likelihood of the former is lower than the latter (Johnson, Hershey, Meszaros, & Kunreuther, 1993). And in the wake of September 11th, a fear of flying led more people to travel by car, which increased traffic fatalities (Gigerenzer, 2004).

Of relevance to our inquiry is research by Sunstein (2003) that documents how the fear of terrorism creates probability neglect. As a result, the public appears more concerned about highly unlikely terrorist acts than common yet mundane risks like traffic or consumer safety. Sunstein makes the argument that probability neglect puts the public in greater jeopardy because the government responds to public opinion by moving resources away from addressing public safety issues to preventing terrorist attacks (even though the shift cannot be justified by weighting potential consequences by their likelihood of occurrence; see also Mueller, 2006).

Blame

Of particular interest to our inquiry is the way that the public makes blame judgments and the influence this process has on policy makers. Research on judgments of blameworthiness is relevant to our contention that people often fail to take into account the likelihood of a terrorist attack when judging officials for failing to prevent the attack. For instance, theories of blame and responsibility posit that people are highly influenced by an outcome's severity (Alicke, 2000; Fiery, 2008; Robbennolt, 2000). The now classic study by Walster (1966) shows that the blameworthiness of a driver increased with the severity of the outcome of an accident, even when identical actions led to the accident – an outcome bias that persists even in within-subject manipulations of severity (Mazzocco, Alicke, & Davis, 2004; but see Tetlock et al., 2007). People also ascribe more blame in situations when the blameworthy outcome elicits greater negative emotions (Alicke, 2000). The connection between negative emotions and blame is well-documented in juror decision-making (Feigenson & Park, 2006). For instance, gruesome photographs presented by the prosecution to jurors in mock trials caused greater emotional arousal, in particular anger toward the defendant, which increased judged culpability (Bright & Goodman-Delahunty, 2006).

Based on outcome bias research, we suspect that the public's natural tendency to focus on outcomes and their severity will override considerations of likelihood in their judgments of anti-terror policy priorities and the blameworthiness of anti-terror failures.

Policy maker responses to the public's probability neglect

Democratic systems of government demand that elected and appointed officials are responsible to citizens for their actions, and thus accountability can encourage or deter normative thought (Lerner & Tetlock, 1999). Despite their experience and stature, politicians are not immune to accountability effects. The tendency of the public to blame politicians is well-documented (Iyengar, 1991; Sniderman, Hagen, & Tetlock, 1986; Thompson, 1980) and accountability to the public and blame avoidance can influence voting decisions (Arnold, 1990; Kingdon, 1981; Weaver, 1986, 1988). Pressure from the public influences more than just votes, however. For instance, negative public opinion quickly led the government to shut down the Pentagon's plan for a futures market in which traders could bet on the occurrence of terrorist acts (Guggenheim, 2003; Lathem, 2003; Sunstein, 2003).

If the public's anti-terror preferences and tendency to blame the government neglect likelihood information, policy makers may be tempted to forgo a normative approach to risk in order to avoid blame. Alternatively, policy makers could employ a normative approach to anti-terror policy, but when necessary, head off blame by informing the public of likelihoods using risk communication techniques (Fischhoff, 2009; Slovic, 2000; Sunstein, 2003). Indeed, people often can be persuaded to attend to likelihood information (Margolis, 1993). For instance, although consumers do not think about the likelihood of product malfunctions when deciding to purchase warranties, they will use that information if it is presented to them explicitly at the time (Hogarth & Kunreuther, 1995). Thus, after a terrorist attack has occurred, policy makers could highlight the improbability of the attack in order to reduce blame on the government (Markman & Tetlock, 2000; McGraw, 1991, 2001). As an example, consider statements by the Bush administration after the 9/11 attacks that allude to the low likelihood of attack:

> "No one could have conceivably imagined suicide bombers burrowing into our society and then emerging all in the same day to fly their aircraft – fly US aircraft into buildings." – President George W. Bush (9/16/01)

> "I don't think anybody could have predicted that ... they would try to use an airplane as a missile, a hijacked airplane as a missile." – National Security Adviser Condoleezza Rice (5/16/02)

Although we suspect that providing likelihood information will be effective in influencing anti-terror preferences before a terrorist attack, we doubt that highlighting likelihoods will affect blame after an attack because of the robust effect that outcomes have on judgments. In addition to the outcome bias, the hindsight bias illustrates how perceptions of likelihoods often change after an event has occurred; people judge events that have occurred as more probable and events that have not occurred as less probable (Fischhoff, 1975). Again, research in jury decision-making is illustrative. Jury-eligible citizens were much more likely to find a railroad's actions negligent and an accident foreseeable in hindsight than in foresight (Hastie, Schkade, & Payne, 1999). Probability judgments of terror-related risks also appear susceptible to a hindsight bias. After a year without incident, people recalled their predicted likelihoods of terrorism to be more in line with a present, safer world (Fischhoff, Gonzalez, Lerner, & Small, 2005).

Outcome biases would seem to create a paradox for policy makers. Even if the public agrees before an attack that likelihood information should be used to make decisions, after an attack policy makers will be blamed based on the outcome of the attack, and not based on the attack's prior low likelihood. If this is true, policy makers may be tempted to deviate from a normative risk-based approach in order to prevent blame. We return to this dilemma in the general discussion.

Pilot study

To test our assumption that the public, in principle, supports a normative approach to anti-terror policy, we presented undergraduates five strategies that the DHS could use for anti-terror policy decisions and asked them to select the option that describes the process that the government should use when