Culture and Extremism

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Much research in the last several decades has examined the social, political, and economic factors that predict terrorism, yet to date, there has been little attention to cultural factors and their relationship to terrorism. We present findings from the Global Terrorism Database showing how numerous cultural dimensions identified in the cultural psychology literature relate to over 80,000 terrorist attacks that occurred between 1970 and 2007. Controlling for economic and religious variables, our results suggest that fatalistic beliefs, rigid gender roles, and greater tightness are related to a greater number of terrorist attacks or fatalities. While fatalism and low gender egalitarianism were related to the overall number of terrorist incidents and fatalities, cultural tightness was related the overall lethality of events, i.e., fatalities per incident. We discuss theoretical and practical implications of our findings.

Understanding, predicting, and thwarting extreme behavior, particularly as it relates to violence, is one of the most challenging issues facing humankind. On a daily basis, we witness terrorist attacks across the globe, which have devastating human and material costs. In recent years, the analysis of country-level terrorism data has increased dramatically along with the increasing availability of worldwide terrorism event data (LaFree, 2012). While recent research has linked terrorism

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to the macro economic and political context of countries (Dugan, LaFree, & Piquero 2005; Enders & Sandler, 2006; Fahey, LaFree, Dugan, & Piquero, in press; Greenbaum, Dugan, & LaFree 2007; LaFree, Dugan, & Fahey, 2007; LaFree, Dugan, & Korte, 2009; Piazza 2008; Tikusis 2009), we know of no research to date that has examined the impact of country-level cultural differences on the prevalence and severity of terrorist attacks.

The purpose of this study is to begin filling this void by examining how cultural values and norms which have been well studied in the cross-cultural psychology literature link to terrorist activity across the globe. Our analysis fits squarely into the theme of this special issue in that we are examining the impact of a set of cultural variables that function in part to reduce individual uncertainty on the occurrence of terrorism, a particularly brutal form of extremism. While we cannot make causal claims due to the correlational nature of the research, we are able to establish that cultural variables are indeed related to the risk of terrorism in predictable ways. In the next section we define terrorism and discuss relevant theories that help to explain its occurrence. We then discuss cross-cultural research on values and norms, and set forth a number of hypotheses that link research on culture to research on terrorism. We then present results from the Global Terrorism Database (GTD), maintained by the START Consortium at the University of Maryland. Our analysis links over 80,000 terrorist attacks from the GTD that occurred between 1970 and 2007 to country-level measures of culture. We conclude with theoretical and practical implications of the results for the study of violent extremism.

Terrorism as Extremism

Terrorism has been defined as "acts by nonstate actors involving the threatened or actual use of illegal force or violence to attain a political, economic, religious, or social goal through fear, coercion, or intimidation" (LaFree & Dugan, 2007, p. 183). Terrorism is radical or extreme in that it departs from the prohibition of unprovoked violence, central to most cultures and religions across history, especially of violence against unarmed civilians, uninvolved in hostile acts of any kind.

Not surprisingly, theory and research over the last several decades has focused on identifying predictors of such extreme behavior. In the early history of terrorism research in the 1960s, the radical acts of terrorists were theorized to have its basis in their extreme or psychopathic personalities. Psychiatrists and others hypothesized that terrorists suffer from unique psychopathologies and/or that they have a unique personality profile that predisposes them to violence. Extant research, however, has illustrated that such notions are not supported and that terrorists are no more likely to have psychopathic tendencies than other individuals (Horgan, 2008; Kruglanski & Fishman, 2009; Silke, 1998). Put simply, researchers agree that most terrorists fall well within the normal range of socio-emotional functioning.

More recent research has also confirmed connections between terrorism and macro political factors, including legitimacy, democratization, and failed or fragile states (for a review, see LaFree & Ackerman, 2009). For example, Ross and Gurr (1989) identified the electoral success of the Parti Quebecois, a legitimate, non-violent political party, as one of the leading reasons that the Front de Liberation du Quebec experienced a decline in political strength. In a quantitative analysis of worldwide terrorism attacks, LaFree and Dugan (2007) found that, controlling for a wide variety of rival explanations, a common democracy measure had a strong-curvilinear relationship to terrorist attacks and fatalities. Piazza's (2007) multivariate analysis also showed that state instability is the most consistent predictor of country-level terrorist attacks. And LaFree et al. (2007) found strong support for the conclusion that by the 1990s worldwide terrorist attacks were concentrated in failed or weak states. Government policies and counter measures have also been shown to affect terrorist activity, sometimes reducing it through deterrence or target hardening, but at other times increasing it through backlash effects (for a review, see Lum, Kennedy, & Sherley, 2006).

In addition to macro-level social and political variables, research has increasingly illustrated that group processes are important to the prediction of terrorism. For example, research on social networks has highlighted the importance of network ties of kinship and friendship in the recruitment and sustainment of terrorist groups (Asal & Rethemeyer, 2008; Sageman, 2004, 2008). Beyond structural properties of groups is the idea that the group's culture—its norms, values, and beliefs—will play a critical role in terrorist activity. Atran and colleagues' (Atran, Axelrod, & Davis, 2007; Ginges & Atran, 2009) work was some of the first to highlight the importance of the group's culture, namely its sacred values, as an important lever for motivating terrorist acts. Likewise, work by Kruglanski, Chen, Dechesne, Fishman, and Orehek (2009) suggested that the terrorist group's ideology, or its "shared reality," can play a critical role in justifying violence against out-groups as laudable, heroic, and one that lends group members "significance." Although research suggests that values and norms of groups might increase the risk of terrorist activity, we know of no research to date that has examined the impact of values and norms of the *macro cultural context* within which terrorist groups operate as a predictor of the prevalence and severity of terrorist attacks. Put differently, we asked the question: are there national cultural differences in the degree to which terrorism thrives or is thwarted?

Culture

The definition of culture has long been a source of debate among anthropologists and cross-cultural psychologists (see Jahoda, 1984; Rohner 1984; Segall, 1984); a classic 1952 publication identified over 160 definitions of culture (Kroeber & Kluckhohn, 1952). Although there is variation in the definitions of

culture, many point to the shared nature of culture, its ability to impart adaptive (or once adaptive) knowledge, and its transmission across time and generation (Triandis, Kurowski, & Gelfand, 1994).

While there are many dimensions on which cultures vary, we discuss a number of cultural dimensions that have potential implications for terrorism. First, *cultural fatalism* has relevance for the risk that individuals may ascribe to extreme actions in general and terrorism in particular. Second, the extent to which cultures are *tight,* or have strong norms and severe punishment for deviation of social norms, has implications for the necessity of extreme means to accomplish one's goals (e.g., address one's grievances) and the potential for extreme behavior in the context of violence. Third, *collectivism* at the national level has implications for increased group-centrism, and in contexts where there are group grievances, higher rates of self-sacrifice for the goals of the group. Fourth, high male dominance and *low gender egalitarianism* has implications for norms for aggressive behavior that creates a context conducive to terrorism. Finally, the extent to which cultures have *high power distance*, or a large differentiation between those in high versus low power positions (Hofstede, 1980; House, Hanges, Javidan, Dorfman, & Gupta, 2004), may also provide a fertile ground for terrorism in contexts where low status groups need to challenge their unequal status through extreme means.

Interestingly, one characteristic that all of these cultural dimensions have in common is that they are all related to lower complexity in thinking—a "closing of the mind"—which has been associated with extremism (see Hogg, Kruglanski, & van den Bos, 2013). Thus, by subscribing to fatalism, individuals put all of their faith in a higher authority and are absolved from taking personal responsibility for their actions; tightness is related to low tolerance for deviance and justification for strong punishments; collectivism produces a shared reality that dictates that individuals should subordinate their individual goals for group goals; strong gender roles provide specific expectations for acceptable behavior and not others; and finally, high power distance requires submitting to authorities and not challenging the status quo. We discuss predictions for each dimension in turn.

Hypotheses

Fatalism

Bernstein (1992) defined fatalism as a belief that one's destiny and life events are predetermined and that whatever happened was meant to have happened. Although people in cultures characterized by high levels of fatalism may point to a variety of external sources that exert ultimate control over their lives (i.e., god, fate, or chance), they are united by a common recognition of the role of these external factors in their lives (Caplan & Schooler, 2007). In contrast, people in less fatalistic cultures, including the United States, are more likely to endorse the belief that

they maintain personal control over their outcomes and lives (see Kay & Eibach, 2013). Fatalism has been linked to harsh economic environments and extreme government regulation, which decrease individuals' perception of personal control (Moaddel & Karabenick, 2008). At the country level, fatalistic beliefs have been shown to be negatively correlated with gross domestic product (GDP) per capita, life expectancy at birth, voter turnout, environmental sustainability, and human development, and positively correlated with heart disease and suicide rates (Leung & Bond, 2004).

We hypothesized that nations that are high on fatalism have the potential for higher levels of terrorism. Most importantly, fatalism, the perceptions that one's destiny and life outcomes are predetermined, can decrease a sense of personal responsibility and increase risk-taking in a number of life domains, including those involving health and safety. Put simply, fatalism may enable risky behaviors known to have potentially adverse consequences because they can be "justified" as preordained. Compared to individuals low on fatalism, for example, those high on fatalism are less likely to engage in health and safety behaviors (Colón, 1992; Hardeman, Pierro, & Mannetti, 1997; McClure, Allen, & Walkey, 2001; Powe & Finnie, 2003), and have more deaths due to risky behaviors (e.g., traffic accidents) (Gelfand, Fulmer, Kruglanski, Abdel-Latif, Khashan et al. 2010). Extending this literature, we predicted that fatalism would lead to a reduction in individuals' perceptions of personal control, a decreased sense of personal responsibility (Aycan, Kanungo, Mendonca, Yu, Deller et al., 2000), and the use of external sources (e.g., god) as a justification for one's actions. That is, in contexts where grievances are not being addressed, extreme acts such as terrorism would occur more frequently in nations high on fatalism as compared to cultures low on fatalism.

Tightness-Looseness

Tightness-looseness reflects the degree to which societies have clear and pervasive social norms and are intolerant of deviations from norms (Gelfand, Nishii, & Raver, 2006; Pelto, 1968; Triandis, 1989). Tight societies, like those of Japan, Singapore, and Pakistan provide strong norms and monitoring systems to detect deviations, which are severely punished. As such, these societies value order, formality, discipline, and conformity (Gelfand et al., 2006, 2011; Pelto, 1968). In contrast, norms in loose societies like those of Brazil, Israel, or the United States are more ambiguous, deviations from norms are tolerated, and punishments for deviations are less severe. Gelfand et al. (2011) found that tightness is related to such factors as high population density, low percentage of arable land and food supply, high degrees of environmental threats (e.g., natural disasters, disease), high police per capita and strength of criminal justice systems (e.g., the death penalty), high degrees of autocracy, and low openness of the media.

We hypothesized that tight nations will have more vulnerability for terrorism than loose nations for a number of reasons. First, tightness is associated with higher ethnocentrism and punishment of individuals who are "different." For example, Gelfand et al. (2011) found that individuals in tight nations find socially deviant behavior much less justifiable (e.g., homosexuality, divorce, prostitution), believe that their way of life needs to be protected against foreign influence, prefer not to have immigrants as neighbors, and are more likely to believe that their culture is superior to others. This suggests that "fringe" groups will perceive more discrimination and have greater humiliation and significance loss (Kruglanski et al., 2009) in tight than in loose nations where individuals have more tolerance of differences. Second, the high degree of monitoring and constraint that characterizes tight societies would suggest that the *means* through which individuals or groups can rectify their grievances are highly circumscribed and limited, rendering more 'radical" means necessary to achieve one's goals. Indeed, Gelfand et al. (2011) found that the percentage of people participating in legitimate collective actions (e.g., signing petitions, attending demonstrations) is low in tight nations and more people report that they would never engage in such actions in comparison to loose nations. Moreover, they found that when asked how societal change generally occurs, people in tight nations were much more likely to believe that it occurs *radically*, whereas people in loose nations were more likely to believe it occurs *incrementally*. Accordingly, we predicted that tightness would be associated with greater terrorism than looseness.

Individualism-Collectivism

Extensive research has shown that individualism-collectivism is a major dimension of cultural variation. Research has shown that in collectivistic cultures, the self is construed as interdependent with others (Markus & Kitayama, 1991), people are socialized to sacrifice their own goals and maintain cooperation within the group (Triandis, 1989), and there are strong ingroup-outgroup distinctions (Triandis, McCusker, & Hui, 1990). By contrast, in individualistic cultures, the self is construed as independent of others, people are socialized to pursue their own goals over the goals of others, debate and confrontation are acceptable in ingroups, and ingroup-outgroup distinctions are much less pronounced (Markus & Kitayama, 1991; Triandis, 1989). As compared to individualistic cultures, collectivistic cultures have lower national wealth (Gelfand, Bhawuk, Nishii, & Bechtold, 2004; Hofstede, 1980), lower geographic and relational mobility (Oishi, 2010; Schug, Yuki, & Maddux, 2010), and more extended family structures (Georgas et al., 2001). Collectivism is generally found in agricultural societies wherein conformity and obedience are crucial for survival, whereas more individualism is found among hunters and in complex (e.g., information) societies (Barry, Child,

& Bacon, 1959), and in societies with an open frontier (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006) wherein self-reliance is crucial for survival.

We theorized that compared to more individualist nations, nations higher on collectivism will experience more terrorism. As noted, individuals in collectivistic cultures are socialized to give up their personal goals, conform to the group, and compete with outgroups (Triandis, 1995). Identification with groups also provides a way o protect against uncertainty (see Hogg & Adelman, 2013). In contexts where there is a grievance (injustice) perpetuated toward one's group (religious, national, ethnic or otherwise), a culprit portrayed as responsible for the injustice, and a means (e.g., terrorism) to address these grievances against the outgroup (Kruglanski et al., 2012), this socialization naturally makes it easier for individuals in collectivistic nations to join the fight, and commit to and sacrifice themselves for the good of the group. Indeed, previous experimental research has shown that individuals who are "fused" with their groups are more willing to sacrifice themselves for the group (Swann, Gomez, Dovidio, Hart, & Jetten, 2010). Field surveys across a number of countries in the Middle East, Indonesia, and Pakistan have also linked collectivism with support for violence when it is seen as justified (Kruglanski, Gelfand, & Gunaratna, in press). Accordingly, we predicted that compared to individualism, collectivism will be associated with higher levels of terrorism.

Gender Egalitarianism

Nations around the globe vary widely on gender egalitarianism, or "the degree to which a collective minimizes gender inequality" (House et al., 2004, p. 359). This dimension fundamentally concerns the way societies construct gender roles for men and women with at least two important implications (Hofstede, 1980; House et al., 2004). First, societies with high gender egalitarianism minimize gender differences and proscribe and prescribe similar roles for men and women; they have more women in positions of authority, less occupational sex segregation, similar levels of educational attainment for men and women, and allow women decision-making roles in everyday affairs (House et al., 2004). By contrast, societies with low gender egalitarianism proscribe very different roles for men and women; they have fewer women in positions of power, more occupational sex segregation, much lower educational attainment for women, and women have much less of a role in decision-making role in everyday affairs (House et al., 2004). Another important distinction therein relates to the extent to which societies emphasize *masculine* values, including toughness, assertiveness, success, and competition, versus *feminine* values of nurturance, tenderness, and cooperation, and solidarity (Hofstede, 1980). In cultures that are low on gender egalitarianism, men are expected to be tough and assertive, whereas in cultures high on gender egalitarianism, men and women are expected to be cooperative and

nurturing (Hofstede, 1980; House et al., 2004). Gender egalitarianism practices at the national level have been found to be related to longevity and greater human development (House et al., 2004).

We theorized that nations that are low on gender egalitarianism will have a greater risk for terrorism than those that are high on gender egalitarianism. Research from the criminology literature lends some support for this prediction. In explaining different rates of crime in the United States, Miller (1958) argued that the cultures that emphasize a set of "focal concerns" that value behavior that encourages crime, including an emphasis on *toughness* (e.g., masculinity, strength); *smartness* (skill at outsmarting the other guy); and *autonomy* (resentment of authority and rules) would have more crime. Similarly, in their subculture of violence theory, Wolfgang and Ferracuti (1967) argued that elevated crime rates occur in communities wherein males' "quick resort to physical combat as a measure of daring, courage or defense of status appears to be a cultural expression" and when individuals who share this culture come into contact with others who share such norms, "physical assaults, altercations, and violent domestic quarrels that result in homicide are likely to be common (pp. 188–189)." Masculine values of toughness have also been used as an explanation for why the U.S. south has higher rates of violent crime than the North (Gastil, 1971; Hackney, 1969; Nisbett & Cohen, 1996).

More recently, Anderson's (1999) ethnographic research on violence in disadvantaged neighborhoods and the oppositional subculture known as "the code of the street" has provided an influential account of how cultural values may relate directly to differential crime rates. According to Anderson, the code of the street is an informal system that governs the use of violence. The code of the street emphasizes that one must maintain the respect of others through a violent and tough identity, and a willingness to exact retribution in the event of disrespect, or risk being "rolled on" or physically assaulted (p. 73). As Anderson noted, "an important part of the code is not to allow others to chump you, to let them know that you are 'about serious business' and not to be trifled with" (p. 130).

Cross-national studies of violent crime also support the conclusion that contexts that allow normative systems that condone aggression and violence as a response to conflict have higher crime rates (Fiala & LaFree, 1988; Gelles, 1987; Straus, 1980). For example, in an examination of homicide rates in 18 industrialized nations from 1950 to 1980, Gartner (1990) measured officially approved violence by examining the existence of the death penalty, the number of international and civil wars in which the nation participated, and total battle deaths incurred during these wars. Controlling for a variety of other variables, she found that countries with higher levels of approved violence had higher rates of homicide. While these applications have generally been aimed at explaining crime, they should also be relevant for terrorist attacks, a type of crime that frequently results in homicide (Clarke & Newman, 2006; LaFree & Dugan, 2004). Accordingly,

we predicted that to the extent that societies are low on gender egalitarianism and emphasize values of assertiveness and masculinity, they will have higher terrorism rates than cultures that are high on gender egalitarianism and emphasize nurturance and femininity.

Power Distance

Power distance refers to the degree to which members of a society expect and accept inequalities (Hofstede, 1980). In high power distance cultures, such as Morocco and Nigeria, people accept large power differentials between levels of the social hierarchy. On the other hand, people in lower power distance cultures, including Denmark and the Netherlands, are less accepting of such power differentials. For example, people in high power distance cultures do not expect to have voice or to challenge authorities, whereas people in low power distance cultures expect to have voice and to challenge authorities (Hofstede, 1980; House et al., 2004). High power distance cultures often have traditions of centralized power in the hands of a monarchy or oligarchy, a small middle class, and agrarianism, while low power distance cultures are characterized by histories of representative governments, a large middle class, and more modern industry (Hofstede, 1980).

We hypothesized that terrorist activity may be higher in high versus low power distance cultures for a number of reasons. High power distance cultures have many class distinctions, have limited mobility, and resources tend to be available to only the few (i.e., high ranking individuals) as compared to low power distance cultures wherein there are fewer class distinctions, more upward mobility, and resources accessible to many (House et al., 2004). Accordingly, there may be more grievances that are found in high versus low power distance cultures. Moreover, as noted, people in high power distance cultures see subordinates and superiors as inherently separate and unequal groups, leading to greater social distance between these groups. In this respect, people in high power positions are largely unquestionable authorities who do not receive "voice" from those in lower power positions (Brockner et al., 2001; Hofstede, 1980). As such, grievances from low power parties are likely to be highly circumscribed with few available means through which they can be addressed, particularly given the highly centralized and stratified contexts that are typical in high power distance cultures. By contrast, voice and challenges to authority are much more normative in low power distance societies, providing more means to address grievances. Accordingly, we anticipated that there would be more terrorism in high versus low power distance cultures.

In sum, extant research on culture in psychology and criminology suggests some potential links between a number of cultural dimensions—fatalism, tightness, collectivism, gender egalitarianism, and power distance—and rates of terrorism. We provide the first test, to our knowledge, of the relationship between

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macro cultural differences and terrorism by linking established measures of culture (Aycan et al., 2000; Gelfand et al, 2011; House et al., 2004) to a number of terrorism indices, including number of incidents, number of fatalities, and the rate of fatalities per incident using the most comprehensive event database on terrorism: The GTD.

Method

The Global Terrorism Database

Because terrorism is a type of behavior that is difficult to study using police reports or victim or offender surveys, event databases have come to occupy an important role. At present, the longest running of these event databases is the GTD maintained by the START Consortium at the University of Maryland. Because the GTD is described in detail elsewhere (LaFree & Dugan 2007, 2009), we offer only a brief explanation here. The GTD is collected by trained researchers who identify and record events from the print and electronic media. Early years of the GTD relied mostly on reports picked up by wire services (including Reuters and the Foreign Broadcast Information Service), U.S. and foreign government reports, and U.S. and foreign newspapers (including the *New York Times*, the *British Financial Times,* the *Christian Science Monitor,* the *Washington Post,* the *Washington Times*, and the *Wall Street Journal*). Over time, the GTD has been tied more directly to unclassified information available on the Internet. A major advantage of the GTD compared to other open source databases is that from its inception it has tracked domestic as well as international terrorist attacks.

Based on coding rules originally developed in the early 1970s, the analysts responsible for collecting the GTD have excluded criminal acts that have no obvious political or ideological motivation and also acts arising from open combat between opposing armed forces, both regular and irregular. Data collectors have also excluded actions taken by governments in the legitimate exercise of their authority, even when such actions are denounced by domestic or foreign critics as acts of ''state terrorism.'' Because most terrorists seek publicity, event databases that rely on print and electronic media are likely more useful for studying terrorism than most other types of crime. Nevertheless, event data have important weaknesses, most notably media inaccuracies, conflicting information or false, multiple or no claims of responsibility, and government censorship and disinformation.

Terrorism is defined in the GTD as "the threatened or actual use of illegal force and violence by non-state actors to attain a political, economic, religious or social goal through fear, coercion or intimidation" (LaFree & Dugan, 2007, p. 184). The GTD is collected through the open-source media, including newspaper articles, news wires, foreign language aggregators, like the Foreign Broadcast Information Service, and unclassified government reports. Potential incidents are

flagged for examination, and they are coded as to whether they meet the inclusion criteria.

In particular, to be included in the dataset as a terrorist incident, each incident must meet all three of these criteria: (1) "The incident must be intentional—the result of a conscious calculation on the part of a perpetrator" [this is assumed *prima facie* to be correct in cases in which it is difficult to assess the intentionality of the incident (LaFree & Dugan, 2007, p. 200, note 23)]; (2) "The incident must entail some level of violence (including violence against property) or the threat of violence"; and (3) "[T]here must be sub-national perpetrators. That is, at the time of the incident, the perpetrator group must not be exercising sovereignty (unequivocal, stable control of demarcated territory; functioning government structures)" (LaFree & Dugan, 2007, p. 188).

Thereafter, all incidents are evaluated for whether they meet the following criteria: (1) "The act must be aimed at attaining a political, economic, religious or social goal. In terms of economic goals, the exclusive pursuit of profit does not satisfy this criterion"; (2) "There must be evidence of an intention to coerce, intimidate or convey some other message to a larger audience (or audiences) than the immediate victims"; and (3) "[T]he action must be outside of the context of legitimate warfare activities; that is, the act must be outside the parameters set by international humanitarian law (particularly the admonition against deliberately targeting civilians or non-combatants)" (LaFree & Dugan, 2009, p., 188). In order to be included in the database, the incident must meet 2 out of 3 of the above criteria.

We use terrorist incidents which occurred from 1970 to 2007. We measure terrorism as *total terrorist incidents*, the *total number of fatal incidents*, and the *average number of fatalities per incident*. This allows us to capture a range of terrorism-related dependent variables. Data from 1993 were lost in an office move and we have never been able to successfully restore them. We, therefore, treat 1993 as missing.

Dimensions of Cultural Variation

We measured cultural variables using established databases. Individualism-collectivism, gender egalitarianism, and power distance were measured from House et al.'s (2004) established measures of cultural practices across 62 nations. Sample items from the *Individualism-Collectivism* practices scale included: "In this society, children take pride in the individual accomplishments of their parents" (reverse scored), "In this society, parents take pride in the individual accomplishments of their children" (reverse scored), and the measure also included items regarding whether parents live and home with their children and whether children live at home with their parents until they get married (Gelfand et al., 2004). Nations high on collectivism practices included the Philippines, Georgia,

Iran, India, and Turkey, while nations low on family collectivism practices included Denmark, Sweden, New Zealand, the Netherlands, and Switzerland.

Sample items of *gender egalitarianism* practices items included "In this society, boys are encouraged more than girls to attain a higher education" and "In this society who is more likely to serve in a position of high office" [from 1 (males) to 7 (females)]. Nations that scored the highest on gender egalitarianism practices included Hungary, Russia, Poland, Slovenia, and Denmark, while nations that scored the lowest on gender egalitarianism included South Korea, Kuwait, Egypt, Morocco, and Zambia.

Sample items from *Power Distance* practices included "In this society, followers are expected to . . . .question their leaders when in disagreement (7) or obey their leader without question (1)" (reverse scored) and "In this society power is . . . .shared throughout the society (7) or concentrated at the top (1)" (reverse scored). Nations that scored the highest on power distance practices included Morocco, Nigeria, El Salvador, Zimbabwe, and Argentina, and nations that scored lowest on power distance included Denmark, the Netherlands, Bolivia, Albania, and Israel. We also examined older scores from Hofstede (1980) values on power distance and individualism, as well as masculinity and uncertainty avoidance and did not find any relationships of these variables with terrorism. Results are available from the first author.

Tightness-looseness was measured using Gelfand et al.'s (2011) established scale across 33 nations. Sample items include: "There are many norms that people are supposed to abide by in this country," "In this country there are very clear expectations for how people should act in most situations," "In this country, if someone acts in an inappropriate way, others will strongly disapprove," and "People in this country almost always comply with social norms." Gelfand et al. (2011) found that there was wide cultural variation across the globe on tightness-looseness, with Pakistan, India, Japan, Korea, and Singapore scoring very high on tightness and the Ukraine, Israel, the Netherlands, and New Zealand scoring very low on tightness.

Fatalism was measured with Aycan et al.'s (2000) fatalism measure. Sample items include "When bad things are going to happen they just are going to happen no matter what you do to stop them," "When one is born, the success or failure one is going to have is already in one's destiny, so one might as well accept it," and "Planning only makes a person unhappy since your plans hardly every work out anyway." Data on Aycan et al.'s scale were collected across the same 33 nations as tightness (Gelfand et al., 2011). There was wide cross-cultural variation on the measure, with Pakistan, India, and Turkey being the highest on fatalism and Norway, the Netherlands, and the United States being the lowest on fatalism.

We caution that because the cultural measures we use here are cross-sectional and were measured at different times (e.g., in 1990s for GLOBE, early 2000s for tightness and fatalism; Gelfand et al., 2011), we cannot infer causality. We

are simply examining whether there are certain cultural variables that may be correlated with the amount of terrorism, controlling for some common predictors of terrorism.

Control Variables

We measured the economic development of the nation using the GDP per capita of that nation in 2,000 U.S. dollars. These data come from the World Bank's *World Development Indicators*. We include GDP in this analysis in order to control for the economic differences between nations that may lead to differences in outcome on terrorism. We also measured religiosity as a control variable given it has been linked to terrorism (Juergensmeyer, 2003; Stern, 2003). Religiosity was measured by responses to the item regarding the importance of god in life as assessed by the World Value Survey (1995).

Results

Descriptive statistics are presented in Table 1 for all of the nations that were available for the variables being investigated. The total number of overlapping countries for all databases including the control variables, culture variables, and terrorism variables was 21. Included were a wide range of countries, including Australia, Austria, Brazil, France, Greece, Hong Kong, Hungary, India, Israel, Italy, Japan, Malaysia, Mexico, the Netherlands, New Zealand, Portugal, Singapore, Spain, Turkey, the United States, and Venezuela. From the descriptive statistics, we can see that there is a wide range of experience with terrorism incidents; the minimum number of incidents experienced by any country from 1970 to 2007 was 7 while the maximum was 4,310, and the mean was 872.33. Further, there is a great deal of variability in the number of fatalities, with a range of 1 to 13,508 and a mean of 1,271.57. Finally, the mean for the ratio of fatalities per incident was .88, and the range was .08 to 3.35, indicating that many incidents are low-fatality events. The economic and religious context of the nations also varied widely. For GDP, there was a minimum of 299.58 to a maximum of 28,363.13, with a mean of 11,597.76. For the measure of religiosity, there was a minimum of 4.61 and a maximum of 9.61, with a mean of 7.03. All of the cultural variables (fatalism, tightness, individualism-collectivism, gender egalitarianism, and power distance) also had significant variation across the countries (see Table 1).

The correlations among the variables suggest that numerous cultural variables were associated with different indices of terrorism. Number of terrorist incidents were negatively related to gender egalitarianism ($r = -.66, p < .01$) and positively related to fatalism ($r = .48, r < .05$). Number of fatalities were also negatively related to gender egalitarianism ($r = -.53, p < .05$) and positively related to fatalism ($r = .50, p < .05$). Finally, the number of fatalities per incident was

Table 1. Descriptive Statistics

	Means	SD	Incidents	Fatalities	Fatal/ Incident	Religiosity	GDP	Tightness	Fatalism	Collectivism	Power distance	Gender egalitarianism
Incidents	872.33	1,194.52	1									
Fatalities	1,271.57	3,052.65	0.82**	1								
Fatal/Incident	0.88	0.99	0.44*	0.65*	1							
Religiosity	7.03	1.64	0.28	0.33	0.57*	1						
GDP	11,597.75	87,675.04	−0.23	−0.32	−0.37	−0.54*	1					
Tightness	6.25	2.73	0.28	0.41	0.55*	0.23	−0.17	1				
Fatalism	−0.43	0.43	0.48*	0.50*	0.37	0.41	−0.64*	0.44*	1			
Collectivism	5.02	0.68	0.34	0.34	0.39	0.58*	−0.66**	0.53*	0.84**	1		
Power distance	5.15	0.36	0.41	0.26	0.14	0.40	−0.56*	0.27	0.71**	0.73**	1	
Gender egalitarianism	3.38	0.29	−0.66**	−0.53*	−0.28	−0.22	−0.09	−0.23	−0.15	−0.03	−0.02	1

Note. $N = 21$; * $p < .05$; ** $p < .01$.

Table 2. Predictors of Number of Terrorist Incidents and Fatalities

	Coef	SE	z-stat	p-val	Lower CI	Upper CI
Number of incidents						
Religiosity	0.28	0.22	1.28	.200	− 0.15	0.71
GDP	0.00	0.00	1.53	.126	0.00	0.00
Tightness	− 0.19	0.11	− 1.80	.072	− 0.40	0.02
Fatalism	3.29	1.13	2.91	.004**	1.08	5.51
Collectivism	− 1.45	1.05	− 1.38	.167	− 3.51	0.61
Power distance	1.77	0.96	1.84	.066	− 0.12	3.66
Gender egalitarianism	− 2.69	0.82	− 3.30	.001***	− 4.30	− 1.10
Number fatalities						
Religiosity	0.93	0.32	2.95	.003**	0.31	1.55
GDP	0.00	0.00	1.27	.203	0.00	0.00
Tightness	− 0.02	0.14	− 0.14	.892	− 0.29	0.25
Fatalism	3.76	1.45	2.59	.01**	0.91	6.60
Collectivism	− 1.73	1.61	− 1.08	.282	− 4.89	1.42
Power distance	1.13	1.36	0.83	.406	− 1.54	3.80
Gender egalitarianism	− 2.69	1.05	− 2.55	.011*	− 4.75	− 0.62

* $p < .05$; ** $p < .01$; *** $p < .001$.

positively related to cultural tightness ($r = .55$, $p < .05$). As these are only bivariate relationships, we next report analyses for each of our dependent variables including all of the culture variables as well as control variables.

Model 1: Number of Incidents

In this model, we predict the total count of incidents using culture, religiosity and GDP as predictors. In order to analyze the count of total terrorist incidents (as well as the count of fatalities for each country, discussed below) we utilized a negative binomial regression model. This model more appropriately handles overdispersed data, such as is usual with count data (Long, 1997). Overdispersion is a condition of count data in which the mean and the variance of the data are not equal. In addition, the NBRM provides consistent and efficient estimators and appropriately handles the standard errors in overdispersed data. The model for number of terrorist incidents was significant ($\chi^2(7) = 23.20$ $p < .01$). As can be seen in Table 2, the results show that nations high on fatalism had higher levels of terrorist incidents than nations lower on fatalism (Coeff $= 3.29$, $p < .01$), and nations low on gender egalitarianism have a greater number of terrorist incidents than those high on gender egalitarianism (Coeff $= -2.69$, $p < .001$), thus showing that cultural variables are indeed related to number of terrorist incidents from 1970 to 2007.

Table 3. Regression of Fatalities per Incident

Fatalities per incident	Unstandardized Coeff	SE	Standardized beta	t	Sig
Religiosity	.32	0.16	0.53	2.05	.06
GDP	0.00	0.00	− 0.23	− 0.85	.41
Tightness	.20	0.08	0.55	2.41	.03*
Fatalism	.44	0.90	0.19	0.49	.64
Collectivism	− .53	0.69	− 0.36	− 0.76	.46
Power distance	− .64	0.75	− 0.23	− 0.85	.41
Gender egalitarianism	− .10	0.74	− 0.03	− 0.13	.90

* $p < .05$.

Model 2: Fatalities Due to Terrorist Events

In this model, we examined the number of fatalities using culture, religiosity, and economic development as predictors. The overall model was significant ($\chi 2(7) = 26.72, p < .001$). As seen in Table 2, the results show again that nations higher on fatalism had statistically significantly greater number of fatalities than those nations lower on fatalism (Coeff $= 3.76, p < .01$). Societies with less gender egalitarianism also had a statistically significantly larger number of fatalities than nations with high gender egalitarianism (Coeff $= –2.69, p < .01$).

Model 3: Fatalities per Incident

In this model, we used multiple regression to examine the number of fatalities per incident with culture, religiosity, and economic development as predictors of fatalities per incident. The overall model was marginally significant $(7, 20) = 2.71, p = .058$. As can be seen in Table 3, the results showed that nations that are higher on cultural tightness have higher fatalities per incident than nations lower on tightness (Coeff $= .55, t = 2.41, p < .05$).

Discussion

Terrorism is a global hazard that threatens individuals, groups, and societies. On a daily basis, throughout the world, we have witnessed extreme, violent acts that threaten humans' peaceful existence. Much research in the last several decades has examined the factors that predict terrorism, focusing much attention on political, social, and psychological factors. To date, however, there has been very little attention to cultural factors and their relationship to terrorism.

In this research, we contribute to this literature by examining how the cultural context relates to the degree of terrorism that societies face. We developed theory

and hypotheses linking different cultural variables that have received widespread attention in the literature to terrorism rates. The results of our analysis of the GTD, one of the most comprehensive databases on terrorism, supported a number of hypotheses. Across the different indicators of terrorism, the results showed evidence that cultural factors do matter for understanding cross-national rates in terrorism. Societies that have the belief that one's destiny and life events are predetermined (*fatalism*), have very strong norms and severe punishments for deviation from norms (*cultural tightness*), and are masculine and have very distinct gender roles (*low gender egalitarianism*) have higher terrorism rates than those that are low on these dimensions. These cultural factors predicted terrorism even when accounting for economic and religious factors. Moreover, in many of our models, these variables captured independent variance, suggesting that they each have some unique relationship with terrorism activity.

More generally, our results suggest that cultural values and norms that promote rigid thinking—fatalistic beliefs, strict gender roles, and greater tightness—are related to a greater number of terrorist attacks or fatalities. Future research should investigate the mechanisms underlying these effects. From a dynamical systems approach, it is possible that cultural systems that have a strong emphasis on certainty create a strong press for coherence which results in a *collapse of complexity*—or more simplistic Black–White thinking (Nowak & Vallacher, 1998). Indeed, the collapse of complexity has been found to be associated with conflict escalation and destructive conflict dynamics (Chung, Coleman, & Gelfand, 2011) which could provide a fertile basis for extreme behavior such as terrorism.

Interestingly, the results showed that different cultural variables were related to different measures of terrorism. While gender egalitarianism and fatalism were related to the overall number of incidents and fatalities, tightness was related to the number of fatalities per incident, a variable that can be seen as the most "extreme" or lethal of terrorism rates. It is possible that low gender egalitarianism affords a culture that permits violent behavior in general due to the enhanced masculinity and toughness, which can spark violence even when minor provocations are present (or in the case of terrorism, grievances), resulting in a greater number of incidents and fatalities. This is consistent with the criminology literature that has linked masculinity norms with homicides (Anderson, 1999; Gastil, 1971; Hackney, 1969, Nisbett & Cohen, 1996; Wolfgang & Ferracuti, 1967). Likewise, cultures that are fatalistic ultimately believe that others (i.e., god, fate, chance) control their outcomes, leaving little personal responsibility. Research has indeed shown that fatalism is associated with more deaths in the domain of safety and health (Gelfand et al., 2010; Leung & Bond, 2004). In the domain of terrorism, to the extent that there is a grievance and an ideology that justifies the grievance, fatalism may create a context that encourages more willingness to engage in violent behaviors with the justification that one's life is in others' hands, as compared to cultures low on fatalism.

By contrast, the enhanced number of fatalities per incident found in tight societies might be due to different processes that are conducive to higher impact terrorist episodes (i.e., more fatalities per incident), and more generally, the use of *extreme means* in the service of grievances. Tight nations have high degrees of monitoring and suppression, and much stronger punishments to norm violation in comparison with loose nations. Accordingly, it is possible that the means needed to air one's grievances need to be more extreme or radical. Indeed, while there are fewer legitimate forms of collective action in tight societies (e.g., signing petitions, attending demonstrations; Gelfand et al, 2011), tight cultures believe in more "radical" change than incremental change, which likely develops given the constraint pervasive in the cultural context. To be sure, these explanations are merely speculative, yet they suggest that different mechanisms may explain the relationship between different cultural dimensions and different indices of terrorism in nations.

It is interesting to point out that one cultural dimension—collectivism—had very weak direct relations with the terrorism indices. This suggests that collectivism in and of itself may not be a risk factor for terrorism at the national level. It is possible that collectivism serves as a moderator variable; that is, it is only in contexts where there is an ideology that supports the means and goals of terrorism that collectivistic values—which foster support for group over individual goals—facilitate terrorism (Kruglanski et al., 2009).

While this research begins to fill an important gap which examines cultural factors in relation to terrorism, it is clearly not without limitations. First and foremost, given the nature of the data, we do not have the ability to make any causal references regarding culture and terrorism. The cultural data available for this analysis were collected at different times during the period that we had available terrorism incident data, and thus it is impossible to determine whether cultural factors cause terrorism or vice-versa. For example, while it is theoretically possible that tightness provides a fertile breeding ground for the use of extreme means in societies, it is also possible that terrorism within nations is a threat which makes societies develop stronger norms and punishments. Second, we tested the relationship between culture and terrorism with only one set of possible operationalizations of terrorism. The GTD only represents one very broad definition of terrorism which may include incidents which other terrorism event databases may not have included. In addition, the GTD data rely primarily on open source media reports for an incident to be included in the data. This means that incidents will be excluded if reports of the incident never make it into the open source media. Accordingly, future research should examine the relationship of cultural factors to terrorism using other databases to replicate our effects. Finally, we have examined a very limited sample of countries in our test of the relationship between culture and terrorism. We were only able to analyze 21 countries that overlapped in the

databases being utilized and thus, caution should be taken in generalizing the results to all countries.

Despite these limitations, the results have practical implications for public policy on terrorism and political violence. Most generally, this work supports earlier analysis (e.g., LaFree, Morris, & Dugan, 2009; LaFree, Yang, & Crenshaw, 2009) suggesting that worldwide terrorism is not evenly distributed across countries, with most countries experiencing few or no attacks and a handful experiencing most of the attacks. These results, while cross-sectional, suggest that culture may be a part of the explanation for this uneven distribution. These results also have implications for how policy makers might best respond to terrorism in different countries. For example, to the extent that these results can be replicated and extended to a broader range of countries, it may well be that they could assist policy makers in terms of determining whether a particular intervention is likely to result in a deterrent effect, and thereby reduce the future incidence of terrorism, or a backlash effect, and thereby increase attacks in the future. In general, countries exhibiting high levels of fatalism, cultural tightness and low gender egalitarianism may require special consideration when policy makers are weighing options for reducing terrorism.

References

Anderson, E. (1999). Code of the street: Decency, violence, and the moral life of the inner city. New York: Norton and Company.

Asal, V., & Rethemeyer, R. K. (2008). The nature of the beast: Organizational structures and the lethality of terrorist attacks. *Journal of Politics*, *70*, 437–449. doi: 10.1017/S0022381608080419

Atran, S., Axelrod, R., & Davis, R. (2007). Sacred barriers to conflict resolution. *Science*, *317*, 1039–1040. doi: 10.1126/science.1144241

Aycan, Z., Kanungo, R. N., Mendonca, M., Yu, K., Deller, J., Stahl, G., & Kurshid, A. (2000). Impact of culture on human resource management practices: A 10-country comparison. *Applied Psychology: An International Review*, *49*, 192–221. doi: 10.1111/1464-0597.00010

Barry, H., III, Child, I. L., & Bacon, M. K. (1959). A cross-cultural survey of sex differences in socialization. *Journal of Abnormal and Social Psychology*, *55*, 327–332. doi: 10.1037/h0041178

Bernstein, C. (1992). The idiot culture: Reflections of post-Watergate journalism. *The New Republic*, 22–28.

Brockner, J., Ackerman, G., Greenberg, J., Gelfand, M. J., Francesco, A. M., Chen, Z. X., & Shapiro, D. (2001). Culture and procedural justice: The influence of power distance on reactions to voice. *Journal of Experimental Social Psychology*, *37*, 300–315. doi: 10.1006/jesp.2000.1451

Caplan, L. J., & Schooler, C. (2007). Socioeconomic status and financial coping strategies: The mediating role of perceived control. *Social Psychology Quarterly*, *70*, 43–58. doi: 10.1177/019027250707000106

Chung, C., Coleman, P. T., & Gelfand, M. (2011). Conflict, culture, and complexity: The effects of simple versus complex rules in negotiation. Paper presented at the 24th annual conference of the International Association for Conflict Management in Istanbul, Turkey.

Clarke, R. V. G., & Newman, G. R. (2006). *Outsmarting the terrorists*. Westport, CT: Greenwood Press.

Colón, I. (1992). Race, belief in destiny, and seat belt usage: A pilot study. *American Journal of Public Health*, *82*, 875–877. doi: 10.2105/AJPH.82.6.875

Dugan, L., LaFree, G., & Piquero, A. R. (2005). Testing a rational choice model of airline hijackings. *Criminology*, *43*, 1031–1065. doi: 10.1111/j.1745-9125.2005.00032.x

Enders, W., & Sandler, T. (2006). *The political economy of terrorism*. Cambridge, UK: Cambridge University Press.

Fahey, S., LaFree, G., Dugan, L., & Piquero, A. R. (in press). Situational determinants of terrorist and nonterrorist aerial hijackings. *Justice Quarterly*.

Fiala, R., & LaFree, G. (1988). Cross-national determinants of child homicide. *American Sociological Review*, *53*, 432–445.

Gartner, R. (1990). The victims of homicide: A temporal and cross-national comparison. *American Sociological Review*, *55*, 92–106. doi: 10.2307/2095705

Gastil, R. D. (1971). Homicide and a regional culture of violence. *American Sociological Review*, *36*, 412–427.

Gelfand, M. J., Bhawuk, D. P., Nishii, L., & Bechtold, D. (2004). Individualism and collectivism. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, leadership, and organizations: The GLOBE study of 62 cultures* (pp. 437–512). Thousand Oaks, CA: Sage Publications.

Gelfand, M. J., Nishii, L., & Raver, J. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*, *91*, 1225–1244. doi: 10.1037/0021-9010.91.6.1225

Gelfand, M. J., Fulmer, C. A., Kruglanski, A. W., Abdel-Latif, A.-H., Khashan, H., Shabka, H., & Moaddel, M. (2010). Cultures of fate: Implications for risk-taking. In C. S. Burke & M. Salazar (Chairs), *Impact of culture on collaboration and negotiation. Symposium conducted at the 3rd International Conference on Applied Human Factors and Ergonomics*, Miami, FL.

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. L., & Yamaguchi, S. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, *332*, 1100–1104. doi: 10.1126/science.1197754

Gelles, R. (1987). *Family violence*. Thousand Oaks, CA: Sage.

Georgas, J., Mylonas, K., Bafiti, T., Poortinga, Y. H., Kagitcibasi, C., Kwak, K., & Kodic, Y. (2001). Functional relationships in the nuclear and extended family: A 16-culture study. *International Journal of Psychology*, *36*, 289–300. doi: 10.1080/00207590143000045

Ginges, J., & Atran, S. (2009). Non-instrumental reasoning over sacred values: An Indonesian field experiment. In D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *Psychology of learning and motivation, Vol. 50: Moral judgment and decision making*. San Diego, CA: Academic Press.

Greenbaum, R., Dugan, L., & LaFree, G. (2007). The impact of terrorism on Italian employment and business activity. *Urban Studies*, *44*, 1093–1108. doi: 10.1080/00420980701255999

Hackney, S. (1969). Southern violence. In H. D. Graham & T. R. Gurr (Eds.), *The history of violence in America* (pp. 505–527). New York: Praeger.

Hardeman, W., Pierro, A., & Mannetti, L. (1997). Determinants of intentions to practice safe sex among 16–25 year-olds. *Journal of Community and Applied Social Psychology*, *7*, 345–360. doi: 10.1002/(SICI)1099-1298(199712)7:5<345::AID-CASP431>3.0.CO;2-F

Hofstede, G. (1980). *Culture's consequences*. London: Sage.

Hogg, M. A., & Adelman, J. (2013). Uncertainty-identity theory: Extreme groups, radical behavior, and authoritarian leadership. *Journal of Social Issues*, *69*, 436–454.

Hogg, M. A., Kruglanski, A., & van de Bos, K. (2013). Uncertainty and the roots of extremism. *Journal of Social Issues*, *69*, 407–418.

Horgan, J. (2008). From profiles to pathways and roots to routes: Perspectives from psychology on radicalization into terrorism. *Annals of American Association of Political and Social Sciences*, *618*, 80–94. doi: 10.1177/0002716208317539

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Leadership, culture, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage Publications.

Jahoda, G. (1984). Do we need a concept of culture? *Journal of Cross-Cultural Psychology*, *15*, 139–151. doi: 10.1177/0022002184015002003

Juergensmeyer, M. (2003). *Terror in the mind of God: The global rise of religious violence*. Berkeley, CA: University of California Press.

Kay, A. C., & Eibach, R. P. (2013). Compensatory control and its implications for ideological extremism. *Journal of Social Issues*, *69*, 564–585.

Kitayama, S., Ishii, K., Imada, T., Takemura, K., & Ramaswamy, J. (2006). Voluntary settlement and the spirit of independence: Evidence from Japan's Northern frontier. *Journal of Personality and Social Psychology*, *91*, 369–384. doi: 10.1037/0022-3514.91.3.369

Kroeber, A. L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions*. Cambridge, MA: Harvard University Peabody Museum.

Kruglanski, A. W., Chen, X., Dechesne, M., Fishman, S., & Orehek, E. (2009). Fully committed: Suicide bombers' motivation and the quest for personal significance. *Political Psychology*, *30*, 331–557. doi: 10.1111/j.1467-9221.2009.00698.x

Kruglanski, A. W., & Fishman, S. (2009). Psychological factors in terrorism and counterterrorism: Individual, group, and organizational levels of analysis. *Social Issues and Policy Review*, *3*, 1–44. doi: 10.1111/j.1751-2409.2009.01009.x

Kruglanski, A. W., Gelfand, M. J., & Gunaratna, R. (2012). Terrorism as means to an end: How political violence bestows significance. In P. R. Shaver & M. Mikulincer (Eds), *Meaning, mortality, and choice: The social psychology of meaning, mortality and choice*. Washington, DC, US: American Psychological Association.

LaFree, G., & Ackerman, G. (2009). The empirical study of terrorism: Social and legal research. *Annual Review of Law and Social Science*, *5*, 347–374.

LaFree, G. (2012). Generating terrorism event databases: Results from the global terrorism database, 1970 to 2008. In C. Lum & L. W. Kennedy (Eds.), *Evidence-based counterterrorism policy* (pp. 41–64). New York: Springer.

LaFree, G., & Dugan, L. (2004). How does studying terrorism compare to studying crime? In M. DeFlem (Ed.), *Criminology and terrorism* (pp. 53–74). New York: Elsevier.

LaFree, G., & Dugan, L. (2007). Introducing the global terrorism database. *Terrorism and Political Violence*, *19*, 181–204 doi: 10.1080/09546550701246817

LaFree, G., & Dugan, L. (2009). Tracking global terrorism trends, 1970–2004. In D. Weisburd, T. E. Feucht, I. Hakimi, L. F. Mock, & S. Perry (Eds.), *To protect and to serve: Policing in an age of terrorism* (pp. 43–80). New York: Springer.

LaFree, G., Dugan, L. & Fahey, S. (2007). Global terrorism and failed states. In J. J. Hewitt, J. Wilkenfeld, & T. R. Gurr (Eds.), *Peace and conflict*. Boulder, CO: Paradigm Publishers.

LaFree, G., Dugan, L., & Korte, R. (2009). The impact of British counter terrorist strategies on political violence in Northern Ireland: Comparing deterrence and backlash models. *Criminology*, *47*, 501–530. doi: 10.1111/j.1745-9125.2009.00138.x

LaFree, G., Morris, N., & Dugan, L. (2009). Cross-national patterns of terrorism: Comparing trajectories for total, attributed and fatal attacks, 1970 to 2006. *British Journal of Criminology*, *50*, 622–649. doi: 10.1093/bjc/azp066

LaFree, G., Yang, S. M., & Crenshaw, M. (2009). Trajectories of terrorism: Attack patterns of foreign groups that have targeted the United States, 1970 to 2004. *Criminology and Public Policy*, *8*, 445–473. doi: 10.1111/j.1745-9133.2009.00570.x

Leung, K., & Bond, M. H. (2004). Social axioms: A model for social beliefs in multi-cultural perspective. *Advances in Experimental Social Psychology*, *36*, 119–197. doi: 10.1016/S0065-2601(04)36003-X

Long, J. S. (1997). Regression models for categorical and limited dependent variables. Thousand Oaks, CA: Sage Publications.

Lum, C., Leslie, W. K., & Sherley, A. J. (2006). Are counterterrorism strategies effective? The results of the Campbell Systematic Review on counter-terrorism strategy. *Fletcher Forum of World Affairs*, *26*, 17–29.

Markus, H., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253. doi: 10.1037/0033-295X.98.2.224

McClure, J., Allen, M. W., & Walkey, F. (2001), Countering fatalism: Causal information in news reports. *Basic and Applied Social Psychology*, *23*, 109–121. doi: 10.1207/153248301300148863

Miller, W. (1958). Lower-class culture as a generating milieu of gang delinquency. *Journal of Social Issues*, *14*, 5–19. doi: 10.1111/j.1540-4560.1958.tb01413.x

Moaddel, M., & Karabenick, S. (2008) Religious fundamentalism among young Muslims in Egypt and Saudi Arabia. *Social Forces*, *86*, 1675–1710. doi: 10.1353/sof.0.0059

Nisbett, R. E., & Cohen, D. (1996). *Culture of honor: The psychology of violence in the South*. Boulder, CO: Westview Press.

Nowak, A., & Vallacher, R. R. (1998). *Dynamical social psychology*. New York: Guilford Press.

Oishi, S. (2010). The psychology of residential mobility: Implications for the self, social relationships, and well-being. *Perspectives on Psychological Science*, *5*, 5–21. doi: 10.1177/1745691609356781

Pelto, P. J. (1968). The differences between "tight" and "loose" societies. *Transaction*, *5*, 37–40. doi: 10.1007/BF03180447

Piazza, J. (2007). Draining the swamp: Democracy promotion, state failure, and terrorism in 19 Middle Eastern countries. *Studies in Conflict and Terrorism*, *30*, 521–539.

Piazza, J. A. (2008). Incubators of terror: Do failed and failing states promote terrorism? *International Studies Quarterly*, *52*, 469–488. doi: 10.1111/j.1468-2478.2008.00511.x

Powe, B. D., & Finnie, R. (2003). Cancer fatalism: The state of science. *Cancer Nursing*, *26*, 454–467.

Rohner, R. P. (1984). Toward a conception of culture for cross-cultural psychology. *Journal of Cross-Cultural Psychology*, *15*, 111–138. doi: 10.1177/0022002184015002002

Ross, J. I, & Gurr, T. R. (1989). Why terrorism subsides: A comparative study of Canada and the United States, *Comparative Politics*, *21*, 405–426.

Sageman, M. (2004). *Understanding terror networks*. Philadelphia, PA: University of Pennsylvania Press.

Sageman, M. (2008). *Leaderless Jihad: Terror networks in the 21st century*. Philadelphia, PA: University of Pennsylvania Press.

Schug, J., Yuki, M., & Maddux, W. W. (2010). Relational mobility explains between- and within-culture differences in self-disclosure toward close friends. *Psychological Science*, *21*, 1471–1478. doi: 10.1177/0956797610382786

Segall, M. H. (1984). More than we need to know about culture, but are afraid not to ask. *Journal of Cross-Cultural Psychology*, *15*, 153–162. doi: 10.1177/0022002184015002004

Silke, A. (1998). Cheshire-Cat Logic: The recurring theme of terrorist abnormality in psychological research. *Psychology, Crime and Law*, *4*, 51–69. doi: 10.1080/10683169808401747

Stern, J. (2003). *Terror in the name of God: Why religious militants kill*. New York: Harper-Collins.

Straus, M. (1980). A sociological perspective on the prevention of wife-beating. In M. Straus & G. Hotaling (Eds.), *Social Causes of Husband-Wife Violence* (pp. 211–32) Minneapolis: University of Minnesota Press.

Swann, W. B. Jr., Gomez, A., Dovidio, J. S., Hart, S., & Jetten, I. (2010). Dying and killing for one's group: Identity fusion moderates responses to intergroup versions of the trolley problem. *Psychological Science*, *21*, 1176–1183. doi: 10.1177/0956797610376656

Tikusis, P. (2009). On the relationship between weak states and terrorism. *Behavioral Sciences of Terrorism and Political Aggression*, *1*, 66–78. doi: 10.1080/19434470802482175

Triandis, H. C. (1989). The self and social behavior in differing social contexts. *Psychological Review*, *96*, 506–520. doi: 10.1037/0033-295X.96.3.506

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.

Triandis, H. C., Kurowski, L., & Gelfand, M. J. (1994). Workplace diversity. In H. C. Triandis, M. Dunnette, & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. *4*, pp. 769–827). Palo Alto, CA: Consulting Psychologists Press.

Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology*, *59*, 1006–1020. doi: 10.1037/0022-3514.59.5.1006

Wolfgang, M., & Ferracuti, F. (1967). *The subculture of violence*. Thousand Oaks, CA: Sage Publications.

World Bank. (2009). World development indicators. Data downloaded 07/20/2009. http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20398986~menuPK:64133163~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html.

World Value Survey, Official Data File. V.3. World Values Survey Association (Online database, www.worldvaluessurvey.org) (1995). When Wave 3 data were unavailable, we used data from subsequent wave.

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