Preface Terrorism, security and the management of organizations: impact, preparation and response

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On September 11, 2001, at 8:46 a.m., terrorists flew an American Airlines Boeing 767 passenger plane into Tower 1 of the World Trade Center (WTC). The plane hit the north side of the building between the 94th and 98th floors. The plane was traveling at 470 mph and carried 10,000 gallons of fuel. At 9:03 a.m., a second plane flown by terrorists, a United Airlines Boeing 767, crashed into the south side of Tower 2 of the WTC between the 78th and 84th floors. This plane was traveling at 590 mph and also carried 10,000 gallons of fuel. The collapse of Tower 2 occurred 57 minutes after impact, followed by the collapse of Tower 1, 102 minutes following impact (Gershon et al. 2007). Almost 2800 lives were lost and this was the worst terrorist attack in US history; the Pearl Harbor death toll was 2403. Although terrorist attacks had occurred previously in the US and in many other countries, the events of 9/11 have changed many parts of the world forever. The events of 9/11 were unique. The number of deaths was unprecedented, and include those of 343 firefighters who lost their lives responding to the attacks. The terrorists did not need weapons of mass destruction to cause mass casualties and more than \$90 billion in losses. The airline, insurance and tourism industries were particularly hard hit. It highlighted the extent of the brutality that fundamentalist terrorists would undertake, and has since caused many countries to spend considerable amounts of money on homeland security. The attacks highlighted the vulnerabilities that existed at the time and still exist. It raised the awareness of the general public of the threat posed by present-day terrorists. And it raised the bar for future attacks as terrorists try to attract media attention.

Furthermore, 9/11 is still killing people. Some individuals have become sick as a result of toxins in the air (asbestos, PCBs (polychlorinated biphenyls), dioxins) immediately following the WTC attacks while others have more recently become sick after an earlier exposure. Two firefighters

died in August 2007 battling a blaze in the Deutsche Bank building damaged during 9/11 but only just being demolished. A blaze broke out as a result of careless smoking and the firefighters had little access to water as this was shut off in the building following the terrorist attacks.

Indeed, 9/11 highlighted how risky life in organizations has become. Parcels left unattended now frighten people, close down buildings and bring out the police. White powder on envelopes leads to the evacuation of buildings. Increases in the level of threat announced by the government, coupled with vague threats of possible attacks, increase levels of anxiety.

The time, inconvenience, and sometimes absurdity of airport security checks has increased the stress of traveling, as airlines, many facing insolvency, simultaneously reduce the level and quality of their services. The financial costs of this increased security have been borne mainly by government agencies, often requiring them (or others) to reduce expenditures in other important areas such as education and healthcare. The clean-up after 9/11 alone cost several hundred million dollars.

The 9/11 terrorists may also be winning on the economic front, one of their stated objectives. The powerful US Department of Homeland Security has made it much harder to move goods, services and people across the Canada–US border since then. Canadian productivity is likely to suffer with the potential of Canadian job losses. New passport requirements have increased paperwork and delayed approvals, and computer foul-ups have increased the time needed to cross the border. Pre-clearance initiatives designed to reduce such delays have also been undermined, delayed or stopped by the US Department of Homeland Security. The US has invested millions of dollars since 9/11 on computer programs that search through financial, communication, travel and other personal records of people in the US and around the world for connections to potential terror plots (data mining).

The 2008 US presidential election race is being influenced by how ‘tough’ the candidates are on national security, a code word for protection against terrorists and whether one is the ‘law and order’ candidate. Data from Israel (Berribi and Klor, 2006) have shown that support for the right-wing party increased following periods of high terrorism and decreased following periods of relative calm, and terrorism was higher when the left-wing party was in power than when the right-wing party held power.

The attacks had a short-term negative effect on the stock market and economy in the US. Other wars (for example, between the Israelis and the Palestinians, and in Yugoslavia and Iraq) have also had negative effects on stock market performance, at least in the short run. Since 9/11, national governments in some countries have lowered interest rates to spur their economies. This has worked: the economies in many countries have

boomed since then. Events since 2002 indicative of this boom include increases in merger activities and in the stock market, short-term increases in the housing market (since fallen in the US), and a shortage of skilled workers.

The events of 9/11 took place almost seven years ago. International terrorism continues to be a threat in many countries. Some experts have argued that the responses to 9/11 reflected in the 'war on terror' have in fact made the world less safe. The threat of terrorism, particularly against the US, will be present for decades. The accumulating evidence shows that terrorist attacks have immediate and negative effects on those directly or indirectly affected by them, and on those who repeatedly watched the events on television. Furthermore, 9/11 has increased the costs of doing business for both organizations and consumers. The immediate negative effects of 9/11 (on the airline industry and on tourism; increased anxiety and depression), however, were short term. Many economies have since rebounded; most individuals and some organizations seem to have coped successfully with the events of 9/11, particularly those having resilience. Some governments, those supporting the war in Iraq in particular, have lost the support of their citizens (Spain, the US, the UK, Australia). In addition, attempts to reduce terrorism through the use of force do not seem to have worked too well. Indeed, these efforts often seem to create more terrorists, and it is clear that citizens in many countries do not feel safer as a result of efforts by their governments to reduce terrorism; an increasing number expect to be attacked again by terrorists. On the sixth anniversary of 9/11, the *Toronto Star* conducted an on-line poll of its readers on the question of whether global anti-terror measures made them feel safer. Almost 80 percent said 'no'.

There are a considerable number of incidents that contribute to these feelings of not being any safer. Consider the following:

- German police arrested three people in an attempted bomb plot against Americans (September 6, 2007).
- A Serbian man was arrested after attempting to enter the American Embassy in Vienna (October 1, 2007).
- Authorities in Denmark arrested several people in Copenhagen on September 4, 2007, charging them with plotting terrorist attacks.
- The Pakistani military attacked the Red Mosque in Islamabad where there were some Islamic extremists; dozens of people died.
- British police arrested five people in connection with plots to attack airports in London and Scotland. Two cars packed with explosives were found in London. Two men rammed a flaming jeep into the main entrance of Glasgow airport.

- American authorities averted an attack on the Army base in Fort Dix, New Jersey (May, 2007).
- American authorities stopped the potential detonation of explosive devices at JFK International Airport in New York City (June, 2007).
- Global terrorism is present in more than 50 nations (Korten, 2006).
- Terrorism is a widespread problem throughout the world, occurring in 54 countries from May 2003 to May 2004 and taking place on all but one continent (Antarctica).
- US diplomats abroad have been subjected to unprecedented security restrictions, with several being confined to fortress-like compounds incorporating both travel restrictions and lockdowns.

CHANGES SINCE 9/11

The Globe and Mail (2006) chronicled some effects of 9/11 five years after the attacks. Some of their findings are as follows:

- 2 number of days that mail addressed to the US government is delayed so it can be irradiated for biohazards.
- 39 number of organizations, including their aliases, that Canada considers to the terrorist groups. Before 9/11, Canada had no such list of its own.
- 11 number of countries added to the list whose citizens now need passports to visit Canada.
- 2 the length of waiting time to receive a passport in Canada has doubled.
- 75 percent percentage increase in Canadian defense spending from 2001 to 2010.
- 10 percent the drop in business travel from Canada to the US.
- 66 percent percentage of respondents in a US poll indicating that people who look 'Middle Eastern' should be singled out for security screening at airports and train stations.
- 12 percent percentage of Turks having a favorable impression of the US, down from 53 percent in 2000.
- 10 percent the drop in earnings of Muslim and ethnically Arab men working in the US since 9/11. Some Arab and Muslim Americans have changed their name because of stereotypes, discrimination and prejudice. Thus Isam Abu Zaid became Sam Paul St. Germain.
- 391:1 ratio of pre-terrorism websites compared with 1998.

- 15 percent of the 48 governments that originally joined the ‘coalition of the willing’ in Iraq, seven have since been defeated at the polls (Dominican Republic, Hungary, Italy, Norway, Slovakia, Spain and the Ukraine). In addition, the popularity of Tony Blair and George Bush reached almost record lows. Blair has since left office and Bush’s Republican party lost control of both the House and Senate.
- 300 percent in the five years before 9/11, 8309 deaths were attributed to terrorism; after 9/11, the figures for five years rose to 26,620.
- 50 percent security hassles in crossing the US–Canada border have resulted in half as many US visitors entering Canada for one-day visits.

WHAT IS TERRORISM?

Terrorism is an intentional act designed to intimidate or coerce a civilian population, usually accomplished through an action that evokes fear and stress in others than those directly involved in the terrorist event. Terrorism is a psycho-social attack on people, and as a political tool it has a long history.

Interestingly there is more terrorism in the more democratic countries than in non-democratic countries. Democracies are more vulnerable to terrorism both from inside and outside the country (WTC, bombings in Madrid and London, the Oklahoma City bombing). This results from terrorists’ dislike of the democratic countries and what they are seen to stand for, and under-reporting of terrorist attacks in the non-democratic countries. In addition, the terrorists’ seeking of publicity and the freedom of the press in more democratic countries makes such countries valued targets.

Violence and terror have come to be central products in the media; terrorists and the media have come to need each other. The general public also seems to prefer media coverage of violence and terrorism. The events of 9/11 seemed to be repeated on all major US networks non-stop for days following the attack. The news media have learned that focusing on terrorism and terrorist attacks attracts viewers, so they are now continuously bombarded with stories and pictures of death and destruction.

A terrorism database in the US, as of June 2006, contained data on over 28,445 terrorist events in more than 5000 cities across 187 countries worldwide since 1968. Some 10,878 of them resulted in at least one person being killed or injured. The frequency of major terrorist events had not changed over this period, but the frequency of less severe attacks had increased (Clauset et al., 2007). Severe terrorist attacks, in contrast to smaller attacks, get significantly more media attention, and terrorists seek publicity. More severe attacks tend to occur in industrialized countries, while more frequent terrorist events occur in non-industrialized countries. More severe

attacks also have a greater psychological, financial and economic impact. Furthermore, they also suggest that the terrorists have more resources, skill and persistence. In addition, governments of countries receiving severe attacks can also increase the magnitude of their responses. Governments can use the 'stick' – tough counter-terrorism policies and measures – or the 'carrot' – more accommodating policies and actions – to reduce the terrorists' base of support. There is some suggestion that heavy-handed government actions may increase the levels of terrorism, however.

WHAT ARE THE CAUSES OF TERRORISM?

A few different causes of terrorism have been proposed. One states that terrorists hate the US for their use of military and economic power to 'oppress and humiliate other nations and peoples' (Korten, 2006, p. 245). This allows the targets of terrorism to shift the focus away from the real causes of this hatred, which may include economic injustices and poverty. Economic conditions such as poverty and income inequality influence terrorism by increasing feelings of deprivation, injustice and political tension. Thus promoting economic growth and reducing inequality through economic aid and the development of welfare programs may reduce these seeds of discontent. Countries with more generous social welfare policies and practices have had fewer terrorist incidents on their soil as well as fewer terrorist acts perpetrated by their citizens. These findings suggest that strengthening of social policies at home and abroad may reduce terrorist violence.

Another view states that terrorism results from a 'clash of civilizations'. Terrorists come from countries that have an ideology that runs counter to the capitalist and materialistic values of the West. Most of the 19 hijackers involved in 9/11 came from middle-class families and were reasonably well educated; they were not economically deprived. There are some terrorists, primarily Islamic radicals, who hate the 'infidels' and what the West represents and are actively pursuing Jihad. These individuals, hopefully few in number, will not be influenced by Western efforts to reduce levels of economic hardship.

International cooperation is needed to bring terrorists to justice and prevent future attacks. Unfortunately several countries, while paying lip-service to the need for international cooperation and information sharing, perform half-heartedly (for example, Saudi Arabia, Syria and Pakistan). Launching unilateral pre-emptive strikes against weak nations fails because it increases the number of terrorists, uses military resources in no-win conflicts, undercuts international trust and cooperation, and reduces the moral authority of the invading country.

TERRORISM AND ORGANIZATIONS

Organizations and their workforces are attractive targets for terrorists (Inness and Barling, 2005). Many people are present at particular times of the day, attacking organizations and their employees receives immediate media attention, and attacking organizations represents an attack on an ideology (for example, progress, capitalism and materialism) that is different from that of the terrorists. Examples of workplaces that have been attacked include the WTC, government embassies, government buildings, military buildings such as the Pentagon, and an army barracks in Saudi Arabia. Attacks have also occurred on transportation infrastructure where people congregate, such as airplanes, trains, buses and subways. The targets of terrorist attacks are not random; most require considerable long-term planning and resources. Individuals apprehended before they were able to carry out a potential terrorist attack often had taken pictures and videotapes of potential targets. Some of the individual hijackers on 9/11 had spent months in the US taking flying lessons.

WHY ARE POTENTIAL OR ACTUAL TERRORIST ATTACKS STRESSFUL?

The vast literature on occupational stressors and their effects offers some suggestions as to why terrorism has such a negative impact on individuals (ibid.). The terrorist event or attack cannot be controlled, has an external cause, is more detrimental to psychological health because it is done deliberately to cause harm, is undertaken by other people who are evil, is difficult to predict when the event has ended, and is associated with an unknown future. Actual terrorist attacks causing death, destruction and loss, impact directly on victims, those in close proximity to the attacks, those who have personally witnessed the attacks, and those losing friends and family in the attacks. Furthermore, the size of the disaster is likely to have an influence on the magnitude of its effects on individuals.

EFFECTS OF TERRORISM ON INDIVIDUALS

Terrorist attacks have been found to have the following effects on individuals: increases in psychological health symptoms such as anxiety, depression and fear; post-traumatic stress disorder (PTSD); inability to concentrate; sleep disturbances; increased alcohol consumption; feelings of helplessness; and negative attitudes towards 'outsiders'. We shall review only a sample of

these research findings, as some of the chapters that follow consider them in more detail.

A 2004 survey of New York City (NYC) residents showed that:

- 56 percent feared they would be the victims of a terrorist attack;
- 35 percent felt less safe than two years ago;
- 23 percent seriously considered relocating from NYC;
- 48 percent experienced flashbacks of 9/11 during the August 2003 blackout; and
- 23 percent were now more vigilant, careful, and alert.

A survey of NYC commuters revealed the following:

- 55 percent feared an attack on a subway or train;
- 52 percent feared an attack on a ferry; and
- 35 percent feared an attack on a bus.

Galea et al. (2003) reported in a study of NYC residents after 9/11 that:

- 35 percent thought about 9/11 almost every day;
- 35 percent reported anxiety, depression or mental stress from 9/11; and
- 20 percent of those living below Canal Street (closer to WTC) reported PTSD symptoms while 7.5 percent living between 110th and Canal Street (further from WTC) reported PTSD symptoms.

Stein et al. (2004) studied psychological and behavioral reactions following 9/11 in a nationally representative sample of 560 adults, resurveying them about two months later ($n = 395$). Sixteen percent had persistent distress at both measurement periods. Adults with persistent distress reported accomplishing less at work (65 percent), avoiding public gathering places (24 percent), using alcohol or other medications or drugs to relax, sleep, or feel better about terrorism (38 percent). Seventy-five percent talked with family or friends but 43 percent reported being unable to share their terrorism-related thoughts and feelings with others as it made others uncomfortable. Few reported receiving counseling or information about psychological distress from general medical providers (11 percent).

Felton (2004) reviewed what we have learned since 9/11 about the impact on mental health of the attacks, and how best to respond to victims and the general public. Rates of PTSD and depression were heightened immediately after 9/11 but had subsided since then. Factors associated with elevated PTSD and depression were close proximity to the attacks, low social support, more life stressors prior to 9/11, major loss due to the attacks (for

example, death of a friend, loss of a job or possessions), watching the attacks on television with high frequency, and experiencing a panic attack during or immediately after the attack. Individuals far away from the attack could also be affected by it. Felton reports on the experiences of Project Liberty, a mental health service provided to NYC citizens. Over 400 disaster mental health workers participated as a source of help and support: over 1.2 million New Yorkers received one or more face-to-face counseling sessions or public education services. Many users of these services indicated that their daily functioning had returned to pre-9/11 levels.

There is some evidence that alcohol consumption may have increased shortly after 9/11 (Vlahov et al., 2002, 2004a, 2004b). Others (for example, Knudsen et al., 2005), found no increase in alcohol consumption in their studies, however.

Studies have shown that merely watching the terrorist attacks repeatedly on television had a negative effect on psychological health. Gil-Rivas et al. (2004) found an increase in four acute stress symptoms in a sample of 142 adolescents indirectly exposed to the terrorist attacks through the media one year later. Parental support, positive affect and parenting self-efficacy (using data obtained separately from parents) were associated with greater positive affect in adolescents, suggesting that parents play an important role in adolescents' responses to traumatic national events. Others have also demonstrated that watching the attacks on the WTC on television had a negative effect on children and youth (Ahern et al., 2002; Gershoff and Aber, 2004; Gould et al., 2004). Watching people falling or jumping from the WTC towers had immediate short-term negative effects.

WITNESSING THE UNTHINKABLE

Shalev (2004) observed that some individuals, not under threat themselves but witnessing body parts or bodies burned beyond recognition, may experience more long-term distress than survivors of an attack. This notion might explain the reactions of those watching events on television or first responders such as police, firefighters and emergency service personnel.

LONG-TERM EFFECTS

It is likely that some survivors of 9/11 and other terrorist attacks, some first responders, and some soldiers fighting terrorism in Iraq, Afghanistan, Pakistan and other countries will show signs of PTSDs. The best research on US veterans of the Vietnam War (Dohrenwend et al., 2006) found that

19 percent had developed war-related PTSD during their lifetime and 9 percent were suffering from PTSD 11 to 12 years after the war. Hoge et al. (2006) reported that 19 percent of those serving in Iraq and 11 percent of those serving in Afghanistan reported symptoms of PTSD or other mental health problems. It has been estimated that 89 percent of those serving on these two fronts had been attacked or ambushed, and 95 percent indicated seeing dead bodies or human remains.

But there is some good news in several of the studies of survivors and witnesses of terrorist attacks. Most return to a life that was similar to their pre-event life. Bonanno (2004, 2005) has found that the vast majority of adults return to relatively stable patterns of healthy functioning along with a lasting capacity for positive emotions and growth. Interestingly, there were many ways to be resilient and some of these were not necessarily adaptive under normal circumstances. In conclusion, there is evidence of immediate negative effects on individuals affected directly or indirectly by a terrorist attack, but these seem to dissipate over time.

WHAT CAN BE DONE TO ASSIST INDIVIDUALS?

We can prepare employees of organizations for possible terrorist attacks by providing information resources and building evacuation routes. We can build better and safer buildings and retrofit older buildings to better withstand attacks. We can better prepare first responders with improved equipment, resources and counseling support. We can improve individual and organizational coping responses such as education, access to employee assistance programs (EAPs), communication systems in organizations and improved team functioning. And we can help individuals by offering education and training for improved coping and resilience. Finally, providing help and support, and encouraging employees to ask for help and support, would yield huge dividends to them.

EFFECTS OF TERRORISM ON ORGANIZATIONS

Terrorist attacks have been found to have some effects on organizations. These include psychological distress of employees and their families, disorganization of the workplace, unclear roles and responsibilities, more absenteeism and turnover, inability to concentrate on the job, and lower performance. These are in addition to the direct and indirect financial costs associated with death benefits, workplace injuries, counseling of staff, and the replacement of buildings and equipment (Inness and Barling, 2005).

FACILITATING ORGANIZATIONAL RECOVERY

The fire created by thousands of gallons of jet fuel pulled so much oxygen out of the air around the WTC that windows in nearby buildings blew out as the towers collapsed. The offices of Barron's Magazine, located on the 32nd floor of the World Financial Center, shook and supplies and equipment flew out of the windows. Barron's employees left the building for their own safety. It took over a year to rebuild and refurnish their offices, but as employees hurried out of their building, they were already thinking about publishing the magazine on time. In fact a complete edition appeared only three days later. Not publishing it was never even considered.

Gittell et al. (2006), in a study of the airline industry following 9/11, found that some airlines rebounded faster and further than others. These differences were a function of several pre-9/11 factors: financial reserves, nature of their business model, and positive long-term employee relationships. Positive employee relationships supported the introduction of coping efforts by particular airlines (for example, Southwest). It is clear that some organizations rebounded quickly after 9/11 while others did not. Leadership quality, levels of organizational support and the health of the human system prior to the attack emerged as key elements here.

Sheffi (2005) considered the ways that organizations could recover from major disruptions, which included lowering their vulnerability and increasing their resilience. Organizations today are more vulnerable than ever. This results from the globalization of business, increasing dependence and interdependence with other organizations, longer supply lines, just-in-time (JIT) processes, increasing competition and higher levels of uncertainty across the board. Organizations need to focus on increasing both security (lowering the probability of an attack) and resilience (increasing resources to rebound quickly). Increasing security involves heightened defenses, including all employees in security initiatives, and increasing communication across various people, companies and agencies. Resilience involves creating redundancy in systems, developing back-up systems, allowing rapid movement of people, information and products from those parts of the organization that are still functioning, and developing a 'can-do' organizational culture that will get the job done under any circumstances. Argenti (2002) highlights the importance of putting the employee's interests above everything else in speeding up recovery.

Companies that rebounded quickly received tangible support from suppliers, competitors, regulators and customers following the attacks of 9/11.

Unfortunately, most companies are still conducting ‘business as usual’. Since 9/11, few have thought about their vulnerabilities and changed in ways to make them better prepared, more secure and more resilient. Organizational preparation, according to Sheffi (2005) involves the following:

- building the business case for security;
- organizing for both preparation and resilience;
- prioritizing threats and vulnerabilities;
- reducing the probability of disruption;
- collaborating with other organizations, including government agencies, in sharing information;
- creating operational redundancies;
- strengthening relationships with suppliers and customers;
- increasing training so that employees can perform multiple jobs;
- developing and practicing emergency responses (for example, building evacuation routes); and
- developing a culture that emphasizes communication, teamwork, passion, performance, flexibility and getting the job done regardless of circumstances.

Most resilient organizations have cultures that have the following aspects (ibid.):

- an emphasis on results;
- teamwork and collaboration;
- informal networks and personal relationships;
- leadership at all levels;
- high levels of employee participation;
- employees that are engaged in their work;
- lots of communication; and
- an emphasis on innovation and flexibility.

Bachrach and Bamberger (2007), in a sample of NYC firefighters ($n = 1600$), examined both involvement in the terrorist incident and fire unit functions such as control and supervisor support climate on post-event negative emotional states. Data were collected almost 18 months after 9/11. They found that post-incident unit support and control climate had important protective functions for these first responders. Interestingly, the human system before the terrorist attacks contributed to the resilience of survivors of the attack, their organizations, and first responders.

WHY DON'T ORGANIZATIONS PREPARE?

Crisis management is 'an organization's pre-established activities and guidelines for preparing and responding to significant catastrophic events or incidents in a safe and effective manner' (Lockwood, 2005, p. 2). Lockwood contends that the human resources function should have a significant role in crisis management, given its responsibility for people, talent management, leadership development, safety and security, and communication planning. Lockwood reports that a recent Society for Human Resources Management survey found that as a result of 9/11, 56 percent of organizations created or revised their disaster preparedness plans, but 45 percent had not. Why don't organizations develop these plans? The Society offered the following reasons: organizations believe that it won't happen to them; other priorities are more important than crisis preparedness; they are unaware of risks to their organizations; and they ignore already available warning signs, and then rely on a weak and untested plan already available.

Mitroff and Alpsalan (2003) defined companies as crisis prepared ('proactive') or crisis prone ('reactive'). They examined several Fortune 500 companies and concluded that between 5 and 25 percent were crisis prepared. They found in their research that being prepared for a crisis had several benefits. Proactive companies experienced fewer crises, they stayed in business longer, they performed better financially, and they had better corporate reputations. Mitroff and Alpsalan identified three types of crisis: natural accidents (for example, fires, earthquakes), normal accidents (for example, *Exxon Valdez* oil spill, Three Mile Island nuclear plant), and intentional accidents (for example, deliberate evil actions such as terrorist bombings, kidnappings, and cyber attacks). Companies know how to deal with safety planning risk assessment and hazards – the first type of crisis; they can also prepare for the second type of crisis by obtaining information early from key actors; it is, however, harder for them to come to grips with the third type of crisis as it is hard to imagine just how evil some people can be.

Can organizations anticipate or predict crisis? Bazerman and Watkins (2004, p. 1) define a predictable surprise as 'an event or set of events that take an individual or group by surprise, despite awareness of all the information necessary to anticipate the events and their consequences'. They see 9/11 as reflecting an avoidable failure of leadership – it could have been anticipated or predicted – and offer suggestions on ways to improve recognition of impending crises and how to work toward preventing them. They first identify reasons why organizations do not see looming crises, covering some of the same ground as Lockwood (2005):

- leaders know that a problem or crisis exists that will not solve itself;
- the probability of a real disaster is increasing;
- solutions involve trade-offs between immediate costs and future benefits;
- the costs are certain, the benefits uncertain;
- the status quo seems more attractive than preparing for the uncertain future; and
- there is a vocal minority that benefits from the status quo.

As a solution they propose their RPM model involving three steps: enhance the Recognition of ongoing problems, Prioritizing problems so that one addresses and solves the most urgent, and Mobilizing support to head off the danger. Each step is then described in some detail with examples of how they would apply to actual events.

DEVELOPING ORGANIZATIONAL RESILIENCE BEFORE AND FOLLOWING A TERRORIST ATTACK

What do leaders and managers need to do to support recovery? Managers need to rebuild hope in people as employees lose a sense of hope in disasters such as 9/11. Employees turn to their leaders in times of crisis, and at such times everything gets magnified. How leaders behave is observed and remembered. Leaders need to instill trust by being trustworthy; this involves keeping promises, being open and honest, treating others with respect and dignity, caring for employees – the victims and survivors – and doing their share. Employees should be encouraged to seek help in times of need. People need help in times of trauma, yet most are reluctant to seek it. Leaders are particularly reluctant to seek help though they need it as much as anyone else, if not more, and employees look to their leaders for clues on how to respond. Organizational values are critical to healing; central here are valuing all employees as whole human beings, seeing the organization as a community, expressing a range of emotions during the tragedy (Mainiero and Gibson, 2003), and showing that the organization cares.

People are obviously confused following a terrorist attack. What is going on? How will we get through this? Did everyone survive? Managers can address these concerns by providing certainty about their job and their place in the organization, by maintaining personal connections to employees through being visible and accessible, by listening to staff, allowing for the expression of employee pain and suffering (*ibid.*, 2003), focusing on the organization as a community, and indicating what the organization is doing to address problems and support high performance.

The routines of getting back to work as soon as possible are critical to recovery. Regular back-to-work routines create a sense of activity, purpose and effectiveness. Employees can get called to meetings to foster a sense of community. Regular communication channels can support help seeking and help giving. Formal and informal networks provide help, ideas, coordination, and information. Some employees behave courageously in times of crisis, thus fostering courage in others who are grappling with the same circumstances. Others feel inspired after seeing courageous acts by their leaders or fellow employees. Finally, organizations can provide employee assistance and counseling programs involving the family, an emergency response plan to speed up recovery, safety training, information on building evacuation routes, back-up communication and data systems and on-site street debriefing (Inness and Barling, 2005).

PREPARING FOR A TERRORIST BOMBING

Bombs are the most common method used by terrorists to create fear and inflict harm. About 70 percent of the terrorist attacks in the US between 1980 and 2001 were the result of bombings. There are some common-sense things to do in preparing for a terrorist bombing. These include: knowing your work, school or community disaster plan, identifying an alternative hospital within reasonable distance but not necessarily the closest to your work or school. If you think someone is going to set off a bomb, follow existing evacuation guidelines. If at work or school, leave the area immediately. If at home or in a public place, continue to follow existing evacuation guidelines that are in place. If at work or school, call 911 in the US, and the same if at home or in a public place. Then follow directions from people in authority such as the police, firefighters, emergency staff, first responders, the military or your company's supervisors.

We now have a greater understanding of building evacuation preparedness (Gershon et al., 2007). Evacuation leaders should be identified and trained for buildings 10 floors or higher, plans for assisting the disabled and disseminating information should be developed, and all employees should be knowledgeable about their building and aware of the exits.

MANAGING THE TERRORIST EVENT

Perliger et al. (2005), using analyses of suicide bombings by terrorists in Israel suggest a defensive method of dealing with such attacks in addition to the active defensive methods currently being advocated. How should

authorities manage a terror event? Three factors appeared to be significant in a well-managed terrorist event: the clarity of the initial description of the event, internal coordination among units operating on the scene and external coordination among municipal agencies.

SECURITY IN THE GLOBAL BUSINESS ENVIRONMENT

Companies with a global workforce are paying greater attention to the risks faced by their employees, their liability, and ways of enhancing security practices. Some countries are unstable; others are in the process of becoming unstable. Companies need to know recent developments, where their employees are located, and to have an evacuation plan ready. Companies may also need to think about reducing international travel and overseas assignments. Problems such as social unrest, military conflicts, terrorist attacks and kidnappings exist. Companies continue to have employees in dangerous places such as the Middle East, South East Asia, and South and Central America.

There is some evidence that expatriates want more support and information from their head offices as they undertake assignments abroad. This should include security bulletins, contingency plans and emergency guidelines. Most expatriates indicated, however, that they would complete their current assignments and accept other expatriate assignments.

THE PRESENT VOLUME

This collection is about the impact of terrorism and terrorist attacks on employees of organizations, the leaders and management of these organizations and the organizations themselves. The events of 9/11 impacted on people, organizations and the economy as a whole. These effects continue today and concerns about future terrorist attacks will be with us for a long time. Some people and organizations showed resilience and returned to previous levels of functioning relatively quickly, others failed to do so. Reflecting the international dimensions of the topic, our authors come from five countries, four of which have suffered terrorist attacks in the past few years and all have had suspected or convicted terrorists within them.

Several books tackle terrorism at the political and cultural levels, its root causes and possible solutions, but relatively few focus on the organizational level. Terrorism is most likely to target organizations and the women and men who work in them to create maximum destruction and media

attention. In addition, organizations, both in the private and public sectors, need to anticipate and prepare for potential attacks and respond if and when they are attacked. This collection focuses on the women and men who work in organizations, and those responsible for assisting them in times of emergency and terrorist crisis.

OVERVIEW OF THE CONTENTS

This volume is divided into three parts. Part I, containing three chapters, serves as an Introduction. In the first chapter, Ronald Burke sets the stage for those that follow. He begins by providing a brief overview of 9/11 on world events since these terrorist attacks, the effects of terrorist attacks and other disasters, both man-made and natural, on people in general, the impact of 9/11 on human resource management practices and organizations, individual coping and resilience, anticipating terrorist attacks and other disasters, improving responses to such attacks and disasters, and the implications of 9/11 and related terrorist events over the past seven years for organizations, their employees and their management. Terrorism is certain to be a worldwide threat and reality for years to come.

In Chapter 2, Jack Kondrasuk and Elizabeth Arwood offer a US analysis of terrorism. They first define terrorism, appreciating the existence of various definitions. They then provide a history of terrorism regarding the US: pre-9/11, 9/11, and post-9/11. Although the US had experience with terrorism previously, 9/11 dramatically changed the way the US now viewed it. The US is the number one terrorist target in the world. In response, the US has embarked on a war against terrorism. It has identified a small number of states it believes sponsor terrorism, terrorist organizations, individual terrorists and weapons used by terrorists. Kondrasuk and Arwood then review the effects of terrorism on US society in general and on the US government. They sketch out the future of terrorism in the US, concluding that it will last a long time. Changing the people likely to undertake acts of terror is seen as a promising avenue, but this is also a long-term strategy.

John Taylor (Chapter 3) writes about governments as actors in terrorism. He observes that governments are the targets of terrorism, the agents of terrorism and responsible for protecting their citizens from terrorism. Terrorism, at its root, results from anger, frustration, or resentments; government actions can cause terrorism, and harsh responses by governments to terrorist attacks may promote further violence. As a consequence; governments become the targets of terrorism. For terrorists, the government, business institutions, and innocent civilians blur into legitimate targets. Furthermore, governments create departments (for example, US

Department of Homeland Security) to both protect their citizens and fight against terrorism (the US war on terror). Taylor reviews the UK strategy which differs in significant ways from the US approach: the US sees the causes of terrorism as external; the UK sees the causes as internal. Defeating terrorism ultimately involves addressing its roots, and governments are the major actors in this effort.

Part II contains four chapters, and considers the impacts of terrorism. In Chapter 4, Kristen Walter, Brian Hall and Stevan Hobfoll use conservation of resources (COR) theory to understand the influence of mass casualty on individuals, groups and organizations. The key proposition in COR theory is that individuals and groups try to obtain, retain and protect the things they most value, termed 'resources'. Stress results then from the actual or threatened loss of resources or failure to gain resources following substantial investment. Resources, for them, are objective. When individuals or groups experience a traumatic event such as a terrorist attack and mass casualty, a loss of resources occurs. Managerial decision making is also affected by disasters such as terrorist attacks. These effects can be negative in many cases (for example, inaction, hostility to out-groups, risk aversions), influencing responses to these attacks. They then offer ways to best respond in these situations. These include promoting a sense of safety, calming, developing a sense of self- and collective-efficacy, connectedness and hope. Specific interventions are illustrated to provide concrete examples.

Ross Pastel (Chapter 5) focuses on the psycho-social impacts of biological warfare and bioterrorism following 9/11. Both use micro organisms or toxins to induce death and disease. These are used to attack a society by inducing fear and vulnerability among the population; the sending of anthrax through the US mail in October 2001, causing death, brought this to the forefront. The psycho-social impact of bioterrorism is a function of risk perception which is influenced by risk communication by leaders and information provided by the news media. Pastel reviews various bioterrorism agents associated with possible bioterrorist scenarios. Risk communication guidelines are reviewed and discussed. Bioterrorist attacks affect three groups: the community, healthcare workers, and patients and their families. Pastel then considers the effects of bioterrorism on each. Finally, he lays out some thoughts on how to best manage the effects of such attacks.

Arie Shirom and his colleagues (Chapter 6) summarize two studies investigating the effects of fear of terror on subjective and objective indicators of health. Both studies were carried out in Israel among adult samples. In the first study, objective exposure to terror did not predict self-reported health but fear of terror negatively predicted self-reported health for both

females and males, The second study, using a subsample from the first study, considered low-grade inflammation as the objective health indicator. They found, in women only, a positive association between fear of terror and low-grade inflammation. Controlling several demographic and bio-medical variables, they conclude that fear of terrorism was prospectively associated with both subjective and objective indicators of health.

Hector González-Ordi and his colleagues (Chapter 7) examine the effects of the March 11, 2004 terrorist attacks at the Atocha train station in Madrid. This was the biggest terrorist attack in the history of Spain. Al Qaeda placed 10 bombs in four commuter trains during rush hour, killing 191 people and injuring 1800. Shortly after the attack, 2 million citizens of Madrid took part in a demonstration against terrorism. Surveys of Madrid residents showed acute stress symptoms following the attack, but most people were generally able to go about their daily lives shortly thereafter. The authors carried out three longitudinal studies of citizens in general, victims and their relatives, and emergency responders. Phone interviews were carried out with over 1500 people. About 10 percent of the general population had symptoms reflective of panic attack, women more than twice as likely to be affected as men. Interestingly, figures on symptom levels following the Madrid attack tended to be lower than those reported following the attacks on the WTC. Several variables (for example, sex, age, social support, stressors before the attack) predicted individual symptom levels following the attack in Madrid. Not surprisingly, victims and their families were more strongly affected than were the public at large, with first responders falling roughly in between these two groups. The authors conclude with an observation also made about the attacks in NYC following 9/11: although Madrid will never be the same, it emerged stronger following the attack.

Part III contains five chapters and focuses on what we know about building individual and organizational resilience. In Chapter 8, Michelle Slone and Anat Shoshani examine the interrelated function of the media and the viewing public in dealing with the psychological warfare of terrorism. The violence of terrorism is increasingly present in people's daily lives. Increased media exposure to terrorism increases anxiety, anger and fear. Negative stereotypes are also increased. Slone and Shoshani describe efforts to develop a preparatory intervention to help individuals deal with common responses to media coverage of terrorism involving high risk community sectors. Although evaluation data of the usefulness of such interventions is just emerging, their early results are promising. They conclude with their thoughts on regulating media exposure to terrorism. The public should be made aware of how media coverage evokes negative emotional

reactions and helps to control their cognitions; the media needs to alert the viewing public to the potentially disturbing nature of their images. The power of the media in fact can be used to improve conflict resolution tactics among the viewers of terrorism.

Brian Flynn and Fred Lane (Chapter 9) integrate organizational and behavioral health concepts central to protecting, promoting, and sustaining the health of individuals and organizations in trying circumstances. Disasters such as terrorist attacks adversely affect both individuals and organizations. The authors first consider key factors necessary to sustain and develop organizations in normal as well as extraordinary circumstances. Leadership, particularly as it creates a culture, is central here. In addition, the overlapping roles and responsibilities of numerous stakeholders play a major part and are identified. Flynn and Lane then examine central concepts to achieve individual well-being. These include pre-event, during an event, and post-event responsibilities. They conclude with a review of concrete initiatives that unite organizations, leaders in organizations, and all employees around a shared value of promoting health and reducing negative consequences.

Parbudyal Singh (Chapter 10) tackles the challenges of maintaining work motivation during trying times. His review of many current theories of work motivation finds them only partially useful. Based on interviews with staff at a New York hospital after 9/11, along with archival data, press reports and recent literature, he distills important factors in motivating employees 'under attack'. This hospital lost some of its employees in the 9/11 attack as well as responding to the needs of others injured in the attack and their own workforce. Hospital employees continued their work during and after the attack, even working harder. Leadership, aided by the availability of a disaster plan, provided clear instructions and visible examples of commitment. Employees in the nursing profession generally are motivated to help in times of need. In addition, a sense of patriotism, coupled with a love for New York, supported high levels of work motivation. Singh suggests ways in which organizations can incorporate some of these messages in their own response to disasters.

Robyn Gershon and her colleagues (Chapter 11), using archival information and interviews with individuals who left the WTC after the terrorist attacks, distill lessons about employee responses to this workplace disaster and offer recommendations for workplace preparedness. Workplace readiness not only reduces injury and death but also preserves organizational assets and supports continuous operations. Information about individual responses to disaster is central to emergency preparedness. Individuals rarely panic during these emergencies and we have come to understand the conditions for panic. Emergency preparedness is the

process of preparing for and recovering from disasters such as 9/11. The authors review key elements in emergency planning, including specific codes and standards. They conclude with findings from their WTC Evacuation Study. They collected data from over 1400 individuals, almost 10 percent of those who evacuated the two towers. These data identified individual, organizational and environmental factors that served as barriers to evacuation and progression. They conclude with specific recommendations for improving the evacuation of high-rise buildings. These are presented in the larger context of disaster mental health. Organizations have considerable leverage in addressing disaster mental health through providing social support and tangible services, employee assistance programs, and resilience training.

Finally, Jody Hoffer Gittel and her colleagues (Chapter 12) focus specifically on airline industry responses to 9/11. The airline industry faced devastating financial losses following these terrorist attacks. This chapter examines factors associated with the success of some airlines in rebounding quickly and the difficulties encountered by others. It considers employee relationships, financial reserves, and the underlying business model in 10 large airline companies. All three factors were important in maintaining productivity. Interestingly, employee relationships were central in the development and enactment of a viable business model. Some organizations do well in a crisis – particularly those having resilience. Contrasts of Southwest Airlines and US Airways are provided in some detail. A low-cost business model achieved through long-term positive employee relations, coupled with adequate financial reserves, allowed Southwest to return quickly to business as usual. The importance of positive employee relationships in this rebound is highlighted.

The world has become a less safe place over the past few years and threats of terrorism as well as actual terrorist attacks will be with us for some time. Organizations and their employees remain prime targets for such attacks. It is vital that organizations and their leadership be better prepared for and better able to recover should such attacks occur. We hope that this collection brings these issues to the forefront and strengthens the ability of organizations to anticipate, plan for, and respond to such disasters. We need resilient people and adaptive organizations.

NOTE

1. Preparation of this manuscript was supported in part by York University, Canada and Lancaster University, UK.

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