

## TERRORISM THREATS AND PREPAREDNESS IN CANADA: THE PERSPECTIVE OF THE CANADIAN PUBLIC

---

Stacey Gibson, Louise Lemyre, Mélanie Clément, Marie-Pierre L. Markon, and Jennifer E. C. Lee

---

Although Canada has not experienced a major terrorist attack, an increased global pending threat has put preparedness at the top of the Canadian government's agenda. Given its strong multicultural community and close proximity to the recently targeted United States, the Canadian experience is unique. However, minimal research exists on the public's reactions to terrorism threats and related preparedness strategies. In order for response initiatives to be optimally effective, it is important that the public's opinions regarding terrorism and preparedness be considered. This qualitative study examined perceptions of terrorism threats among Canadians living in Central and Eastern Canada ( $N = 75$ ) in the fall of 2004. Conceptualizations of terrorism threat, psychosocial impacts, and sense of preparedness were explored in a series of qualitative interviews. Findings revealed that the majority of Canadians did not feel overly threatened by terrorist attacks, due in part to a perception of terrorist threats as related to global sociopolitical events and a positive Canadian identity. In addition, while most respondents did not feel they were individually affected by the threat of terrorism, there was some concern regarding larger societal impacts, such as increased paranoia, discrimination, and threats to civil liberties. Participants' views on preparedness focused largely on the utility of emergency preparedness strategies and the factors that could mitigate or inhibit preparedness at the individual and institutional levels, with a specific focus on education. Finally, the significant relevance of these findings in shaping terrorism preparedness, both in Canada and generally, is discussed.

**T**ERRORISM THREATS and attacks on western targets have increased since September 11, 2001. In the fallout of the attacks on the Pentagon and the World Trade Centers in the United States, as well as the subsequent London and Madrid bombings, speculation on future targets continues. This has been intensified by several recent discoveries of major planned terrorist attacks worldwide. For instance, Canadian authorities recently arrested 17 suspects accused of knowingly participating in a terrorist group and plotting bomb attacks on a series of Canadian institutional targets.<sup>1</sup>

In 2005, the Canadian Security Intelligence Service maintained that, ". . . with the exception of the United States, there are more terrorist groups active in Canada today than in any other country in the world."<sup>2</sup> Moreover, Canadians' experience with terrorism threats is not limited to recent events. Long before September 11, Canada experienced domestic terrorist attacks, such as the FLQ crisis in Quebec in the late 1960s, as well as internationally related incidents, including attacks on the Turkish Embassy in 1985 and the Iranian Embassy in 1992. In addition, several

---

Stacey Gibson, Marie-Pierre L. Markon, and Jennifer E. C. Lee are doctoral candidates in the School of Psychology, University of Ottawa. Louise Lemyre, PhD, FRSC, is a Professor, School of Psychology, University of Ottawa; R.S. McLaughlin Research Chair; and Director of Gap-Santé Research Unit at the University of Ottawa. Mélanie Clément, PhD, was formerly Research Coordinator, Gap-Santé, University of Ottawa.

terrorist activities were initiated on Canadian soil, including the bombing of an Air India aircraft traveling from Vancouver to London, in which 329 people were killed.

The global threat of terrorism has put emergency preparedness at the top of the Canadian government's agenda, as reflected in the creation of specialized federal departments and preparedness initiatives. However, for this response to be optimally effective, it is important that the public's opinions regarding terrorism and preparedness be considered, as perceptions of risk can affect individuals' related decision-making strategies<sup>3,4</sup> as well as their subsequent behaviors.<sup>5-8</sup>

Given its strong multicultural community and close proximity to the U.S., Canada's experience is a special one, but little research exists on the public's reactions to terrorism threats and preparedness strategies in Canada. In conjunction with the present study, a nationwide survey on Canadians' perceptions of terrorism demonstrated that the public was generally not concerned about the threat of attacks in Canada.<sup>9</sup> In addition, it has been found that Canadians generally do not consider terrorism to be a threat to health.<sup>10</sup> Such findings may surely generate concern among emergency officials and warrant further investigation.

These quantitative studies offer insight into the public's general attitudes and perceptions, but qualitative studies are a useful complement in that they provide additional, specific information about *how* these attitudes are formed and transmitted in day-to-day life, through analysis of participants' own statements and representations. Thus, qualitative research on terrorism threats and preparedness can serve as a powerful tool for researchers and emergency officials to further understand how the public views these occurrences.

Similar studies elsewhere have provided extensive knowledge regarding public attitudes toward the threat of and response to attacks involving biological,<sup>11,12</sup> chemical,<sup>13</sup> and radioactive<sup>14</sup> agents. For instance, it was discovered that peoples' reactions to chemical and radioactive threats and attacks often were fatalistic in nature, such that they believed that any protective action they took would be useless.<sup>13,14</sup> Despite this, it was also demonstrated in all four cited studies that the public does want to be informed about the threats and measures that can be taken in the event of such risks and that they would most likely turn to the media, such as television and radio, for this information.<sup>11-13</sup> Knowing what the public believes is imperative so that emergency managers can develop effective communications campaigns to help people respond to these threats. Indeed, the importance of knowing what, and how often, people discuss information about hazards and preparedness has been echoed elsewhere, including a review of 50 years of disaster research, disseminated by the Committee on Disaster Research in the Social Sciences.<sup>15</sup>

These studies provide excellent insight into how individuals perceive the threat of terrorist attacks and how officials

can respond effectively to the needs of the American public. However, the distinctive identities and experiences of individuals in other countries may provide further knowledge as to how these attitudes and perceptions are formed. Furthermore, identifying these similarities and differences may allow for the development of more targeted risk management approaches, which may ultimately be more effective. Thus, broadening these studies to identify similar and unique attributes in other countries, such as Canada, merits investigation.

The present qualitative study examined perceptions of terrorism threats among Canadians in eastern and central Canada. Focus group interviews were conducted to assess individuals' conceptualizations of possible terrorism threats, as well as the potential manner in which these threats affect their day-to-day lives and their opinions on preparedness in Canada.

## METHOD

### *Participants*

Volunteer participants were recruited from the Canadian public using a variety of methods. Notices describing the research, with contact information, were posted in various public areas. Electronic versions of the notice and verbal notification of the study also were disseminated via various community organizations across Canada. Participants were invited to take part in a study examining Canadians' thoughts on terrorism, and they were encouraged to share their ". . . concerns, views and needs regarding chemical, biological, radiological and nuclear terrorism in Canada." Participants contacted the researchers using the information on the recruitment posters. No potential volunteers were excluded from the focus groups, provided they met the recruitment criteria described in the posters. When there were more volunteers than required, extra focus group sessions were held to limit groups to fewer than 12 participants.

Groups of participants were selected to ensure a range of opinions from Canadians in various areas, both urban and rural. The breakdown of the seven focus groups was as follows: Interviews with groups in urban centers included a group of younger community-college students (Ottawa, Ontario); a group of senior citizens (Winnipeg, Manitoba); a mixed-age group (Toronto, Ontario); a Francophone group (Montréal, Québec); and an Asian group (Toronto, Ontario). Interviews with groups in rural centers (nonurban communities with a population under 15,000) included an Anglophone group (Morris, Manitoba) and a Francophone group (Hawkesbury, Ontario). With the exception of the rural groups, which were composed of only Caucasian participants, and the Asian group, all groups

were made up of various ethnic and racial backgrounds, including Caucasian, black, South Asian, and West Asian/Arab. Altogether, 75 participants were recruited to participate in the focus groups (27 males, 48 females). Each focus group consisted of 8 to 10 participants, with the exception of the students, who were split from a group of 24 participants into four smaller groups.

It should be noted that this sample does not generalize nationally, given the lack of participants from western Canada, northern Canada, and the Maritimes, and the limited number of focus groups held with people living in rural Canada. However, as conveyed in the description of the final sample, efforts were made to recruit participants from various geographic, demographic, and cultural backgrounds to collect a diverse and thorough set of viewpoints.

### *Interview Questions*

The focus groups were guided by a series of open-ended questions. This included questions regarding participants' concerns about terrorism in Canada; which possible scenarios concerned them the most; how they perceived the threat to have affected themselves as well as their community; what they had done to cope with terrorism threats and what they had done to prepare; and their views on information sources, key players, and emergency measures.

### *Procedure*

The focus groups were conducted over a 1-month period in the fall of 2004. In each focus group, the interviewer began by briefly explaining the purpose of the study and answering any questions. Issues of anonymity and confidentiality were discussed, and participants were told they could remove themselves from the study at any time without repercussion. Moreover, the interviewer explained that disclosure with regard to any of the interview questions was completely voluntary and that all opinions were welcomed, with no right or wrong answers. Participants then read and signed a consent form and answered a short demographic questionnaire. The focus group sessions lasted between 2 and 3 hours. The interviews were tape recorded and later transcribed. All identifying information was removed from the transcripts.

The procedures followed to obtain results for this study were drawn from a modified conceptualization of Grounded Theory.<sup>16</sup> The approach involves open, creative examination and interpretation of data, while using one's experience to recognize, rather than guide, the various properties and dimensions of the emerging phenomenon; these related concepts are then grouped into categories. Next, category data are linked to their relevant subcategories, which describe the context and consequences related to the phenomenon under study. It is through these two coding techniques that the phenomenon is understood.<sup>16,17</sup>

Following from the techniques and considerations described above, the interviews were independently analyzed by one of the researchers (SG), who made conscious efforts to openly recognize the emerging concepts related to the phenomenon, as experienced by the participants. The interviews were then reviewed and coded again using the grid, to ensure the concepts were appropriate when applied to the original statements.

In qualitative research, several criteria can be employed to judge the trustworthiness and rigor of results.<sup>18</sup> One such model, as presented by Lincoln and Guba,<sup>19</sup> points to the importance of establishing credibility, transferability, dependability, and confirmability. For this study, credibility was established by consulting researchers in different fields of study, as well as key informants with expertise in emergency preparedness. Transferability of the results was maintained through exhaustive definitions and descriptions of the data, to ensure ease of application in both academics and policy. The study's dependability was enhanced by means of the dense description of procedures and processes presented in this methodology. Finally, confirmability was established by having an external researcher review the progression of data collection and analysis and substantiate the validity of the steps taken and subsequent findings. In addition, interrater reliability was established by having a second researcher (MM) recode 10% of the data, to further ensure the robustness of the steps taken and subsequent findings.

## RESULTS

The analyses of the transcriptions and subsequent development of the coding grid indicated the emergence of four distinct yet related themes in Canadians' perceptions of terrorism threats: (1) the concept of terrorism, (2) the sociopolitical context, (3) outcomes/consequences, and (4) implications for preparedness. A visual representation of these emergent themes is presented in Figure 1. As represented in the model, sociopolitical context and the concept of terrorism are related topics. These two themes contextualize and moderate how Canadians perceive terrorism threats; thus, their interaction has some impact on the outcomes and consequences of these threats and their implications for preparedness.

### *Sociopolitical Context*

The concept of terrorism and terrorism threat was framed unmistakably in a sociopolitical context. Given the timeframe of the interviews, it should be noted that the sociopolitical climate was somewhat different from the current one. Nonetheless, the views expressed by the participants reflected long-standing, presently relevant sociopolitical orientations. Specifically, opinions regarding

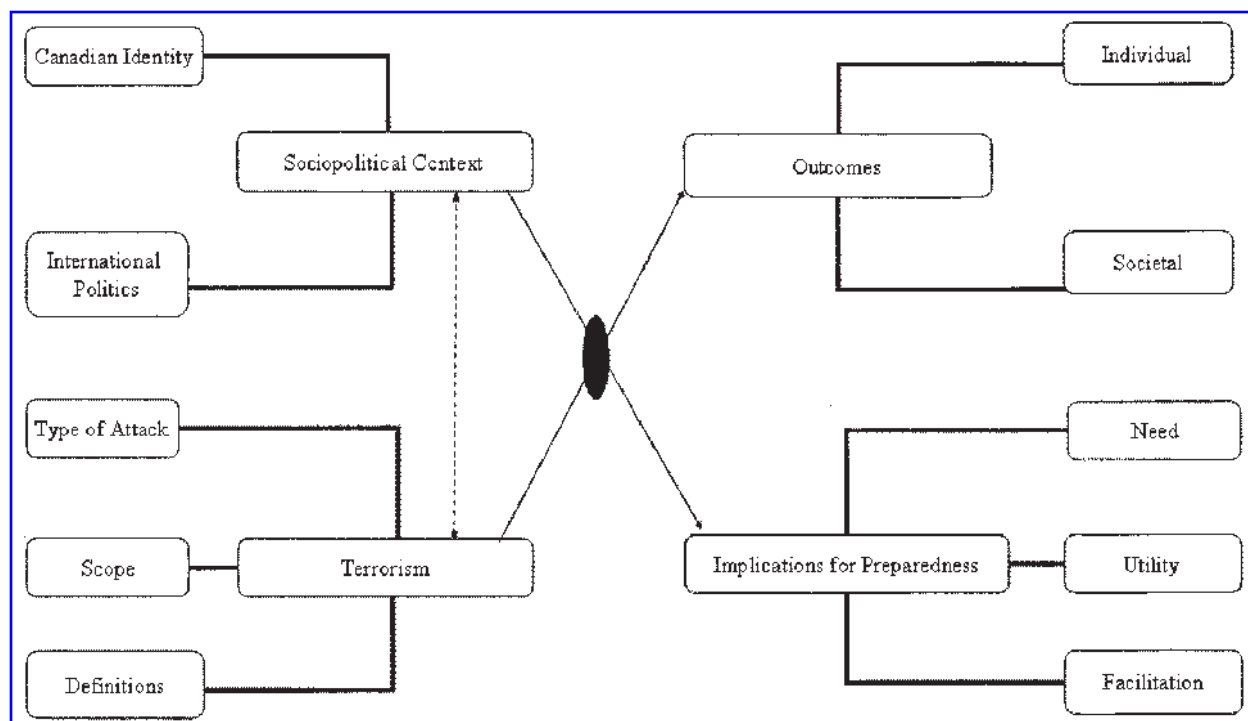


Figure 1. Visual representation of emerging themes related to terrorism threats in Canada

the presence or absence of threats revolved mainly around issues of national identity and international politics, giving insight into Canadians' perceptions of the precursory and motivating factors of terrorism threat. With regard to Canadian identity, the majority of respondents felt that Canada projects an image of a peaceful, diplomatic country and that this protects us from harm. Many statements were made suggesting that "Canada is not a likely target." As one respondent explained,

Canada has a reputation—has always had—for appeasement and diplomacy and making people more comfortable with others around the world, and we are recognized as such anywhere in the world right now. We have never been considered, and that's one of the things why I feel outside terrorists will not really affect Canada, because if it did, I think there would be an outcry from a lot of nations . . . we are considered to be the good guys very often.

In addition, Canada's dedication to multiculturalism was a main tenet of Canadian identity: "We embrace diverse faiths and races and cultures." While some thought this attribute helped protect us by improving our world image, other respondents felt that this was becoming more of a problem than a protective factor:

There's this residue of tension between this fabric of Canadian diversities. . . . It's breaking down that

multiculturalism because certain communities are going at each other with their points of view of what's happening across the world.

In fact, some respondents were more concerned about terrorists using Canada's multicultural image for their benefit: "I think that's one of the concerns that as general Canadians, that our perception internationally has been perceived as a place where terrorists are hiding and doing operations and things." Despite these concerns, most respondents felt that terrorism was not something that has happened in Canada, and thus they did not feel any imminent threat of an attack.

The focus on national identity as a mitigating factor of terrorism threat was extended to the rest of the world in the category of international politics. There was a strong focus on the effect of international involvement, whether politically driven or for economic gain; this was seen by many respondents as a main source of tension between countries and a precursor of terrorist threat and attacks: "We tend to use our economic power to try and influence the governments, to influence their economies, to influence the way they're thinking, and I think that's what creates that environment. . . ." Other sources of conflict, such as religious differences, ethnic conflict, and extremism, were also seen as factors, though to a lesser extent:

Well, I would say that that is probably a fairly major factor, the role of the United States in the world af-

fairs at the moment. But I think it's too simplistic to say that's the only reason for terrorists, and I do think that there is a fundamentalist revival in the Islamic world.

As reflected in the previous comment, specific attention was given to the Middle East, Muslim nations, and the United States as key players in the development of the modern threat of terrorism. In turn, Canada's proximity to the United States, both geographically and economically, was an important consideration for many respondents. As one participant noted, "I think about it happening in the States and affecting us."

### *The Concept of Terrorism*

The phenomenon of terrorism itself was difficult to define for participants, and when asked what they first thought when they heard the word, responses included "attack," "death," "mass destruction," "something big," "senseless acts of violence," "no control," "George Bush," and "the Middle East." The phenomenon was found to be conveyed through statements regarding the *characteristics* of terrorism and terrorists; the *scope*, including the history of terrorism threats; and statements about specific *types* of events.

Characteristically, attributes emerged that distinguished terrorism from other types of aggressive conflict. The most salient topic was the creation of fear, terror, or panic. For instance, one respondent noted that the goal of terrorism was to ". . . scare a lot of people and kill quite a few. . . . Terror. I mean, terror is the point." Many respondents also focused on the innocence and pervasiveness of the victims: "I think of death, and I think of the death of innocent people. For me, it is unjust; something which one cannot understand; something incomprehensible. It causes hurt, it destroys families, it destroys countries." However, while there was some consensus that the attacks were most often aimed at innocent victims, other respondents argued that the terrorists themselves were acting in desperation, to effect some change. One respondent suggested:

Basically the causes of terrorism are dissatisfaction and, in turn, the dissatisfaction which is then fuelled by political and religious beliefs or fanaticism which is then used by the leadership to create the weapon. . . . But the dissatisfaction only happens because there is a very large group of de-franchised [sic] people in the world.

Indeed, there was some debate over where the distinction between war and terrorism lies, and, despite extensive discourse in a few of the focus groups, it was apparent that there is no consensus on this topic. Generally, while it was agreed that the overall goal of terrorism was fear, partici-

pants were largely unable to reach a consensus regarding the classification of "terrorists" and of specific "terrorist acts."

While the categorization of recent events as terrorist attacks was inconsistent, participants had a clear conceptualization of *how* terrorism threats are capable of creating fear, even among Canadians. As previously mentioned, the majority of respondents agreed that a terrorist attack was not likely in Canada. However, participants generally agreed that terrorist attacks are unpredictable, and there was consensus that terrorism can take many forms. As one respondent noted, "Anyone can do it, anytime, anyplace, anywhere." In concordance with this, the most probable types of attacks suggested by the respondents throughout the focus groups were widespread and diverse.

However, the main concern was for attacks involving biological agents, mainly because it is a novel threat that individuals feel the government is unprepared to counter. For instance, one respondent stated, "I would say biological, on my list, biological because of the fact that it does seem to be that you can send biological weapons by mail, that one of the things that can cover the country, we can saturate currency in it and it can spread across."

By contrast, there were mixed opinions regarding the likelihood of other types of attacks, such as those of a nuclear or chemical nature. In addition, many respondents noted their concern over attacks on infrastructure, technology, and communications, as well as the effect of "hoaxes" as a method of spreading fear: "I think the one I feel most is the psychological one." This sentiment was illustrated with the example of the early anthrax scares in 2001: "The anthrax thing—the fear that spread, and it was a very small thing, really, that spread a lot of fear."

Despite the fact that Canadians' attention to terrorism is largely peripheral, many respondents acknowledged its prevalence in the world and throughout history. One participant asserted, "I think it's existed from day one." It was clear, however, that many respondents viewed the recent attacks on Western targets as a change in the scope of terrorism in the world: ". . . before it was maybe localized, whereas now they're getting everybody involved." As one participant noted, the attacks of September 11 were something that ". . . is so global. . . . Like that event affected every country in every way, and that event was really international." Thus, while kept at arm's length, the threat of terrorism was generally conceptualized as a fact of life for Canadians as well.

### *Outcomes and Consequences of Terrorism*

The impact of terrorism threats, as perceived by the respondents, was largely focused on two areas: individual effects and societal effects. Whereas the majority of respondents did not feel they had been affected individually, some did

reveal that the threat of terrorism had affected their thoughts and behaviors. Moreover, there were many who voiced their concerns over the societal effects of the threat and the response by Canada to this threat.

As previously mentioned, the majority of the participants did not feel that they had been affected by the threat of terrorism. When asked if the threat had affected them personally, statements such as “Well, generally I feel safe,” and “Not personally, not on a personal level,” and “It doesn’t even really affect me in my day-to-day living” were common. That said, impacts were presented by some individuals that revolved around affective reactions such as fear, paranoia, and anger, as reflected in the following comment:

You get more paranoid, for one thing. You’re more paranoid about going out in certain situations. Every time there is like even a SARS breakout or something like that, the first thing you think is: oh, my God, there is another terrorist attack or something like that. It’s like simple things in our life now have changed, interrupted. Going to school, certain groups of people you’ve been hanging out with or something like that. . . . You’re scared that they might possibly be terrorists or they might be influenced by a terrorist group.

In addition, some respondents noticed changes in their behavior, such as avoiding certain public gatherings. One respondent described a change in plans to travel to the United States:

It’s like I wanted to go to the Republican convention, but what happened was my family said no to it because they said that if I go to a Republican convention, there might be a terrorist act and everything, so it puts a damper onto that thing, or some things, some major event that only happens like once in a lifetime that you really want to see.

While some respondents avoided certain places, others acknowledged that they had changed their behavior around members of certain ethnic and religious backgrounds; this consisted largely of being conscious of any potentially offensive language and avoiding discussion of controversial issues. As one respondent noted, “You become very sensitive towards where everybody stands and where viewpoints are and their opinions, so as to . . . avoid topics like this.”

Unlike the opinions regarding individual impacts, most respondents did feel that terrorism events and terrorism threats had affected Canadian communities and society as a whole. Some respondents stated that they believed that we had become more paranoid as a society as a result of this threat. In addition, some voiced apprehension regarding the potential loss of our personal freedoms in an attempt to

increase security in Canada. For example, one participant noted, “. . . with the whole fear that’s attached to terrorism, it feels like, at least to me, North America has got very drastic measures as a reaction to fear. So for me, I have concerns with that to what measures will we take.” Specifically, privacy issues were a major concern:

I think . . . another concern is like, you know, what kind of information is being . . . personal identification, information of Canadians are being controlled by whom? And who has access to those information as individuals? You know, there’s privacy issues. So I know there’s a national security issue that we have to take care of, but at the same time, who in the government, which department, which authority has those access? With that, I think that’s one thing that’s of concern for all.

There was also considerable concern over cultural tension rising as a result of the threat, as well as the possibility of increased discrimination and segregation of some minority groups. Comments like “I think it racialized [sic] society as well. It racialized [sic] terrorists,” and “I think it’s more a racial and religious profiling that’s going on” were common. Indeed, incidents of profiling and racial targeting were recounted. As one respondent commented:

I’m not that kind of person, I can treat everyone equally, but I find that right after September 11th, it was pretty terrible, because people were suspicious at everyone Muslim, and everyone Middle Eastern—even people who looked that . . . like Italians were getting, like, harassed and beaten. And in Calgary I think or in Edmonton there was a . . . he was Sikh I think . . . he was killed. And he wasn’t Muslim. And I think that it’s just terrorism that just leads to more violence, you know, it leads to more hatred, more racism.

However, while the majority of the collective outcomes discussed were negative, some respondents acknowledged some positive impacts that the increased awareness of terrorism and terrorism threats had on Canadians. Some respondents suggested that terrorism brought victims together, and others discussed the increase in awareness of world events and other cultures. For instance, one participant thought that it

. . . made us more aware of the other religions, you know, like sometimes you just live like with your group and with your religion and you do that and I mean . . . it made me more aware of the Muslim culture and Islam . . . which I think . . . it’s a good thing you know . . . that we’re all . . . we’re coming together

and learning about each other so you know maybe to prevent something happening like this from hatred.

### *Implications for Preparedness*

From the comments made regarding the context and outcomes of terrorism, certain themes emerged that pertained to preparedness in reaction to terrorism threats. These themes were subsequently grouped into three subcategories: *effectiveness*, referring to the utility and best methods for preparedness; *facilitation*, which included what had or would motivate the respondents to prepare, what they have done in the past, and what they would plan to do in the event of a terrorist attack, including where they would seek information; and *needs*, referring to what the respondents wanted from officials to be better prepared for the threat.

Regarding the effectiveness of preparing, most participants did not feel that attempting to prepare for terrorism was a realistic goal. Throughout the interviews, it was common to hear remarks such as, “Well, I don’t think there is really much we can do,” and “You know that sometimes there’s just absolutely nothing you can do so why worry?” Indeed, the unpredictable nature of terrorist attacks led many participants to question the feasibility of individual preparedness:

How do you really prepare for it? Like, seriously. Like do we know how they’re going to attack? Not a clue. So do we get ready for a chemical warfare? Radiological warfare? Nuclear warfare? Like I mean, how do you prepare for so many options that in so many ways, ways that we haven’t even thought of, how they can attack? How can you prepare for every possible thing? You can’t.

Moreover, some participants felt that excessive attempts to prepare could lead to adverse reactions, such as paranoia and panic, or conversely, apathy. As one participant noted,

And it’s also about how many times you hear it. How many times can the boy cry wolf kind of thing? If there’s always going to repeatedly alert, alert, alert, alert . . . I was at a friend’s building and then the fire alarm goes on, and instead of evacuating the building, my friend was like, “No, don’t worry, this happens all the time.”

In light of the respondents’ opinions on the utility of preparedness, it was not surprising that the overwhelming majority of participants had not done anything, as individuals, to prepare for terrorism. A few respondents did note that they kept a few standard emergency supplies, such as candles and canned food: “We stock our basement pantry, and we’ve got enough stuff for about a week.”

However, when asked what they would do in an emer-

gency situation, the responses were varied. Some respondents, particularly among those in large urban centers, said that they would flee suspicious areas: “Well, that’s the first thing you do, so they tell you run out of the city, run far away from the city as possible, as fast as possible from a terrorist attack.” However, many participants said that they would seek out information before acting:

The first thing I think would make sense is to try to be informed, what happened and why and what would be the cause of it? I don’t know, if you’re not informed, then how can you react, right?

This reservation to act in haste was also connected to feelings of uncertainty:

See, and I wouldn’t assume at all that I would know what to do. My whole point is that I have no idea what to do. I just have to listen and get some guidance. That’s why I said what I’d do is have a cup of tea and cookie. I have no idea what to do.

Sources of planned information seeking were largely directed at popular media outlets, including television, internet, newspaper, and radio. Respondents generally felt that the source would depend on the circumstances:

Yes, radio would be first. Telephone lines would be pretty plugged. You probably wouldn’t get through the telephones. The radio’s only, it seems to me, the reasonable possibility.

When asked who they would like to hear from, responses were varied. For instance, some respondents in urban areas expected to hear from national authorities, while rural participants were likely to turn to local officials for information:

You would automatically go to your mayor or reeve because they run the town, right? So, you go to them for directions. . . . I think that it’s the mayor’s responsibility to be educated . . . to be able to tell your 500 or 5,000 people that live in your town what they’re supposed to do. And if he doesn’t know that information, then he needs to go find it because someone has to be in charge of these 5,000 people or there’s chaos, right? So if it can’t be the reeve or the mayor, then he needs to delegate someone. If it’s after the fact and he can’t do it, then he’s going to have to put someone else in charge, but ultimately someone has to be in charge.

What was clear throughout the interviews was that the source of information needed to be competent: “Who would you like to hear from? The person who knows the

answer.” Subsequently, most respondents said that they would be willing to follow emergency directives provided to them. Generally, respondents agreed that they would trust official information being delivered in a crisis situation, regardless of the source:

Did I trust you before this? Who cares? It’s crazy out there. Am I trusting you now? Yes, because you’re sitting there and you’re going okay, this is what you need to do. . . . Is it a matter of trust or not trust? At that moment, I don’t think people are going to care. I think they just want someone to tell them what to do because we won’t know. . . . You’re telling me what to do, I’m going to do it, because if that’s what’s going to save my family, I will do it.

However, many respondents noted that they would not blindly follow directives without giving them careful consideration. As one respondent noted, “I would evaluate them carefully. I don’t always follow directions. I have to think about them to see that they make sense to me.”

The emphasis on both the appropriateness of the emergency messages and the credibility of the message source was reflected in the tepid overall confidence that participants revealed they had in government emergency management. Most participants stated that they were unsure of Canada’s ability to prepare for and respond to terrorist threats, should they be an issue: “The Canadian government . . . they haven’t done enough to basically do anything.” Others felt that perhaps the government did have a plan in place but that such plans had not been shared with the public: “But it’s not information that should be secret; it’s information that will help me—it’s not something that they should be keeping secret, because it’s me that they’ll be helping at the end of the day.”

Conversely, the vast majority of participants had faith in the ability and competence of emergency responders:

If you’re talking of paramedics, firefighters, all police officers, military—they’re all in a mindset to always be as prepared as possible for any kind of situation. So, of course, we’re going to look for them and look towards them, that they’re going to be telling us the truth.

It remained clear throughout the interviews that government emergency officials and first responders were regarded differently in terms of their ability to respond effectively.

Despite the common assumption that one could not really prepare for a terrorist attack, the respondents did discuss areas of concern where increased preparedness could be achieved. For instance, many participants desired changes and improvements related to existing infrastructure. Examples included integrated first response efforts,

“to set something that’s centralized . . . in terms of just deployment of police and firemen and stuff like that; just the mobilization of those forces.” There was also considerable interest in the development of universal communication strategies, such as “alarm systems” and a “specific station for Canada with a specific untouched and untouchable frequency range.” These measures were considered to be accessible in all circumstances: “I think one of the things that we actually should prepare for terrorism is to try to get some sort of infrastructure that if, you know, the power goes out again, everybody’s accessing information so we know what’s going on.”

However, it should be noted that several participants were concerned about inappropriate levels of preparedness and the potential for causing paranoia in the community: “Would you like to [have] the . . . system where they have the red, green, yellow, different lights with what the terror threat is today? I think that’s an awful way to live. Oh my God, it’s red. I better not go outside today.” While participants appreciated improvements that could be made in emergency preparedness, the focus was on moderation: “. . . if it consumes your daily life, then it’s going to change the way Canada is, and honestly, I wouldn’t want Canada to change the way it is.”

Although protective preparedness activities were discussed, participants felt they could most benefit from education on preparedness. This included information on emergency procedures, as reflected in one participant’s comments:

I think just do their best to educate. I know that’s probably the most important thing . . . try to do something to educate people on situations like this. Would New York have handled their situation different had they been educated? Who knows? Again, hindsight is 20/20. And can we be more prepared even in knowing what to do? Not necessarily, but I think we’d have a little edge on knowing somewhat what to do in the event of a national catastrophe like this. . . . So yes, to give us some pointers, to give us ideas, I think that would be a great idea.

It was also suggested that consideration must be given to people with special needs:

You have to keep in mind the public good, because there’s a lot of people who aren’t like you, who don’t have a clue, who wouldn’t know what to do, who would be needing guidance, and I don’t think we should forget to think about them in whatever is being set up.

In addition, many respondents thought Canadians needed education to respond to the social issues related to



culturally based crises. Specifically, many respondents expressed concern about the danger terrorist threats pose to Canada's multicultural society and how the multiculturalism itself might be a source of conflict:

We embrace diverse faiths and races and cultures, and I think in some ways, I think it starts within our own backyard in the sense that, you know, education system wise, we have to start doing more cultural sensitivity and faith sensitive education within public schools. . . . We have so many new immigrants coming into, especially in Toronto. . . . Everybody had their own cultural baggage from different countries and they are going at each other. On one hand they're trying to deal with their cultural baggage, but at the same time, they're trying to adapt and you know, sustain, you know, some of life in Canada, sort of saying there's always contrast, a contradiction between those cultures. So perhaps it's one of the more important things that Canada should look into, how we can probably make this process easier.

Thus, while most participants did not prepare themselves for terrorism, and even questioned the effectiveness of such strategies, it remained that many believed that education, in response to actual threats and related outcomes, was worthwhile.

## DISCUSSION

This qualitative analysis of these Canadians' perceptions regarding terrorism threats and events offers important insights that can be used to guide future endeavors by emergency researchers and practitioners alike. This research did not include participants from western provinces or from the eastern maritime provinces; given the regional divisions of sociopolitical ideologies across Canada, further research into similarities and differences of national subpopulations could enhance the results provided in this study. However, the results of this study are supported by the subsequent national survey conducted by Krewski and colleagues,<sup>10</sup> and these results still provide a legitimate snapshot of how many Canadians perceive terrorist threats in Canada.

The message that prevailed throughout the interviews was that Canadians overall were not significantly concerned about the threat of terrorism. This was subsequently confirmed in a national representative survey.<sup>9</sup> This finding provides an interesting contrast to the views expressed by Americans since the attacks of 2001 and Londoners following the bombings of 2005, which demonstrated an increase in perceived threat.<sup>5,8,20</sup> We can theorize that higher perceived threat would result from being direct targets of such attacks; nonetheless, it was surprising to discover that

Canadians generally did not sense this threat was an immediate danger on their side of the border. Whereas geographical proximity to the U.S. was apparent to Canadians, a more figurative distance in terms of international relations was considered to be a buffer against any impending threat.

Despite the fact that the participants did not feel immediately threatened, preparedness in Canada remained a complex issue. Individual preparedness was largely considered to be unnecessary or infeasible; the fatalism expressed by many participants was similar to earlier studies exploring concerns about chemical and radioactive materials.<sup>13,14</sup> Despite this, most participants indicated that they wanted to know officials were prepared and wanted to be informed as to which measures were being considered and endorsed in the event of a future threat. Such findings suggest that Canadians may largely depend on the government to provide information and assistance in the event of a terrorist attack. This reliance on government preparedness has been demonstrated with similar hazards, as reported by Lindell and Perry in their review of household adjustment to earthquake hazard.<sup>21</sup>

While this is not an unreasonable expectation, outcomes of past emergencies such as natural disasters—as seen in New Orleans with Hurricane Katrina, as well as the 2005 earthquake in India and Pakistan—underline the value of individual preparedness as well. Certainly, the literature on risk communication emphasizes the importance of making the public an active participant in its own safety, through partnerships with related institutional efforts.<sup>22</sup> In response, the Canadian government has been promoting public participation in preparedness as part of their emergency management strategies, as exemplified by recent public education campaigns (e.g., “72 hours . . . Is your family prepared?”).<sup>23</sup>

Nevertheless, motivating individuals to take preparedness into their own hands also requires that the government seriously consider the public's perceptions regarding terrorism threats, since perception of risk can have an impact on the decision-making strategies and behavior of individuals.<sup>3,5–8,24</sup> For instance, as discussed by Neuwirth and colleagues,<sup>6</sup> perceptions of hazard severity, threat likelihood, and response efficacy have an effect on protection behavior intention. While the Canadian government views terrorism as a serious threat, the public does not, so most participants had not taken measures to prepare for a terrorist event. Such discrepancies in risk judgments between experts and the public are not uncommon; thus, it is imperative that governments understand and consider the public's perspective on such issues to facilitate an effective response.<sup>25,26</sup>

Related to this point is the emphasis that participants placed on the need for more education on terrorism threats and preparedness. This is encouraging, as such education could increase individuals' response efficacy (i.e., their per-

ceived ability to protect themselves through action) and thereby diminish the overwhelming sentiment that participants share: that there is no point in preparing. Indeed, the benefit of response efficacy on facilitating precautionary action has been demonstrated with other risks<sup>6</sup> and crisis situations, such as floods.<sup>26</sup>

Furthermore, despite their skepticism regarding any pending attacks, respondents conveyed their desire to react effectively to these threats, and many confirmed that they would seek out information in the event of an attack. In similar qualitative studies regarding the communication of chemical and biological threats, most participants reported that they would get their information from broadcast media, such as television and radio.<sup>11–13</sup> A few of these studies also reported on the respondents' desire to receive these facts in a clear and simple manner.<sup>13,14</sup> Nevertheless, many of the respondents stated that this information would first be scrutinized to ensure that the details made sense and were relevant; this reflects similar reactions to a nuclear power accident, as studied by Mileti and Peek.<sup>27</sup>

Concern over preparedness issues was not limited to the feasibility and efficacy of preparedness strategies. Some respondents acknowledged that these events had caused them to become more paranoid about people and places that could be somehow connected to terrorist threats; other respondents suggested that societal paranoia was increasing in reaction to both the threat and response. This stigmatization has been reported in similar research exploring the social amplification of risk.<sup>28</sup> Associated with this outcome was a reported concern over the impact of potential terrorism events and responses on the sociopolitical climate in Canada and, more specifically, threats to privacy and human rights; several comments were made regarding the increased discrimination toward targeted minorities. Again, if emergency officials want to effectively promote preparedness in Canada, these concerns must be allotted legitimate consideration. This is especially salient in the context of Canada, which has a strong multicultural make-up.

The results of this study offer compelling insight into how some groups of Canadians perceive the threat of terrorism and the feasibility of related preparedness. However, significant developments have taken place in the past several months that may have affected some of the views presented here. Given the recent high-profile arrests made in response to potential attacks on Canadian soil and the recent change in Canadian leadership (e.g., a ruling Conservative government that demonstrates less neutrality on the world stage), it would be interesting to contrast these findings with more current public perceptions. Such a comparison could demonstrate whether these events have narrowed the disparity in perceived threat between Canadians and Americans. Furthermore, it would provide an indication of how issues such as personal experiences and international self-perceptions contribute to the dynamic sociopo-

litical interactions that help shape perceptions of terrorism threats and attacks.

Political context, both historically and in the present, is an important consideration when interpreting public perceptions of terrorism threats. While the scope of this study was limited to people's perceptions of current government and individual preparedness, as well as perceptions of the hazard itself, future researchers may benefit from further considering and incorporating elements of historical and current political context. For instance, the relative appropriateness in magnitude of previous responses to terrorist incidents may influence individuals' perceptions of the relevance of both present threats and responses. Given the politicized nature of terrorist activities, an investigation of perceptions of terrorism threat in the context of relevant political backgrounds would help to further shape our knowledge, both in Canada and abroad.

Nonetheless, in the context of the present study, it is apparent that Canadians living in eastern and central Canada have an interesting conceptualization of terrorism threats and events. A legitimate effort must be made on the part of emergency officials to understand these perceptions and align individual and institutional needs. Additionally, providing practical education on how to prepare emotionally and physically, as well as promoting existing services and sources of information, is an important first step in the engagement of public participation. Emergency management approaches designed around such considerations may not only more effectively address the public's needs; they also have the potential to substantially enhance the nation's overall response to, and recovery from, terrorism threats and attacks.<sup>28</sup>

## ACKNOWLEDGMENTS

This research was funded by the government of Canada's CBRN Research and Technology Initiative (CRTI), as well as the Social Sciences and Humanities Research Council (SSHRC), and supported by the Institute for Population Health, University of Ottawa. Special thanks to Wayne Corneil for his role in developing the interview strategy and to Nancy Beaugard for her expertise on qualitative research. Gratitude is due also to the members of the Canadian public who agreed to participate in this research and who offered their honest and valid viewpoints. Finally, the authors would like to express their appreciation to the editors and anonymous reviewers of *Biosecurity & Bioterrorism* for their valuable suggestions and comments.

## REFERENCES

1. Toronto bomb plot. *CBC News Indepth* August 4, 2006. Available at: <http://www.cbc.ca/news/background/toronto-bomb-plot/index.html>. Accessed August 8, 2006.

2. Canadian Security Intelligence Service. *Terrorism*. November 14, 2005. Available at: <http://www.csis-scrs.gc.ca/en/priorities/terrorism.asp>. 2005. 8-17-2006. Accessed August 17, 2006.
3. Slovic P, Finucane ML, Peters E, MacGregor D. The affect heuristic. In: Gilovich T, Griffin D, Hahneman D, eds. *Intuitive Judgment: Heuristics and Biases*. New York: Cambridge University Press; 2000.
4. Loewenstein GF, Weber EU, Hsee CK, Welch N. Risk as feelings. *Psychol Bull* 2001;127(2):267–286.
5. Rubin GJ, Brewin CR, Greenberg N, Simpson J, Wessely S. Psychological and behavioural reactions to the bombings in London on 7 July 2005: cross sectional survey of a representative sample of Londoners. *BMJ* 2005;331(7517):606–611.
6. Neuwirth K, Dunwoody S, Griffin RJ. Protection motivation and risk communication. *Risk Anal* 2000;20(5):721–734.
7. Sönmez SF, Graefe AR. Influence of terrorism risk on foreign tourism decisions. *Annals of Tourism Research* 1998;25(1): 112–144.
8. Lerner JS, Gonzalez RM, Small DA, Fischhoff B. Effects of fear and anger on perceived risks of terrorism: a national field experiment. *Psychol Sci* 2003;14(2):144–150.
9. Lemyre L, Turner MC, Lee JEC, Krewski D. Public perception of terrorism threats and related information sources in Canada: implications for the management of terrorism risks. *Journal of Risk Research* 2006;9(7):755–774.
10. Krewski D, Lemyre L, Turner MC, et al. Project 2.1: national survey of health risk perception and acceptability in Canadians. In: Krewski D, Lemyre L, Bouchard L, Brand K, Dallaire C, Mercier P. *Public Perception and Acceptable Levels of Health Risk among Canadians: A Research Report to Health Canada*. Ottawa, Canada: University of Ottawa, McLaughlin Centre for Population Health Risk Assessment; 2005.
11. Glik D, Harrison K, Davoudi M, Riopelle D. Public perceptions and risk communications for botulism. *Biosecure Bioterror* 2004;2(3):216–223.
12. Wray R, Jupka K. What does the public want to know in the event of a terrorist attack using plague? *Biosecure Bioterror* 2004;2(3):208–215.
13. Henderson JN, Henderson LC, Raskob GE, Boatright DT. Chemical (VX) terrorist threat: public knowledge, attitudes, and responses. *Biosecure Bioterror* 2004;2(3):224–228.
14. Becker SM. Emergency communication and information issues in terrorist events involving radioactive materials. *Biosecure Bioterror* 2004;2(3):195–207.
15. Committee on Disaster Research in the Social Sciences. *Future Challenges and Opportunities, National Research Council. Facing Hazards and Disasters: Understanding Human Dimensions*. Washington, DC: National Academy of Sciences; 2006.
16. Strauss A, Corbin J. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 2nd ed. Thousand Oaks, Calif: Sage Publications; 1998.
17. Heath H, Cowley S. Developing a grounded theory approach: a comparison of Glaser and Strauss. *Int J Nurs Stud* 2004;41(2):141–150.
18. Krefling L. Rigor in qualitative research: the assessment of trustworthiness. *Am J Occup Ther* 1991;45(3):214–222.
19. Lincoln YS, Guba EG. *Naturalistic Inquiry*. Beverly Hills, Calif: Sage Publications, 1985.
20. Huddy L, Khatib N, Capelos T. Reactions to the terrorist attacks of September 11, 2001. *Public Opin Q* 2002;66(3): 418–451.
21. Lindell MK, Perry RW. Household adjustment to earthquake hazard—a review of research. *Environ Behav* 2000; 32(4):461–501.
22. Fischhoff B. Risk perception and communication unplugged—20 years of process. *Risk Anal* 1995;15(2):137–145.
23. Public Safety and Emergency Preparedness Canada. Minister Day launches Emergency Preparedness Week [press release]. Available at: <http://www.psepc-sppcc.gc.ca/media/nr/2006/nr20060508-2-en.asp>. Accessed on August 18, 2006.
24. Fischhoff B, Slovic P, Lichtenstein S. Lay foibles and expert fables in judgments about risk. *Am Stat* 1982;36(3):240–255.
25. Slovic P, Malmfors T, Krewski D, Mertz CK, Neil N, Bartlett S. Intuitive toxicology.2. expert and lay judgments of chemical risks in Canada. *Risk Anal* 1995;15(6): 661–675.
26. Grothmann T, Reusswig F. People at risk of flooding: why some residents take precautionary action while others do not. *Natural Hazards* 2006;38(1–2):101–120.
27. Mileti DS, Peek L. The social psychology of public response to warnings of a nuclear power plant accident. *J Hazard Mater* 2000;75(2–3):181–194.
28. Lemyre L, Clement M, Corneil W, et al. A psychosocial risk assessment and management framework to enhance response to CBRN terrorism threats and attacks. *Biosecure Bioterror* 2005;3(4):316–330.

*Manuscript received August 28, 2006;  
accepted for publication January 10, 2007.*

Address reprint requests to:  
Stacey Gibson  
School of Psychology  
University of Ottawa  
1 Stewart St., Room 312B  
Ottawa, Ontario K1N 6N5  
Canada

E-mail: [stacey.gibson@uottawa.edu](mailto:stacey.gibson@uottawa.edu)