

The Consequences of Terrorism: Disentangling the Effects of Personal and National Threat

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The events of 11 September 2001 have led to a higher perceived risk of terrorism in the United States. A better understanding of the political consequences of 9/11 requires a more complete accounting of the nature and consequences of perceived threat. Here, the distinction between perceived personal and national risks is examined in terms of two competing hypotheses: (1) The personal threat of terrorism has a pervasive influence even on national decisions and perceptions, in line with its highly arousing nature. (2) The effects of personal threat are highly circumscribed and overshadowed by the impact of perceived national threat, consistent with findings on the meager impact of self-interest and other personal concerns on public opinion. A survey of 1,221 residents of Long Island and Queens, New York, explored the degree to which personal and national threat affect perceptions of the consequences of, and possible solutions to, terrorism. As expected, there was a clear distinction between perceived personal and national threat, although the two are related. Perceived personal threat did not influence the perceived economic consequences of terrorism, although it had a narrow effect on personal behaviors designed to minimize risk. Overall, the findings imply that the effects of personal threat are circumscribed, consistent with past research on the limited personal basis of political judgments. However, the tests of these hypotheses were constrained by a limited set of dependent variables that included national consequences but not policy solutions designed to limit terrorism.

KEY WORDS: threat, national threat, personal threat, terrorism, self-interest

The events of 11 September 2001 (9/11) shattered Americans' sense of security and led to an elevation of their perceived risk of terrorism on U.S. soil (Huddy, Khatib & Capelos, 2002). Suddenly, understanding the political effects of threat has become a pressing topic for researchers of American public opinion. Threat had not been ignored by political behavior researchers prior to the terrorist attacks on the Pentagon and the World Trade Center. It has played a role in understanding the origins of political intolerance (Feldman & Stenner, 1997;

Marcus, Sullivan, Theiss-Morse, & Wood, 1995), the development of prejudice (Schimmel et al., 1999), and the dynamics of Israeli public opinion (Arian, 1989; Gordon & Arian, 2001; Jacobson & Bar-Tal, 1995). But 9/11 gave new urgency to understanding the degree, origins, nature, and consequences of the threats experienced by Americans in the aftermath of that day's events.

Consequences of Threat

The general effects of threat on attitudes, cognitive processing, and behavior have been well documented by psychologists and political scientists. Threat increases ethnocentrism and xenophobia (Levine & Campbell, 1972; Seago, 1947; Struch & Schwartz, 1989). It promotes intolerance and a willingness to forego basic civil liberties (Doty, Peterson, & Winter, 1991; Feldman, 1982; Marcus et al., 1995). It leads to closed-mindedness and rejection of challenging beliefs (Lodge & Taber, 2000; Rokeach, 1960). It reduces the efficiency of memory processes (Blaney, 1986) and promotes both threat-related thought content (Gilligan & Bower, 1984) and perceptual hypersensitivity to information concerning threat (Mathews & MacLeod, 1986).

Certain types of threat increase reliance on stereotypes (Bodenhausen, Sheppard, & Kramer, 1994), reduce susceptibility to persuasive messages (Janis & Feshbach, 1953), bias cognitive processing (Lieberman & Chaiken, 1992), and increase willingness to take risks (Kahneman & Tversky, 1979). Perceptions of international threat lead some citizens to oppose international involvement (Niemi, Mueller, & Smith, 1989) and tend to increase reliance on enemy images (Herrmann, 1984), although there are instances in which threat increases support for belligerent policy options (Gordon & Arian, 2001). And among elites, threat accompanied by time pressure has been found to heighten group conformity pressures (Janis, 1982; 't Hart, 1990) and to reduce consideration of policy alternatives (Hermann, 1969). Most of these findings suggest some degree of cognitive "shutdown" under threatening conditions, which has also been a central theme in work on fear emotions (Cacioppo & Gardner, 1999).

Personal Threat

Although the general effects of threat are well known, there have been relatively few attempts to distinguish between the differing effects of personal and more remote national or collective threats. Personal threats—especially threats that pose a physical danger—are likely to be very affectively arousing and to elicit fear to a greater degree than more remote threats to the nation. Indeed, this is what we found in a related national study on reactions to the terrorist attacks on New York and Washington (Huddy, Feldman, Taber, & Lahav, 2002), which indicated that personal threat is much more likely than national threat to elicit fear, anxiety, and

related somatic symptoms such as depression and insomnia. By design, there is something personally disturbing, immediate, vivid, and frightening about the threat of terrorism. It raises the specter of one's mortality, and elicits pervasive feelings of insecurity and fear of physical harm (Greenberg, Simon, Pyszczynski, Solomon, & Chatel, 1992; Jacobson & Bar-Tal, 1995).

Research on threats that involve the potential for physical harm, such as crime, natural disasters, and violent conflicts, provides clear evidence that personal threat and fear leads to a change in personal behavior designed to minimize exposure to risk. Consider crime research. Warr (1990) reported that in 1987, 40% of respondents to the General Social Survey (GSS) said there was an area within a mile of their house where they were afraid to "walk alone at night." And there is some evidence that this fear motivates changes in personal behavior, referred to as "constrained behavior" by crime researchers (Ferraro, 1996). Smith and Uchida (1988), for instance, found a link between the perceived risk of crime and gun ownership. Outside the area of crime, there is additional supportive evidence that personal risk leads to behavioral change. Sattler, Kaiser, and Hittner (2000) found that the perceived risk of a hurricane improved hurricane preparedness. The possible threat of biological weapons during the Persian Gulf war appears to have influenced the personal behavior of Israelis; 65% said that they went into sealed rooms and wore gas masks during Iraqi missile attacks (Arian & Gordon, 1993).

Personal threat clearly motivates individual behavior designed to reduce risk. But does it have the same effect on support for threat-reducing national policies? Evidence on this point is less clear-cut, although relevant research is not extensive. Sears, Lau, Tyler, and Allen (1980) found that having been a victim of crime increased support for law-and-order policies. But other indices of crime-related threat—such as viewing one's neighborhood as unsafe at night, or staying away from certain parts of town to avoid crime—had no impact on attitudes toward law-and-order policies, which included questions about the rights of the accused and gun control. Of course, Americans disagree over the perceived effectiveness of policies such as gun control in reducing crime, complicating the link between perceived threat and support for policy solutions in this instance. Hence, there is a plausible link between personal threat and support for public policies designed to reduce threat.

As noted, personal threat is also likely to elicit the effects associated with threat more generally—that is, some form of cognitive shutdown that produces a more limited processing of information and a heightened sensitivity to threatening information. Decision theorists have found that risks are exaggerated for events that are highly vivid, widely reported in the news, involuntary, responsible for a large number of deaths, and unusual. Such events lead to the exaggeration of risk because they are more readily available in memory (Lichtenstein, Slovic, Fischhoff, Layman, & Combs, 1978; Thaler, 1983). Events that arouse negative feelings also

lead to an overestimation of risk (Johnson & Tversky, 1983).¹ Taken together, these findings help to explain why Americans wildly overestimated the personal risk of terrorism after 9/11. In reality, a large number of people—but a very small proportion of the U.S. population—died in the attacks. Nonetheless, in a poll conducted on the day of the attack by Gallup 58% of Americans were somewhat or very worried that they or a member of their immediate family “will become the victim of a terrorist attack”. This concern eroded over time but still remained remarkably high in late November (26-27) when 35% of Americans remained worried about being victimized by terrorism in response to the same Gallup question as that asked on 9/11 (Huddy, Khatib, & Capelos, 2002). It would not be surprising to find that Americans not only overestimated the risk posed by terrorism but also exaggerated its broader consequences.

National Threat

Alternatively, Americans may base their reactions to 9/11 on the threat posed to the country as a whole. This prediction is consistent with a broad range of studies that find a separation between citizens’ personal concerns, especially self-interest, and their support for a broad array of social issues and related policies (Sears & Funk, 1991). For example, personal finances have less impact than national concerns on vote choice and policy positions (Citrin, Green, & Muste, 1997; Feldman, 1982; Kinder & Kiewiet, 1981), perceived group finances (Kinder, Adams, & Gronke, 1989), or the welfare of other groups (Mutz & Mondak, 1997). This tendency to “morselize” politics—to keep personal considerations out of decisions about national policies or political figures—is well documented (Kinder & Sears, 1985). Typically, voters choose their candidates or decide their position on current political issues from an assessment of the state of national events, not their immediate personal situation. As evidence, Arian (1989) reported that Israelis who perceived the outbreak of war as highly or moderately likely in the late 1980s were more likely to support an increase in military power over peace negotiations, and were less willing to cede land and grant civil rights to Palestinian inhabitants of the West Bank and Gaza Strip.

We therefore have competing predictions about the impact of perceived threats to oneself versus the nation. On the one hand, there is reason to think that personal threat will motivate support for policies that minimize threat and, at the same time, lead to a distorted view of the magnitude of threat and its impact. On the other hand, there is also reason to expect that national threat will drive national perceptions and

¹ This prediction is at odds with the finding that anxiety prompts a search for information and elicits a potentially more reasoned response to political choices (Marcus & MacKuen, 1993; Marcus, Neuman, & MacKuen, 2000) or that some sources of stress can improve the quality of decision-making by resulting in a more complete search for information (Vertzberger, 1998). The difference arises in part because of the added role of fear associated with the threat of terrorism, which impairs cognitive reasoning.

influence policy solutions to a greater degree than personal threat, as has been found in a slew of past research studies. On the basis of this latter research, we would expect citizens to put aside their personal needs and concerns to focus instead on the national situation.

Personal Versus National Threat

Several studies have distinguished between the personal and collective threat of violent conflict, although findings are inconclusive. Arian and Gordon (1993) found that personal threat was more emotionally arousing than perceived threats to the collective. In their research, Israelis who felt that Saddam Hussein was out to get them personally during the Gulf war experienced higher levels of anxiety 4 weeks after the war than did those who felt Hussein was out to get them as a Jew, an Israeli, or the Jewish people. Jacobson and Bar-Tal (1995) directly examined the differing impact of personal and national threat on sociopolitical beliefs. They found that feeling insecure about one's personal life (i.e., job, finances, family, and health) had less impact on feeling insecure about social and economic conditions in Israel (including economic growth) than did feeling insecure about Israel's relationship with the world and other national matters. But feeling insecure about a job or one's health may not arouse the same level of emotion as being concerned about becoming the victim of terrorism. As a consequence, these findings do not rule out the possibility that the personal threat and fear of terrorism colors reactions to national issues.

Determinants of Personal Threat

The goal of the current research is to examine the differing effects of perceived personal and national threat. A focus on the relative impact of the two types of threat raises a parallel concern about the extent to which personal and national threats are truly distinct. Research on the determinants of personal threat suggests that perceived personal risk is based to some degree on actual risk factors, which often vary geographically within a nation and thus lead to differences between perceived personal and national threat. Tyler (1984) reported that estimates of crime victimization are derived from direct personal experience with crime and the indirect victimization experiences of relatives and friends. This fits with Arian and Gordon's (1993) evidence that residents of the Tel Aviv area—where Scud missiles were aimed—were more likely to feel fearful than were other Israelis during the Gulf war. Interestingly, general information from the media about base rates of victimization—which are likely to have a broader and more uniform effect on a population—have almost no impact on estimates of personal vulnerability, helping to further reduce the link between perceived national and personal threat. The limited use of base rate information has been well documented by social

psychologists and extends to the estimated risk posed by floods, earthquakes, other natural disasters, and automobile accidents (Tyler, 1984).

On the basis of this evidence, we argue that personal and national threat are distinct. But this does not mean that they are unrelated. Indeed, in the context of terrorism it would be strange if strong feelings of personal threat existed in the absence of any perceived national threat. Pervasive gender differences in perceived personal and national threat serve to further heighten the connection between the two types of threat. One of the most consistent findings to emerge from research on physical threat is that women are more afraid of victimization than are men, even though men are more likely to be the victims of violent crime (Ferraro, 1996; Stafford & Galle, 1984; Warr, 1984). Women overestimate the risk posed by a specific crime, such as murder, and they respond with higher levels of fear than men to the same level of perceived risk of crime (Ferraro, 1996; Warr, 1984). This gender difference extends to perceptions of national threat. Young Finnish women were more afraid than young men of nuclear war before the onset of the Gulf war (Poikolainen, Kanerva, & Loennqvist, 1998). Arian and Gordon (1993) found that Israeli women were more fearful than men during the Gulf war. The thought of terrorist attacks or memories of the Gulf war aroused higher levels of insecurity among Israeli female than male students (Jacobson & Bar-Tal, 1995). In a related study, the same researchers found that women settlers living in the occupied territories felt less secure about Israel's current situation (including the Arab-Israeli conflict and relations with the United States) than did men (Bar-Tal, Jacobson, & Freund, 1995). And Israeli girls reported higher levels of negative emotions, including fear/anxiety, sorrow, and despair, than did boys in the aftermath of terrorist attacks in early 1996 (Raviv, Sadeh, Raviv, Silberstein, & Diver, 2000).²

Perceived Threat of Terrorism in the United States Before 9/11

Americans were concerned about terrorism before 11 September 2001. The Rand Corporation conducted a study of public opinion on terrorism in 1988 and 1989 in the aftermath of the bombing of Pan Am flight 103 over Lockerbie, Scotland. In that survey, 57% of Americans thought terrorism was a somewhat or very serious problem in the United States—a level of concern that far outweighed the numbers of individuals killed on U.S. soil by terrorists. In 1988, 203 Americans were killed by terrorist throughout the world and of those 93% died in a single incident (the Lockerbie bombing). In 1989, 23 Americans were killed by terrorists, almost the same number as Americans who were killed by dogs (2) in that year (Downes-Le Guin & Hoffman, 1993). The threat posed by terrorism was seen as even greater in the aftermath of the 1995 Oklahoma City bombing and the explosion

² Women's greater fear of personal crime such as murder, burglary, or assault arises almost completely out of their greater fear of rape (Ferraro, 1996). This does not explain, however, women's greater fear of nuclear weapons or the risks posed by violent conflicts, such as terrorism.

at the 1996 summer Olympics in Atlanta, with roughly 90% of Americans viewing terrorism in the United States as a somewhat or very serious problem at that time (Kuzma, 2000). Sixty-two percent of Americans said that the threat of terrorism was “a big problem” in a *Time/CNN* poll conducted in March 1997, and 64% of respondents reported that terrorism posed a “major threat to the well being of the United States” in a poll by Princeton Survey Research Associates in May 2001 (Roper Center, 2002). Yet terrorism was never very salient as a national issue. In several polls conducted between 1995 and 2001, terrorism was mentioned by 1% or fewer of the respondents as one of the most important problems facing the country (Roper Center, 2002).

Levels of perceived personal threat were also quite high in the Rand study when compared to actual probabilities: 14% said they were somewhat or very likely to be “a passenger on a plane that is hijacked” and 14% said they were somewhat or very likely to be “injured by a bomb left by terrorists.” Through the 1990s, somewhere between 23% and 36% of Americans were personally worried or concerned about terrorism when they were in public places in the United States (Kuzma, 2000). Moreover, consistent with evidence that perceived risk of crime leads to behavioral changes designed to reduce risk, individuals in the Rand study who felt personally threatened by terrorism were more likely to say they would refuse to travel overseas in the future. There were no apparent gender differences in fear of terrorism in the Rand survey, but there were differences by education, with less educated individuals being more likely to fear terrorism (Downes-Le Guin & Hoffman, 1993).

Hypotheses

Data for this study are drawn from a telephone survey on reactions to 9/11 among the residents of Queens (within the city of New York) and Long Island (in the larger New York metropolitan area). We use the data to test the following hypotheses: (1) The perceived personal threat posed by terrorism is distinct from perceived threats to the nation. (2) Personal threat will have a greater impact than national threat on the perceived negative personal and national consequences of terrorism and will be more likely to alter personal behavior that is designed to reduce risk. We refer to this as the *personal threat* hypothesis. This is contrasted with the expectation that (3) perceived national threat will have a greater impact than personal threat on assessment of the national consequences of terrorism. This is referred to as the *national threat* hypothesis. Moreover, on the basis of past findings, we expect (4) women to feel more personally threatened by terrorism than men. We explore the determinants of personal and national threat and examine their impact on the perceived economic consequences of 9/11 and personal solutions adopted to avoid the threat of terrorism.

Method

The *Newsday*–Stony Brook survey was conducted via telephone with 1,221 adults over age 18 in Nassau, Suffolk, and Queens counties in New York between 20 October and 11 November 2001.³ The study was conducted by the Center for Survey Research at SUNY at Stony Brook. Up to seven callbacks were made at each number, and limited attempts were made to convert individuals who initially refused.

Sample

Telephone numbers were generated by random-digit dial from telephone blocks with at least one listed residential number (one-plus) by Genesys Inc. Respondents within a given household were selected randomly using the last-birthday method (Lavrakas, 1993). Residents of Long Island were oversampled ($N = 818$) and Queens residents undersampled ($N = 403$) during sample selection. Respondents in these two areas were reweighted to reflect their true prevalence in the combined population.

Measures

Personal threat was assessed by two questions: “How concerned are you personally about you yourself or a family member being the victim of a future terrorist attack in the United States?” and “How worried are you that you yourself or someone in your immediate family might receive a letter in the mail at home or at work contaminated with the anthrax bacteria?” *National threat* was assessed by two questions: “How concerned are you that there will be another major terrorist attack on U.S. soil in the near future?” and “How concerned are you that there will be a major terrorist attack in the U.S. involving biological or chemical weapons?” The survey was conducted during the height of the anthrax scare, and interviewers were allowed to clarify that future biological attacks were in addition to the current anthrax incidents.

National economic assessments were one of the primary dependent variables in this study. Items about national and personal economic conditions were drawn from the Consumer Sentiment Index (from the Survey of Consumers conducted by the Survey Research Center at the University of Michigan). All questions are treated as single items because they deal with differing time frames. Some are retrospective, others deal with the next 12 months, and others ask about the next 5 years. The first question assesses perceived business conditions in the next 12 months: “Now turning to business conditions in the country as a whole—do you

³ The survey was completed the day before an American Airlines Airbus flight out of JFK Airport crashed in Rockaway, Queens on November 12, 2001.

think that during the next twelve months we'll have good times financially, or bad times, or what?" Long-term prospective economic conditions were assessed by the following question: "Looking ahead, which would you say is more likely—that in the country as a whole we'll have continuous good times during the next five years or so, or that we will have periods of widespread unemployment, or depression, or what?" The following two questions were also included about the future of the *stock market*: "Where do you think the stock market will stand one year from now? Do you think it will be up 10% or more, up somewhat but not as much as 10%, down somewhat but not as much as 10%, down 10% or more, or will it stay the same?" and "Where do you think the stock market will stand five years from now? Do you think it will be up 10% or more, up somewhat but not as much as 10%, down somewhat but not as much as 10%, down 10% or more, or will it stay the same?"

Personal economic assessments were also included as a check on the pervasiveness of the effects of personal and national threat. The following question tapped perceived retrospective finances: "We are interested in how people are getting along financially these days. Would you say that you are better off or worse off financially than you were a year ago?" A second question tapped prospective finances: "Now looking ahead—do you think that a year from now you will be better off financially, or worse off, or just the same as now?" Two questions assessed the impact of the economic downturn more generally: "Have you lost money in the stock market or in mutual funds due to recent changes in the economy?" and "Have you lost your job due to changes in the economy?"

Several questions asked respondents about *behavioral changes* that they had undertaken since 9/11 to reduce their exposure to risk. One question addressed anthrax: "Have you been handling your mail at home more carefully as a consequence of recent news about anthrax?" Another dealt with changes in time spent with family: "Have you changed your daily routine to spend more time with your children or family since the attacks?" Several questions dealt with changes in travel plans. The first concerned air travel: "Have you delayed or canceled any specific plans to travel by air in the near future as a consequence of the attacks?" The second set of questions were combined to assess any changes in other travel plans and included the following questions: "Are you planning to take a vacation or a weekend getaway in the next six months?" If yes: "Have you changed the destination of any planned vacations or weekend getaways as a consequence of the attacks?" If no: "Did you cancel any specific vacation or weekend plans as a consequence of the attacks?" Two questions dealt with traveling into and around Manhattan: "Since the attacks have you driven by car into Manhattan more often, less often, or about as often as before?" and "Since the attacks have you used public transportation to get into and around Manhattan more often, less often, or about as often as before?"

Several questions tapped the *direct and indirect effect of terrorism*. Living in Queens (as opposed to Nassau or Suffolk counties) was obtained from area code

information. Respondents' demographic and work-related backgrounds were assessed with a series of questions. To assess their work location, employed respondents were asked "Do you work in Nassau County, Suffolk County, Queens, Manhattan, New York City other than Queens and Manhattan, or somewhere else? Individuals who knew a victim of the attacks were identified by the following question: "Do you or someone in your family know someone who is missing, hurt, or killed in the terrorist attacks of September 11?" The psychological impact of the attacks was assessed by the following question: "In the past week, how difficult has it been, if at all, for you to concentrate on your job or your normal activities because of the way you feel about the terrorist attacks and the events since then?"

The following questions were included to assess age, racial and ethnic background, educational background, household income, marital and parental status, occupation, and religion: "What is your age?" "Are you of Hispanic or Latin American descent?" "Are you White, Black, Asian or of another background?" "How far did you go in school?" "If you added together the yearly income of all the members of your family living at home last year, would the total be . . . ?" "Are you currently married; not married, but living with a partner; separated; divorced; widowed; or have you never been married?" "How many children do you have under the age of 18 currently living with you?" "What is your main occupation?" "What is your religious background—Protestant, Eastern Orthodox, Roman Catholic, Jewish, Islamic, or something else?" Political partisan affiliation was assessed with the following question: "Do you consider yourself to be a Republican, a Democrat, an independent, or affiliated with another party?" This was followed by a question that assessed strength of identification for Democrats and Republicans or the partisan direction in which independents leaned.

Analysis

About 6 weeks after 9/11, survey respondents saw pervasive future threats to the nation: 82% were very or somewhat concerned about another major terrorist attack in the near future, and 81% were similarly worried about a biological or chemical attack (Table 1). On both questions, almost 50% of all respondents reported being *very* concerned about further terrorist attacks. Similar levels of perceived threat were recorded in a CBS News national poll conducted at roughly the same time, in late October. In the national poll, 88% of respondents were somewhat or very concerned that there would be "another attack on the U.S. in the next few months" (Huddy, Khatib & Capelos, 2002).

A large number of Long Island and Queens respondents also felt threatened personally by the possibility of future attacks: 70% were very or somewhat concerned that they or a family member would be the victim of a future terrorist attack, and 48% were somewhat or very worried about receiving an anthrax-tainted letter. Of those concerned about receiving a letter containing anthrax, about half

Table 1. Frequency Distributions for Personal and National Threat Items

Personal threat		
“How concerned are you personally about you yourself or a family member being the victim of a future terrorist attack in the United States?”		
Very concerned	415	34.1%
Somewhat concerned	437	35.9%
Not very concerned	190	15.6%
Not at all concerned	156	12.8%
Don't know	21	1.7%
“How worried are you that you yourself or someone in your immediate family might receive a letter in the mail at home or at work contaminated with the anthrax bacteria?”		
Very worried	278	22.8%
Somewhat worried	302	24.8%
Not very worried	331	27.1%
Not at all worried	308	25.2%
Don't know	0	0%
National threat		
“How concerned are you that there will be another major terrorist attack on U.S. soil in the near future?”		
Very concerned	579	47.5%
Somewhat concerned	414	34.0%
Not very concerned	108	8.8%
Not at all concerned	105	8.6%
Don't know	13	1.1%
“How concerned are you that there will be a major terrorist attack in the U.S. involving biological or chemical weapons?”		
Very concerned	600	49.2%
Somewhat concerned	387	31.7%
Not very concerned	127	10.4%
Not at all concerned	88	7.3%
Don't know	17	1.4%

Note. $N = 1,221$ for each item.

were *very* concerned that they or a family member would be affected. These numbers are not that different from those observed for the nation as a whole. In a Fox News poll conducted in mid-October 2001, 46% of national respondents reported being somewhat or very concerned that they or a family member would be “exposed to bioterrorism, such as anthrax” (Huddy, Khatib & Capelos, 2002).

It is clear that in the immediate aftermath of 9/11, residents of the New York metropolitan area were very worried about the likelihood of additional terrorist attacks in the United States. This is understandable given the news coverage in the weeks after the attacks and continuing statements from government officials that more attacks were probable. Moreover, in some respects New Yorkers were more concerned about attacks in their area than were residents in other parts of the country. In early October, 74% of New Yorkers expressed concern about another

terrorist attack in the area in which they lived, compared to 31% of national poll respondents, interviewed in a separate poll (CBS News, 2001).

Perhaps somewhat more surprising is the number of people who worried that they would be directly affected by terrorism. This level of personal concern might be the result of the graphic images of the destruction of the World Trade Center towers and the damage to the Pentagon, and is consistent with previous research showing that people tend to overgeneralize from vivid, negative events (Johnson & Tversky, 1983; Lichtenstein et al., 1978). In addition, almost 54% of people interviewed in this survey said that they, or someone in their family, knew someone who was missing, hurt, or killed in the 9/11 attacks. This is substantially higher than the national percentage (20% in a Pew poll conducted in mid-September; Polling Report, 2002). Knowing someone who was killed in the attacks would help to reinforce the immediacy of 9/11. However, even after the attacks and the reports of anthrax-contaminated mail, the objective likelihood of being hurt in a terrorist attack or receiving a letter contaminated by anthrax was very low for most people, even in the greater New York area. Objectively, local residents should not have been very concerned that they would be *directly* affected by another terrorist attack, even if they believed such attacks to be likely.

We also find that significant numbers of people reported that they had altered their behavior in the weeks after 9/11. Most notably, 55% of the respondents said that they were handling mail at home more carefully as a consequence of the news about anthrax contamination. In addition, 26% said that they had delayed or canceled plans to travel by air, 7% said that they had changed upcoming vacation travel plans, 18.4% said that they were driving into Manhattan less often, 13% reported taking mass transportation into Manhattan less often, and 31% said that they had changed their daily routine to spend more time with their children or family since 9/11. The impact of the terrorist attacks (including the anthrax-contaminated mail) on people's lives is also evident from the 52% of respondents who said that, in the week before the interview, they had found it somewhat or very difficult to concentrate on their job or normal activities. Regardless of the validity of people's fears, these behavioral consequences of the terrorist attacks clearly had a substantial effect on the economies of the United States and New York City.

To further explore the causes and consequences of the perceived threat of terrorism, we factor-analyzed the four subjective threat questions. A principal axis extraction with an oblique (direct oblimin) rotation produced two distinct but correlated dimensions that separated the two personal threat and the two national threat items. The estimated correlation between the two factors is .60, so, not surprisingly, the more people believed that there would be future terrorist attacks on the United States the more they were concerned for themselves and their families. On the basis of these results, we constructed two scales: one for perceived national threat (interitem $r = .71$) and one for personal threat ($r = .56$). Both variables were recoded to range from a minimum of 0 (no perceived threat) to 1 (maximum threat). Confirmation of two distinct factors lends support to our first

hypothesis: that the perceived threat posed by terrorism to oneself and one's family is distinct from the perceived threat of terrorism to the nation.

Personal and national threat are distinct but related, as observed in the factor analysis. One of the reasons for a healthy relationship between personal and national threat is that personal threat is conditional on perceived national threat. Not surprisingly, respondents who minimized the likelihood of a future attack on U.S. soil experienced very low levels of personal threat. Among those perceiving low levels of future national threat, only 4% felt highly threatened personally. In contrast, 47% of those perceiving a high level of national risk also felt highly threatened personally. In essence, high levels of personal threat were concentrated among individuals who perceived that an attack on U.S. soil was highly likely. Among those who perceived a high level of national risk, roughly half felt highly threatened personally by such an event while the other half felt moderately threatened. This relationship is presented in Table 2.

Determinants of Perceived Threat

To examine the determinants of perceived threat, we regressed both threat measures on a number of variables. As shown in Table 3, these included demographic variables such as age, occupation, income, religion, gender, race, and ethnicity; whether respondents worked in New York City (with a presumed higher likelihood of terrorist victimization); whether they lived in Queens (closer to Manhattan and presumed to have higher levels of risk than suburban Long Island); whether they knew anyone who was injured or killed in the 9/11 attacks; and partisanship—a likely influence on levels of perceived national threat. Table 3 reports the unstandardized regression coefficients and their estimated standard errors.⁴

The most notable result of this analysis is the hypothesized effect of gender on both perceived threat scales. Men are significantly less likely than women to perceive the United States as at risk from an additional terrorist attack and are less worried about being directly affected by such attacks. The estimated difference between men and women on both variables is about 12% of their full range, as seen from the size of the two coefficients (–.12 for national and –.13 for personal). In addition, white-collar workers (the primary victims in the collapse of the World Trade Center towers) are more likely to perceive both national and personal threat than blue-collar workers and those who are unemployed. The other consistent finding across the two measures is that Hispanics are more likely to be threatened (especially personally) than are whites.

⁴ Missing income information was imputed from a regression equation that included the following variables as predictors: worse financial situation, local business conditions, marital status, own stock, made stock market gains, professional occupation, sales or clerical occupation, education, gender, live in Queens, age 18 to 30, age 30 to 50, and perceived length of recession. The adjusted R^2 for this model was .31.

Table 2. Relationship Between Personal and National Threat

Personal threat	National threat		
	Low	Medium	High
Low	69.2%	21.7%	6.3%
Medium	26.9%	68.4%	47.0%
High	3.8%	10.0%	46.7%
<i>N</i>	78	452	647

Note. Entries are percentages. The threat scales were split into three on the basis of their original seven categories (constructed by combining the two items for each scale listed in Table 1). High threat was made up of the two highest values, medium threat the middle three values, and low threat the two lowest values.

Table 3. Predictors of Personal and National Threat Perceptions

	National threat increase	Personal threat increase
Live in Queens	-.03 (.02)	.05* (.02)
Work in NYC	.00 (.02)	-.01 (.03)
Know any victims	.03 (.02)	.01 (.02)
Gender	-.12** (.02)	-.13** (.02)
Age	-.01 (.01)	-.01 (.01)
Black	.04 (.03)	.07* (.03)
Hispanic	.06* (.03)	.11** (.03)
Education	.01 (.03)	-.09** (.03)
Income	.00 (.00)	-.00 (.00)
Party identification	.02 (.03)	.06* (.03)
Married	-.01 (.02)	.01 (.02)
Children under 18	.03 (.02)	.02 (.02)
Occupation – professionals	.07** (.02)	.05* (.02)
Occupation – sales and clerical	.05* (.03)	.06* (.03)
Occupation – trade	.00 (.03)	.02 (.04)
Occupation – laborer	.02 (.04)	.07 (.05)
Protestant	-.01 (.03)	-.02 (.03)
Catholic	.01 (.02)	-.00 (.03)
Jewish	.07* (.03)	-.02 (.04)
Constant	.75** (.05)	.61** (.05)
R^2	.09	.11
Adj. R^2	.07	.10
<i>N</i>	1,085	1,091

Note. Parameter estimates are unstandardized regression coefficients with standard errors in parentheses. All variables are coded on a 0–1 scale. The dependent variables, national threat and personal threat, are coded so that 1 = maximum threat and 0 = minimum threat; live in Queens is a dummy variable (1 = live in Queens, 0 otherwise); work in NYC is a dummy variable (1 = work in NYC, 0 otherwise); gender is a dummy variable (0 = female, 1 = male); age is measured in tens of years; income is measured in tens of thousands of dollars; party identification is a 7-category scale (1 = strong Democrat, 0 = strong Republican); married is a dummy variable (1 = married or living with partner, 0 otherwise); child is a dummy variable (1 = having at least one child, 0 otherwise); the occupation variables are dummy variables (1 = respondent has specific occupation, 0 otherwise); Protestant, Catholic, and Jewish are dummy variables (1 = respondent has specific religion, 0 otherwise). All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$.

Several variables influence perceived personal but not national threat. The most interesting effect is for education. Better educated individuals are less likely to worry about being directly affected by terrorism, in parallel with an earlier finding that less educated individuals were more likely to fear terrorism (Downes-LeGuin & Hoffman, 1993). There is, however, no effect of education on concern about further terrorist attacks in the United States. This suggests that education improves the use of base rate information to arrive at a more accurate and less alarming view of the personal risks posed by terrorism. People who live in Queens (a borough of New York City) are somewhat more likely to worry about the personal threat of terrorism. Finally, two other significant but small coefficients indicate that blacks and Democrats are somewhat more worried about the personal threat of terrorism than are whites and Republicans, respectively.

It is clear that an assessment of personal threat is only partially influenced by objective risk factors: Living in Queens and working in a white-collar occupation could both be seen as factors that increased the chance of victimization on 9/11. But other factors such as less education, partisanship, or being female, black, or Hispanic are not associated with a higher risk of exposure to terrorism. Rather, they seem to hint at differences in the way in which threat is appraised.

Overall, these two regressions leave much unexplained about the determinants of threat perceptions. Unfortunately, the *Newsday*–Stony Brook survey did not contain the questions necessary to test other potential explanations such as differential attention to news reports, personality differences, and social network communications.

Perceived Threat and the Economy

To explore the effects of threat on the perceived national consequences of terrorism, we examined the determinants of a series of questions from the *Newsday*–Stony Brook survey on the perceived current and future state of the national economy. Two of these questions elicited prospective assessments of the national economy over the next year and the next 5 years; two analogous questions concerned the U.S. stock market. Responses from these four questions were regressed on the two threat measures and a series of other variables shown in Tables 4 and 5. For the most part, the predictor variables are identical to those used in the previous regression analysis. The dependent variables in Tables 4 and 5 are scored so that they range from 0 (most negative economic assessments) to 1 (most positive).

As shown in Table 4, the greater the perceived risk of future terrorist attacks on the United States, the more negative the assessments of the U.S. economy in both the coming year and the next 5 years. In both instances the coefficient for national threat is sizable ($-.27$ and $-.20$). There is no evidence in these analyses, however, that perceived personal threat has any effect on judgments of the national economy. Both coefficients are barely different from zero and much smaller than their standard errors.

Table 4. Predictors of National Economic Evaluations: Business Conditions

	Improvement in 1 year	Improvement in 5 years
Personal threat	.00 (.05)	-.09 (.05)
National threat	-.27** (.05)	-.20** (.05)
Gender	.08** (.02)	.12** (.03)
Age	-.00 (.01)	.01 (.01)
Black	.03 (.04)	-.05 (.04)
Hispanic	-.07 (.04)	-.01 (.05)
Education	-.03 (.04)	-.01 (.05)
Income	-.01* (.00)	.00 (.00)
Party identification	-.11** (.04)	-.04 (.04)
Married	-.03 (.03)	.02 (.03)
Children under 18	.01 (.03)	.03 (.03)
Occupation – professionals	-.07* (.03)	.03 (.03)
Occupation – sales and clerical	.02 (.04)	.04 (.04)
Occupation – trade	.04 (.04)	.08 (.05)
Occupation – laborer	.09 (.06)	-.03 (.06)
Protestant	-.04 (.04)	-.06 (.04)
Catholic	-.03 (.03)	-.00 (.03)
Jewish	-.01 (.05)	-.01 (.05)
Constant	.74** (.07)	.59** (.08)
R^2	.11	.10
Adj. R^2	.10	.08
N	980	968

Note. Parameter estimates are unstandardized regression coefficients with standard errors in parentheses. All variables are coded on a 0–1 scale. The dependent variables, business conditions in 1 year and business conditions in 5 years, are 5-category variables (1 = best conditions, 0 = worst conditions); national and personal threat are coded so that 1 = maximum threat and 0 = minimum threat; gender is a dummy variable (0 = female, 1 = male); married is a dummy variable (1 = married or living with partner, 0 otherwise); age is measured in tens of years; income is measured in tens of thousands of dollars; party identification is a 7-category variable (1 = strong Democrat, 0 = strong Republican); child is a dummy variable (1 = having at least one child, 0 otherwise); the occupation variables are dummy variables (1 = respondent has specific occupation, 0 otherwise); Protestant, Catholic, and Jewish are dummy variables (1 = respondent has specific religion, 0 otherwise). All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$.

The same general results are found in respondents' assessments of the future of the U.S. stock market, as shown in Table 5. National threat has a significant effect on the perceived future of the stock market for both the 1-year and 5-year time frames, although national threat perceptions have less impact on judgments of the stock market than on assessments of the national economy. Once again, there is no effect of personal threat on economic forecasts. The only other consistent trend is that lower income individuals are more optimistic about the economy and the stock market over the next 12 months.

These findings suggest that people consider their beliefs about the likelihood of additional terrorist attacks on the United States when assessing the future of the

Table 5. Predictors of Stock Market Evaluations

	Improvement in 1 year	Improvement in 5 years
Personal threat	-.06 (.05)	-.01 (.03)
National threat	-.16** (.04)	-.07* (.03)
Gender	-.03 (.02)	.01 (.04)
Age	.00 (.01)	.01 (.01)
Black	-.08* (.04)	-.02 (.03)
Hispanic	-.03 (.04)	-.01 (.03)
Education	.00 (.04)	.08** (.03)
Income	.01** (.00)	.00 (.00)
Party identification	.01 (.03)	-.03 (.02)
Married	-.00 (.02)	.01 (.02)
Children under 18	-.02 (.02)	-.01 (.02)
Occupation – professionals	.01 (.03)	.04* (.02)
Occupation – sales and clerical	.00 (.03)	.02 (.02)
Occupation – trade	.04 (.04)	.04 (.03)
Occupation – laborer	.07 (.05)	.00 (.04)
Protestant	-.09** (.03)	.01 (.02)
Catholic	-.02 (.03)	.05** (.02)
Jewish	-.05 (.04)	.00 (.03)
Constant	.80** (.06)	.81** (.05)
R^2	.07	.07
Adj. R^2	.05	.05
N	983	882

Note. Parameter estimates are unstandardized regression coefficients with standard errors in parentheses. All variables are coded on a 0–1 scale. The dependent variables, stock market in 1 year and stock market in 5 years, are 5-category variables (1 = best conditions, 0 = worst conditions); national and personal threat are coded so that 1 = maximum threat and 0 = minimum threat; gender is a dummy variable (0 = female, 1 = male); married is a dummy variable (1 = married or living with partner, 0 otherwise); age is measured in tens of years; income is measured in tens of thousands of dollars; party identification is a 7-category variable (1 = strong Democrat, 0 = strong Republican); child is a dummy variable (1 = having at least one child, 0 otherwise); the occupation variables are dummy variables (1 = respondent has specific occupation, 0 otherwise); Protestant, Catholic, and Jewish are dummy variables (1 = respondent has specific religion, 0 otherwise). All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$.

national economy, consistent with the national threat hypothesis. There is no evidence, however, that the personal threat of terrorism has any additional impact on economic judgments, at odds with the personal threat hypothesis. Within days after 9/11, the media were prominently reporting stories of the likely negative economic consequences of the terrorist attacks. Undoubtedly the salient link drawn in the media between 9/11 and an economic downturn heightened this connection among members of the public as well. There is no evidence, however, that fears about one's own victimization distorted estimates of future conditions beyond concerns about the nation as a whole.

To check that the influence of perceived national threat on national economic conditions involves a reasonable calculation of the effects of terrorism, we examined the effects of national threat on respondents' prospective and retrospective judgments of their own economic situation. To the extent that the national economy is hurt by future terrorist activity, people should be more pessimistic about their own economic future. However, there is no reason why the fear of terrorism should influence people's reports of how their economic well-being has changed in the *preceding* year.

The results of these two regression analyses are presented in Table 6. Consistent with our prior findings, national threat has a substantial effect on respondents' assessments of their own economic prospects. Respondents who perceived the nation to be at greater risk of a future terrorist attack were more pessimistic about their own future finances. In contrast, national threat perceptions had no effect on judgments of respondents' retrospective finances. This is consistent with the notion that judgments of national threat are carefully evaluated and involve a reasoned guess about the likely impact of terrorism on the economy. But even individuals who thought they were at risk of victimization did not translate this into concern about their own personal finances over the next 12 months or 5 years.

There were several other interesting predictors of one's economic future. Individuals who had lost a job or lost money in the stock market due to recent changes in the economy were more pessimistic in the short term. Older respondents were more pessimistic about their finances in the short and long term. Republicans and those with higher incomes were more optimistic about their personal finances in the next 12 months and 5 years.

Fear of Terrorism and Personal Behavior

To this point we have found significant evidence that the perceived risk of a future terrorist attack on the nation influences assessments of the national economy and one's future economic well-being. We have found no evidence, however, that the perceived personal threat of terrorism has any effect on assessments of the national economy or personal economic well-being. Holding national threat constant, the coefficients for personal threat are all close to zero. Previous research suggests, however, that personal fears may motivate behaviors designed to minimize risk, even if this does not extend to judgments about the economy or other national issues. Do people adjust their behavior to deal with the personal fear of terrorism, consistent with the personal threat hypothesis?

To test this prediction, we used questions from the *Newsday*–Stony Brook survey to gauge the extent to which people report that they have changed their behavior since 9/11. We noted earlier that significant numbers of people reported that they had exercised greater caution in handling the mail, had spent more time with their families, had canceled or postponed air travel, had altered vacation plans, had driven into Manhattan less, and had been less likely to use public transportation

Table 6. Predictors of Personal Economic Evaluations

	Better off than 12 months ago	Better off in 12 months
Personal threat	-.04 (.05)	-.03 (.05)
National threat	-.00 (.07)	-.11* (.05)
Lost job	-.29** (.05)	-.07 (.05)
Lost money	-.08** (.03)	-.04 (.03)
Gender	-.03 (.03)	.01 (.02)
Age	-.04** (.01)	-.05** (.01)
Black	.11* (.04)	.04 (.04)
Hispanic	-.09* (.04)	-.02 (.04)
Education	-.06 (.04)	-.01 (.04)
Income	.01** (.00)	.01* (.00)
Party identification	-.09* (.04)	-.07* (.03)
Married	-.01 (.03)	-.06* (.03)
Children under 18	-.01 (.03)	.00 (.03)
Occupation – professionals	.10** (.03)	.04 (.03)
Occupation – sales and clerical	.05 (.04)	.02 (.04)
Occupation – trade	.06 (.05)	.14** (.04)
Occupation – laborer	.00 (.06)	-.11* (.06)
Protestant	.00 (.04)	.00 (.04)
Catholic	.03 (.03)	.05 (.03)
Jewish	-.01 (.05)	.11* (.04)
Constant	.67** (.07)	.39** (.07)
R^2	.13	.11
Adj. R^2	.11	.09
N	1,063	968

Note. Parameter estimates are unstandardized regression coefficients with standard errors in parentheses. All variables are coded on a 0–1 scale. The dependent variables, present personal economic situation and personal economic situation in 1 year, are 5-category variables (1 = best conditions, 0 = worst conditions); national and personal threat are coded so that 1 = maximum threat and 0 = minimum threat; lost job is a dummy variable (1 = lost job, 0 otherwise); lost money is a dummy variable (1 = lost money in the stock market, 0 = otherwise); gender is a dummy variable (0 = female, 1 = male); married is a dummy variable (1 = married or living with partner, 0 = otherwise); age is measured in tens of years; income is measured in tens of thousands of dollars; party identification is a 7-category variable (1 = strong Democrat, 0 = strong Republican); child is a dummy variable (1 = having at least one child, 0 otherwise); the occupation variables are dummy variables (1 = respondent has specific occupation, 0 otherwise); Protestant, Catholic, and Jewish are dummy variables (1 = respondent has specific religion, 0 otherwise). All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$.

to get into or around the city since 9/11. We now use those six indicators as dependent variables in probit equations to determine the relative impact of national and personal threat on the occurrence of behavioral change since the attacks. The six sets of estimates are shown in Table 7.

As opposed to the previous results, personal threat of terrorism has a significant effect on four of the six personal behaviors. Personal threat has its largest effect on increased care in handling the mail, although the size of this

Table 7. Predictors of Personal Behaviors

	More caution in handling mail	More time spent with family	Change air travel	Change travel plans	Driving less into Manhattan	Taking public transport. less into Manhattan
Personal threat	1.62** (.18)	.66** (.18)	.50** (.18)	.02 (.25)	.28 (.19)	.48* (.21)
National threat	.08 (.18)	.36 (.20)	.48* (.20)	.54* (.26)	.62** (.23)	.01 (.23)
Gender	-.17 (.09)	-.03 (.09)	-.08 (.09)	-.21 (.13)	-.01 (.10)	-.16 (.11)
Age	.00 (.00)	-.01** (.00)	.00 (.00)	-.01 (.00)	-.01* (.00)	-.01 (.00)
Black	.55** (.17)	.23 (.16)	.19 (.16)	.03 (.24)	.45** (.16)	.08 (.19)
Hispanic	.10 (.16)	.03 (.16)	.29 (.16)	.21 (.22)	.17 (.18)	.28 (.17)
Education	-.12 (.16)	-.02 (.17)	.03 (.17)	-.14 (.23)	.04 (.19)	.22 (.20)
Income	-.14 (.25)	-.04 (.26)	.34 (.26)	1.18** (.38)	.09 (.29)	-.24 (.33)
Party identification	.13 (.13)	.14 (.13)	.14 (.13)	.01 (.18)	.09 (.15)	.02 (.16)
Married	.19* (.10)	-.04 (.10)	.09 (.10)	-.16 (.14)	-.16 (.11)	.01 (.12)
Children under 18	.12 (.10)	.52** (.10)	.01 (.10)	-.06 (.13)	.12 (.10)	-.15 (.12)
Occupation – professionals	.00 (.12)	.07 (.12)	.16 (.12)	.05 (.16)	-.12 (.13)	-.26 (.14)
Occupation – sales and clerical	-.08 (.13)	.08 (.13)	.41** (.13)	-.04 (.18)	.02 (.14)	-.44** (.17)
Occupation – trade	.12 (.18)	.06 (.17)	-.03 (.18)	-.28 (.26)	-.08 (.18)	-.32 (.20)
Occupation – laborer	.22 (.22)	.19 (.22)	.20 (.23)	—	.06 (.24)	.33 (.23)
Protestant	-.18 (.14)	.05 (.15)	.07 (.15)	.05 (.20)	-.25 (.15)	.23 (.18)
Catholic	.01 (.12)	.28* (.12)	.05 (.12)	.17 (.17)	-.16 (.13)	.18 (.16)
Jewish	-.15 (.16)	.22 (.18)	-.06 (.17)	.05 (.23)	-.28 (.19)	.07 (.21)
Constant	-.88** (.28)	-1.24** (.29)	-1.86** (.32)	-2.17** (.42)	-1.19** (.32)	-1.11** (.34)
N	1,087	1,087	1,081	1,043	1,089	1,089

Note. Parameter estimates are probit coefficients with standard errors in parentheses. All variables are coded on a 0–1 scale. The dependent variables—more caution in handling mail, spend more time with family, change air travel, change travel plans, driving less into Manhattan, and taking public transportation less into Manhattan—are dichotomous variables (1 = yes, 0 = no); national and personal threat are coded so that 1 = maximum threat and 0 = minimum threat; gender is a dummy variable (0 = female, 1 = male); age is measured in tens of years; income is measured in tens of thousands of dollars; party identification is a 7-category scale (1 = strong Democrat, 0 = strong Republican); married is a dummy variable (1 = married or living with partner, 0 otherwise); child is a dummy variable (1 = having at least one child, 0 otherwise); the occupation variables are dummy variables (1 = respondent has specific occupation, 0 otherwise); Protestant, Catholic, and Jewish are dummy variables (1 = respondent has specific religion, 0 otherwise). All tests of significance are two-tailed.

* $p < .05$, ** $p < .01$.

coefficient should be viewed cautiously because one of the personal threat items is fear of receiving anthrax in the mail. In addition, personal threat increases the amount of time respondents report having spent with their children or family, leads to a postponement of air travel, and results in a decreased use of mass transportation into and around Manhattan. The personal threat of terrorism is thus real and consequential. It substantially affects the ways in which people live their daily lives. And although some of these behaviors—for example, being more cautious with the mail—may have few collective consequences, others, such as traveling less, can have a major effect on the nation's economy. These results show that the personal threat of terrorist victimization

has a significant effect on individual behavior, with broader national implications in the aggregate.

Perceived national threat also has a modest effect on personal behavior. It leads to canceled or delayed air travel plans, canceled weekend trips or vacations or a change in destination for such travel, and a decreased likelihood of driving by car into Manhattan. In other words, a perceived future terrorist attack on U.S. soil encouraged residents to change their travel plans both within and outside the local area. The link between travel and a national attack may have been heightened by national security precautions at airports and Manhattan's bridges and tunnels, suggesting that officials expected a future attack to target air travel or the auto routes into and out of Manhattan. There were few other consistent demographic predictors of behavioral changes in the equations presented in Table 7.

Discussion and Conclusions

In support of the national threat hypothesis, the residents of Queens and Long Island based their estimates of the national consequences of terrorism on concerns about a future terrorist attack in the United States, not on their personal concerns about being victimized. Thus, individuals who saw a future terrorist attack on U.S. soil as more likely were more pessimistic about the future of the economy and the stock market. This is consistent with a large amount of research that finds that personal interests and concerns are rarely translated into support for specific candidates or policies at the national level (Sears & Funk, 1991). Our findings are also consistent with studies that find a minimal effect of a fear of being drafted or the threat of nuclear war on support for militaristic policies (Sears & Funk, 1991).

Several different reasons have been put forward to explain why individuals rarely translate their personal concerns into national considerations. These include the tenuous link between national policy and one's own situation or the myriad other factors, including idiosyncratic forces, that shape an individual's position but do not influence the fortunes of others or the nation as a whole (Sears & Funk, 1991). From this perspective, personally receiving an anthrax-tainted letter has tremendously negative consequences for one's personal health but does not necessarily bode poorly for the economy as a whole.⁵

This explanation is not fully satisfying, however, when it comes to reactions to terrorism. Surely, there is a more direct link between effective homeland security and a lower risk of personal victimization by terrorism than between declining personal finances and taxation policy. If tightened security averts a terrorist attack, the chances of personal terrorist victimization decrease unambiguously. It is less clear that a tax cut will improve a given family's economic circumstances. Even

⁵ We also examined a possible interaction between personal and national threat to test the idea that the personal threat amplifies the effects of national threat. But the interaction was significant for only one of the 12 dependent variables presented in Tables 4 to 7 in analyses not shown.

Sears and Funk suggested in their 1991 review (which found relatively few political effects of self-interest) that a feared outcome provides one condition in which negative personal circumstances stimulate the translation of personal concerns into national assessments.

At the outset, we suggested that fearful and highly arousing personal concerns would influence national views in two different ways. First, we expected personal threat to result in some form of cognitive shutdown in which greater attention is paid to threatening information and less careful attention is given to processing information about terrorist-related events more generally. We suggested that this might bias estimates of the possible impact of future terrorist attacks by exaggerating the negative impact of such events on the future national economy. In relation to this expectation, there is no question that the respondents, along with residents of the nation as a whole, overestimated the threat of personal victimization. This exaggerated view of personal risk did not translate readily into a heightened concern about the national economy, however. It appears that personal threat did not bias the processing of information when it came to assessing the consequences of terrorism.

But we suggested a second way in which personal threat is likely to shape reactions to a threatening event, based on findings from studies on crime victimization. Individuals who felt personally threatened by terrorism were expected to take or support actions that decreased their exposure to terrorism. Such actions are motivated by a desire to reduce the negative emotions, such as fear, associated with threat. We find some support for this notion when it comes to personal behaviors. Consistent with evidence from research on crime victimization, individuals who perceive themselves as the likely victims of crime tend to change their behavior in ways that minimize their risk (Ferraro, 1996)—they use more caution in handling their mail, spend more time with their families, change their plans to travel by air, and use public transportation less frequently. From this perspective, it may be irrational to avoid flying, given the very small percentage of people who die in airplane accidents, but it is emotionally sensible to avoid flying if it prevents the arousal of intensely fearful emotions.

We did not have items to test this link at the national level, however. It is possible that the personal threat of terrorism motivates support for national policies designed to minimize the risk of terrorism, such as tightened homeland security policies and the curtailment of civil liberties. The only questions on national events and circumstances included in the *Newsday*–Stony Brook survey concerned the perceived economic consequences of the 9/11 terrorist attacks, and, as has been noted, these were unaffected by levels of perceived personal threat. Thus, the limitations of the existing data set prevented us from extending our research to a broader set of political and national judgments concerning, for example, the treatment of Arab immigrants or the fate of Osama bin Laden if found by U.S. troops.

Given the results of the current study, it is unclear whether personal or national threat would have the greatest impact on support for national policies designed to reduce the risk of terrorism. On the one hand, the perceived economic consequences of terrorism were largely shaped by the degree of perceived national but not personal threat, implying that respondents did not place undue emphasis on their own fears when evaluating the state of the nation. On the other hand, personal threat had a substantial effect on solutions, albeit personal solutions, to the threat of terrorism. Further research is needed to untangle whether the effects of personal threat are confined to the adoption of more cautious personal behaviors, or whether they extend to support for national policies designed to minimize the threat of terrorism (and, by extension, support for candidates who endorse such policies).

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