Running Head: OLYMPICS AND TERRORISM

Perceptions of terrorism threats at the 2004 Olympic Games:

Implications for sport events

* Professor Tracy Taylor, PhD
University of Technology, Sydney
PO Box 123 Broadway NSW 2007Australia
Tel (direct) 61 2 9514 3664
Fax 61 2 9514 3557

Email: tracy.taylor@uts.edu.au

Professor Kristine Toohey, PhD

Department of Tourism, Leisure, Hotel and Sport Management

Griffith Business School

*Correspondence

Abstract

A legacy of September 11th 2001, and subsequent terrorist attacks such as the Bali, (2002), Madrid (2004), and London (2005) bombings, is evidenced in the increased security measures put in place at major sport events. Heightened attention to safety management and public concern about terrorism threats and perception of risk has now become a fundamental component of the planning and risk management strategies for sport events. On the basis of appraisal-tendency theory (Lerner and Keltner, 2001), we investigated effects of anger and fear on risk judgments of 277 attendees at the 2004 Athens Olympics. Attendees who reported being fearful or feeling unsafe at the Games displayed increased risk estimates and associated concerns, whilst respondents expressing defiance and anger produced opposite reactions. Male respondents had less pessimistic risk perceptions than did females, and men were more likely than women to report that the increased security measures detracted from their Olympic Games experience. Nationality had minimal effect on perceptions of risk except in the case of the host country, with Greek respondents reporting fewer concerns for safety but greater awareness of the security measures present at the Games. The discussion focuses on theoretical, methodological, and practical implications.

Keywords: terrorism, risk, sport events

Perceptions of terrorism threats at the 2004 Olympic Games:

Implications for sport events

Introduction

Since the terrorism attacks of 2001 in the United States of America, concerns about potential terrorism attacks at mega sporting events has been widely speculated upon in the media. Previous concerns arising out of the Palestinian attack at the Munich Olympic Games were starkly revived by the September 11 incident. Atkinson and Young (2002) contend that sporting events, particularly those with considerable media coverage, have become 'prime targets for terrorism' (p. 55).

The importance of the selection of symbolic targets by terrorists has led some experts to predict that it is inevitable that a major sport event will be targeted (Appelbaum, Adeland and Harris, 2005). Due to the physical vulnerability of spectators, large sporting venues align with criteria for terrorists' targets (Whisenant, 2003). There are specific difficulties associated with the security of a large number of people who are seeking to indulge in what has been referred to as 'salubrious socialization' (Chalip, 2006) in a confined site. Alcohol consumption, combined with excitement and passionate support, provides a backdrop of related security issues even without the spectre of terrorism concerns.

The aim of this study was to: investigate the perceptions of terrorism present at one mega-sport event, the 2004 Athens Olympics; to determine the impact of these perceptions on the attendees enjoyment of the event; and to assess the extent to which socio-demographic variables, such as age, gender and nationality, may affect such perceptions. Using the Olympics to study perceptions about terrorism provides us with 'cultural resources for reflecting on identity and enacting agency' (Horne and Manzenreiter, 2006, p.1).

Sport events and the threat of terrorism

Major sport events global television and media coverage, such as the Olympic Games, World Cup Football, and the Tour de France, have particular terrorism 'capital', due to their high public visibility, global media exposure and symbolic representation (Toohey & Taylor, 2006). Roche (2006, p.32) noted, 'there is very little in the international televisual global village to compare with the positive and celebratory, predictably recurrent and relatively frequent character of sport mega-events such as the Olympic Games as media events.'

In concert with these widely articulated concerns about potential terrorism activity, it has been argued that the perceived risk of terrorism has kept spectators away from sporting events (Cashman, 2004). Solberg & Preuss (2005) noted that sport event tourists are especially likely to avoid a destination because of terrorism concerns. Thus, risk management of terrorism has relevance for planning sport events, not only for safety but also for positive economic outcomes, as income to the host region, generated particularly through tourism, is an expected outcome. This perception of a possible terrorist threat has also been found to influence the experience of those sporting enthusiasts who chose to attend sport events. There has been an increasing militarization of sport facilities and events and 'urban spaces in which major sport events occur are increasingly viewed as terrain on which military tactics and weaponry are necessary to protect capital investments, control crowds, and prevent and respond to terrorist attacks' (Schimmel, 2006, p.168).

The relatively low crowd attendance at the 2004 Athens Olympic Games has been in part attributed to terrorism fears (Pelley and Cowan, 2004). Those patrons who attended the Games experienced high-level screening with metal detectors, pat-down searches and other invasive checking techniques (Carey, 2004). These relatively intrusive safety measures could alter and potentially negatively impact attendees' experience. Potential threats need to be taken seriously as sport events have been the target of both realized and thwarted terrorist activity.

Sport events have been targeted by terrorists an estimated 168 different occasions from the Munich Olympic attack in 1972 until 2003 (Carey, 2004; Pelley and Cowan, 2004; Kennelly, 2005). These have included: a car bomb planted by ETA which exploded outside a stadium in Madrid in 2002 before a European Champion Leagues football semifinal match injuring 16 people (Tremlett, 2002); a plot by Islamic extremists to bomb a football stadium in Manchester in 2004 (Cardy and Russell, 2004; *Manchester United dismisses reports that Old Trafford is al-Qaida target*, 2004; Agence France Presse, 2004); and, also in 2004, a bomb threat which occasioned the evacuation of approximately 70 000 fans, players and officials at a football match at Bernabeu stadium in Spain (Agence France Presse, 2004).

The increasing public debate and acts of terrorism have been accompanied by growing academic interest in measuring impacts. Reactions to threats of terrorism and the consequences of terrorism acts have recently been investigated from a range of perspectives, including: emotions and risk perceptions (Lerner, Gonzalez, Small and Fichhoff, 2003), mental health (Schuster et al., 2001), post traumatic stress disorder (DiMaggio and Galea, 2006), substance abuse (Wu *et al.*, 2006), the role of optimism (Ai, Evans-Campbell, Santangelo and Cascio, 2006) and of emotional intelligence (Graves, Schmidt and Andrykowski, 2005), and the impact on intention to travel (Reisinger and Mayondo, 2005).

Depite the growing discouse on terrorism, literature on the relationship between sport events and terrorism has been narrowly focused. The majority of research to date has focused on operational issues relating to venue security and the implementation of technologies designed to identify and deal with terrorist incidents during sporting events (Whisenant, 2003). Other research has examined the media's treatment of security issues at major sporting events (Atkinson and Young, 2002; Toohey and Taylor, 2006). A smaller number of studies have examined the impact of 9/11 on major sport event attendees at the 2002 FIFA World Cup (Toohey, Taylor and Lee, 2003), the 2002 Winter Olympic Games (Atkinson and Young, 2002), and the 2003 Rugby World Cup (Taylor and Toohey, 2006). Within these studies, the interplay of emotions and risk perceptions are evident in both community and individual responses to threats of terrorism. Mega sport events have been labelled as sites of

resistance, with attendees showing defiance and resistance to the possibility of violence through their mere presence at the sporting fixture (Taylor and Toohey, 2006).

To further understand how different emotional responses affect spectators' perceptions of risk, we conducted a survey of attendees at the 2004 Athens Olympics. The study was designed to gauge the perceptions of event spectators with respect of their decision to attend the Games and the impact of security measures on their enjoyment of the events. We explored the effects of fear and anger on perceived risk of terrorism using appraisal-tendency theory (Lerner, Gonzalez, Small and Fichhoff, 2003). The paper begins with a discussion of terrorism and its links to sport and the Olympic Gamesand then places the 2004 Athens Olympics in context. Next, it presents the framework of appraisal –tendency theory used for the study. Finally, it presents and discusses the survey results and implications.

Terrorism and the Olympic Games

In 1972, 11 Israeli members of the Israeli team were taken hostage and ultimately killed in a highly public massacre at the Munich Olympic Games. The incident commenced in the Olympic Village when eight Palestinian terrorists from the militant group Black September scaled the athlete village wall with apparent ease, invaded the athlete residence and initially killed two Israelis and took nine others hostage. Ensuing negotiations were unsuccessful and a botched rescue attempt at the airport resulted in the deaths of the remaining Israelis, along with five terrorists and one German police officer. The Games were halted for commemorative services at which the President of the International Olympic Committee (IOC), Avery Brundage, famously announced, 'The Games must go on.' The incident and its aftermath produced a new approach to Olympic security planning (Sanan, 1996).

Subsequently, at the 1976 Montreal Olympic Games in Canada, no expense was spared on security precautions (Sanan, 1996; Kennelly, 2005). The strict security framework developed for the Montreal Olympics, which arose from an appraisal of what went wrong in Munich, provided a basic schema for all subsequent Olympic venue security operations (Sanan, 1996). However, the tightening of security has not deterred all further terrorist attempts, as terrorists have since targeted different facets

of the Games. In 1992, the Basque separatist group Euzkadi Ta Askatasuna (ETA) and a Marxist group known as Grupo de Resistencia Antifascista Primo October (GRAPO) independently attempted to interrupt the Barcelona Olympic Games by bombing utilities (Sanan, 1996). Both attacks caused relatively minor inconvenience but were unsuccessful in gaining widespread media attention or disrupting the event (Kennelly, 2005).

At the 1996 Atlanta Olympic Games, a bomb exploded during a concert in Centennial Park. One person was killed as a direct result, another died from a heart attack, and over 100 people were injured (Diaz, 2001). The Sydney 2000 Games were not adversely affected by terrorist incidents, however, before the Games, two potential terrorist plots were foiled (Kennelly, 2005). However, soon after these Games, the nature of Olympic security dramatically changed when the world's approach to terrorism experienced a transformation as a result of the events of 9/11.

For the 2002 Salt Lake City Winter Olympic Games, the first Games held after the September 11, 2001, attack, security plans underwent re-evaluation and tighter security was implemented for spectators, athletes, information systems and venues. Overall, the public alarm generated by September 11 resulted in an additional \$US70 million spending on Games security, bringing the Salt Lake City security budget to around \$US500 million (Snider, 2002). Fortunately, no terrorism incidents marred the Games' celebration.

The 2004 Athens Games

The Athens Olympic Games were held in August 2004 over a period of 17 days. The Games included competitions across 28 sports and involved 10,500 athletes and 5,500 team officials from 201 National Olympic Committees. Despite a range of measures taken by Games organisers to ensure a trouble- free, Games time operation, the lead up to Athens was fraught with international concern about insufficient security preparations. Rumours circulated that the United States team would withdraw if the perceived threat of terrorism was too high (Dahlberg, 2004). The US based Federal Bureau of Investigation (FBI) 'established a fully operational command post adjacent to the U.S. embassy in Athens and pre-staged crisis response assets at three strategic locations prepared to deploy, with the consent of Greek authorities, in the event of a

terrorist act' (McGee, 2006, p.13). Despite such concerns, the Games were held without any, publicly known, major security incidents.

The security put in place for the Athens Olympics allegedly cost in the vicinity of an unprecedented one billion dollars. It included tens of thousands of trained personnel, and airborne protection and surveillance, off shore and port security, and even assistance from the North Atlantic Treaty Organisation (NATO) (Kennelly, 2005). Greece also accepted security planning, training and intelligence assistance from a new initiative, an international Olympic security advisory group, formed from representatives of a range of nations' security forces (Grohmann, 2004). The totality of employing all of these measures suggest that Athens was the most guarded Olympic Games in history (Wilson, 2004).

Even with these extensive preparations, Greek officials were continually called upon to reassure the world of their security preparedness. This was particularly evident after several incidents of domestic and international terrorism in 2004. For example, two Greek government vehicles were firebombed, coinciding with a visit to Athens from the IOC President. A local group claimed responsibility and described the attack as a protest against the Games and revenge for workers killed in accidents on Olympic construction sites. Following this, exactly 100 days out from the Games Opening Ceremony, three bombs went off in Athens, raising the possibility that some local groups intended to use the Games for political leverage (Grohmann, 2004).

Other bombings across Europe also raised alarm about terrorism threats for the Games. Of most concern was the bombing of a commuter train that resulted in the death of 201 people and injured more than 1750 in Madrid, Spain, in May 2004. Within a week another bomb went off in regional Spain and an unexploded bomb was found on another rail line. The initial attack in Madrid was the work of a loose-knit terrorist group, allegedly linked to al Qaeda, and it was suggested that the attack was punishment for Spain's involvement in the invasion of Iraq. This led to speculation that athletes from countries with troops in Iraq could be targets at the forthcoming 2004 Athens Olympics (Rufford, 2004). Both athletes and officials raised concerns about the possibility of terrorism via the media and spoke about the emotional effects that these threats were having on their preparations (Kennelly, 2005).

Emotions and risk

Considerable research has been conducted post 9/11 to judge the emotional responses of individual and communities to these terrorist attacks. Frederickson *et al* (2003) reported that following 9/11 Americans frequently mentioned feeling anger and sadness, fear and anxiety and noted that their personal sense of safety and security had been shaken by the attacks. This finding has particularly relevance for sport event organizers as emotions often override probability and can lead to excessive reactions about low-probability risks of further terrorism, more than is statistically warranted (Sunstein, 2003). However, as Frederickson *et al.* (2003) found, positive emotions such as gratitude, interest, etc. are also manifest in times of crisis and these reactions can cushion resilient people against depression and assist them to cope.

Research on affective influences on judgement and choice has found a link between emotions and risk assessment. Emotions, simply put, are a response to ongoing, implicit appraisals of situations, elicited from positive or negative implications for the individual, and are reflective of specific appraisal patterns (Schwartz, 2000). These patterns, or appraisal tendencies, link emotions such as anger, aversion and enjoyment with a greater sense of certainty; and other emotions, such as hope and anxiety with uncertainty. In consequence, appraisal-tendency theory suggests that fear leads people to make pessimistic judgements of future events whereas anger leads to more optimistic judgements (Lerner and Keltner, 2000, 2001). Lerner, Gonzalez, Small and Fischhoff (2003) argue that appraisal theory allows us to 'breakdown emotions into cognitive pieces (or dimensions) that may help to map emotions onto judgments and decision-making processes' (p.118).

The development of performance appraisal tendency theory represented a shift in social psychological research literature. Previously it had been suggested that people engage in more thorough and systematic information processing when they experience negative, compared to positive, mood states. The initial work of Lerner and Keltner (2000, 2001) proposed that the emotional dimension of cognitive appraisals is more complex than can be explained by simple attribution to positive versus negative mood. Instead, they argued that decisions are made based on the person's experience through direct or attendant contact. Emotions focus attention,

memory, and behavior about the current task and are subsequently used to shape responses to novel situations (Wiener, Bornstein and Voss, 2006).

Although designed to assist the individual respond to the event that evoked the emotion, such appraisals persist beyond the eliciting situation and the person may be unaware of the ways in which that emotion has influenced decision making (Lerner *et al.*, 1998). However, the appraisal tendency process suggests that even when a person is aware that the source of his/her emotional state is completely separate from the situation at hand, the emotion continues to affect their decisions (Loewenstein and Lerner, 2003).

Anger, for example, "has been shown to persist past the emotion-provoking episode in the form of a residual arousal or excitation, which may then influence subsequent, unrelated decisions" (Feigenson and Park, 2006: 151). Fear arises from and evokes appraisals of uncertainty and lack of individual control, whereas anger arises from and evokes appraisals of certainty and individual control (Lerner, Small and Loewenstein, 2004). Anger triggered in one situation can evoke a person to seek more optimistic risk estimates and risk-seeking choices in unrelated situations, whereas fear does the opposite (Lerner and Keltner, 2000, 2001). Furthermore, it has been found that fear tends to make a decision maker pessimistic and risk averse, while anger leads to more optimistic risk assessments and risk-acceptant behavior (Lerner and Keltner, 2001).

In a nationwide (US) study on fear, anger and perceived terrorism, Lerner, Gonzalez, Small and Fischhoff (2003) found that fear and anger altered beliefs and attitudes regarding matters of national interest and that anger was the dominant emotion across conditions. Those who experienced more anger had more optimistic beliefs and those with greater fear expressed more pessimism and across all risks. Males expressed less pessimism than did females. To extend this line of argument to the risk of terrorism at sport events, an angry individual would make different choices to travel to a sport event than a fearful one, and might be more likely to choose to attend in the first place.

The nature of terrorism and the emotional reactions it evokes are complex in nature. In consequence, the threat of terrorist attacks at an event such as the Olympic Games and the perception of attendees to this threat needs to be better understood so that

sport event managers can identify ways to implement effective security initiatives that do not impact negatively on spectators' emotional responses by making them more fearful. To address this issue we surveyed 2004 Athens Games attendees about perceptions of terrorism, risk and safety. The findings are interpreted using the work of Lerner *et al.* (2003), which found individuals reporting being in the anger-condition have more optimistic responses than those in the fear-condition. The premise here is that appraisal tendency can be used to explain how emotion may provide an informational cue to decision making.

Method

The approach adopted within this research included a study of attendees at the Athens using a survey instrument designed to ascertain opinions on a range of terrorism, security and safety related issues and implemented at two previous mega sport events (Toohey & Taylor, 2005). Questions were grouped into four categories: game and event attendance statistics; factors influencing decision to attend; security and safety aspects; and demographic information.

The purpose of the study was to ascertain attendee's perceptions about the general threat of terrorism at the Athens Games. Specifically, respondents were asked to indicate if the threat of terrorism influenced their decision to attend the Games, if their experience at the Games had been impacted by concerns about safety or security, and how safe they felt during the Games. Respondents were also asked to rate their satisfaction with safety measures at a range of venues and locations and judge whether the security measures enhanced or detracted from their experience at the Olympics. The measurements used captured subjective data that can reflect the respondents' values and attitudes. However, as argued by Ohmann, Jones and Wilkes (2006:137) 'perceptions have an important role in terms of community opinions of the success or otherwise of the event.'

In addition to the above, the data collected on respondents' demographic background, allowed us to analyse differences in perceptions of terrorism risks, safety measures and levels of satisfaction with security initiatives among attendee subgroups. The

survey included open-ended response sections and the comments elicited from the attendees were useful in assessing emotions such as anger, aversion and enjoyment which were in turn coded as neutral, optimistic and pessimist responses.

Athens Games attendees were randomly approached for questionnaire completion during August 2004. Respondents were selected at three Olympic venue cities, namely Athens, Olympia and Thessaloniki. Surveys were conducted in English and Greek. At each location individuals were randomly stopped by a researcher, using the next person past a particular point technique, and asked if they were willing to complete a short questionnaire on aspects of the Olympic Games. Upon agreeing to complete the survey, a self-complete questionnaire was provided, or the field researcher/s completed the questionnaire via personal interview depending on the participant's preference. Of the questionnaires distributed 277 were fully completed and deemed usable.

Results

The final sample comprised a larger proportion of men (70%) than women (30%). The largest groupings of respondents were from Greece (25.3%), the USA (10%), France (7.6%), the United Kingdom (5.8%), and Australia (5%). The remainder of respondents were drawn from a range of 38 other countries. A total of 23% respondents were under 25 years of age, 55.5% were between 25-44 years, and 21.6% were 45 years and over. Education levels were relatively high as 71.6% of respondents had more than a high school education qualification. A total of 87.2% of respondents completed the survey in English and 12.8% completed the survey in Greek.

Some 45% of respondents had attended previous Olympic Games, including Sydney 2000 (28.9%), 1998 Seoul (4.3%), 1996 Atlanta (13.7%), and 1992 Barcelona (15.5%). The top five reasons for attending the Athens Games were: 1. it is a once in a lifetime experience; 2. for the social experience; 3. cheering and supporting athletes; 4. I'm a big fan of the Olympics; and 5. as part of a holiday. The average number of 2004 Olympic events attended by respondents during their time at the Games was 3.7. The profile of respondents can be seen in Table 1.

Insert table 1 about here

Perceptions

Respondents reported that safety was not a major concern during their time at the Games. Although, respondents felt generally safe at the Games there were some differences by gender and place of residence. Table 2 presents data on the perceptions of terrorism threat by mean scores. The first column represents the answers to the question: How safe did you feel at the Games? and the indicator of 'very safe' (1) to 'unsafe' (5). Respondents were asked to rate the impact of security measures on their enjoyment levels, indicating from 'negative impact' (1) to 'positive impact' (5). And the impact of threat of terrorism on their decision to attend was measured via responses ranging from 'significant impact' (1) to 'no impact at all' (5).

Insert table 2 about here

Female respondents (M = 2.3) indicated that they felt slightly less safe than males (M = 2.1). Respondents that lived locally reported feeling the safest (M = 1.7) followed by those from other parts of Greece (M = 1.8), then Australians (M = 1.9) and Eastern Europeans (M = 2.0). Those feeling least safe were from Taiwan (M = 2.6), Japan (M = 2.7) and Thailand (M = 2.8) respectively.

In general terms, the impact of safety and security measures put in place by the event organisers were viewed neutrally by respondents, but did not detract from their Games experience. Female attendees (M=2.9) and respondents from outside of Greece (M=2.8) were particularly positive about the impact of security on their Games experiences, whilst local (M=3.2) and Greek residents (M=3.1) were more negatively disposed. A consistent pattern emerged in relation to the impact of the threat of terrorism on the respondent's decision to attend the Games. Local residents were less concerned about terrorism than those from other countries. Additionally, nearly half of the respondents indicated that their family or friends indicated some concerns about their decision to come to the Olympics because of possible terrorist attacks. The majority of Greek respondents (69%) noted no such concern evidenced by their family or friends.

Airport and venue security was rated as satisfactory by the majority of respondents. However, security at accommodation sites was listed as relatively non-visible and it was noted that the visibility of security on public transport was also minimal.

The responses to the open-ended safety and security related questions were analyzed and coded for thematic review. Freehand coding was first undertaken using appraisal-tendency theory (Lerner *et al.* 2003). It was refined further through text and Boolean search procedures. Direct quotes were then selected as representative of the themes and discourses presented. Table 3 presents the results of the fear and anger condition responses and associated comments of optimism and pessimism.

Insert table 3 here

The fear related responses clustered around themes of the 'inevitable' happening, that is, these respondents felt that a terrorism attack was going to happen: it was just a matter of when. They spoke about a sense that, wherever a person was in the world, they were at risk of a terrorist attack; and they noted that sport was a 'good target' for terrorists. The pessimistic outlook that accompanied this fear response fell into two categories: for one group the inevitability of terrorism meant that security responses were deemed to be largely irrelevant since, "one can't plan for every contingency"; and, for the other respondents, this inevitability meant they expected a high priority to be placed on tighter security. The anger-related respondents were strident and defiant and their related optimism responses indicated that they felt their chances of being harmed were minimal. They were not overly concerned about the security measures employed by Games organizers.

We also asked respondents about their reactions to the safety and security measures that they experienced at the Games. Table 4 presents these results. In categorizing the comments, anger-condition was attributed to 68% of responses, 16% were related to fear-condition, and the remainder (16%) were indifferent. Anger-conditioned respondents were more likely to react negatively to obvious security measures and be less likely to support tighter security measures, compared with the fear-conditioned respondents. Regardless of emotion, the Greek respondents were more likely to

perceive the security as oppressive. Also, independent of emotion, respondents supported the need for better communication about issues of security and safety and the provision of clear multi-lingual information.

Insert table 4 here

Discussion

The results of the present study suggest that 2004 Olympic Games attendees did not consider terrorism to be a significant deterrent or threat to their safety during the Games. Earlier predictions of the likelihood of terrorism at a major sport event (Atkinson and Young, 2002; Whisenant, 2003) appear to have been largely discounted by the Games attendees that we surveyed. Suggestions that the low attendance evidence at the Games events was related to terrorism (Cashman, 2004; Pelley and Cowan, 2004) were not reflected in the comments of the respondents in the present study. However, we did not survey non-attendees and therefore cannot make any generalizations about why individuals did not attend the Games. The increased security and visible safety checks (Carey, 2004) and military presence in sport facilities was taken for granted by the majority of attendees, although Greek residents found these measures more intrusive and distracting than other visitors.

Fear and anger related attitudes, as expressed via the respondent's comments, were related to beliefs regarding appropriate event security and safety measures and were differentiated on the basis of gender and place of residence. The place of residence differences based on whether the respondent was from the local area or an overseas visitor and has implications for event managers. Anger-related responses corresponded with more optimistic beliefs and fear-related respondents expressed more pessimistic viewpoints about personal safety.

This finding about emotional responses to terrorism threats complements the research of Lerner *et al.* (2003) who elicited similar results when they tested propositions with respect of the effects of fear and anger on perceptions of terrorism against a verbal response scale and an analytical probability response scale. In applying the concept of appraisal-tendency theory to responses of attendees at the Athens 2004 Games we

found that emotion exerts effects on decision-making and judgments. Consistent with previous findings (Lerner *et al.* 2003), gender was an important factor affecting perceptions of possible terrorism threats. The comments of women were more fear related, while men expressed more anger. Women's comments were more likely to be classified as pessimistic and indicated higher perceived risk, whereas men's comments were more likely to be associated with optimism and lower perceived risk.

Future empirical research using appraisal tendency theory could profitably explore how and to what extent particular emotions inform decisions. What could be explored in more depth is how people feel about or interpret the source of their emotion and whether it was incidental or not to their decision making and judgment, as this data could assist us to explain the informational effect. Extending the research to other sport events, from small to large scale, in different locations would provide additional data from which to place these study results into a broader perspective. Dimensions such as the size of the event, including its magnitude (ie the Olympics is once every four years and for many people a once in a lifetime visit); the attendee mix (local and non-local; the different nationalities represented; age and gender); and its media reach (and hence its perceived attractiveness as a terrorist target), along with location (ie the security risk rating of countries) could be of particular research interest.

It was beyond the scope of this study to investigate the feelings and emotions of individuals who stayed at home and did not attend the Athens Olympics, and thus we cannot draw any conclusions about non-attendees, and this is a limitation of the present research. In doing we are cognizant that our sample of attendees may be inherently biased toward less risk adverse people in the first instance, as they were the ones who chose to attend the event. Furthermore, it is noted that the timing of the data collection in relation to its proximity to the most recent significant terrorist attack, is a consideration not fully explored or explained in the context of this study. Appraisal tendency suggests that emotional responses carry over into subsequent decisions, given the likelihood that intensity of emotions would decrease over time it would be likely that the impact of the emotion on decisions would impact over time as well.

Conclusion

Horne and Manzenreiter (2006, p.19) predict that that security issues are likely to come more to the fore in production of sport mega-events as, 'heightened concerns about risk ... will form a substantial research theme in future studies of sport events'. This study has instigated research into this topic in relation to event spectators and provided a framework for thinking about associated emotions and risk. The responses of the 2004 Athens Games attendees to terrorism threats have implications for the analysis of risk management and for spectators' expectations of safety and security provisions at major sport events.

The safety preparations of the Games organizers were generally well received, although local residents were less enamored of the restrictions that accompanied the increased security measures at sporting venues than were overseas visitors. This is consistent with other findings (Taylor and Toohey, 2006) and suggests that the institution of a public relations campaign in the city hosting the event to educate local residents about changes to their normal event security procedures should be considered.

The existence of a distinctive 'culture of fear' in contemporary societies has been the centre of much public discussion and debate. Sport events may provide one site of resistance to this reactive emotion as some attendees used their presence as a form of defiance and a physical statement supporting the separation of sport and politics. Consistent with appraisal-tendency theory, individuals who displayed anger tendencies, rather than fear, have seen their attendance at sport events as a means by which to optimistically deal with the situation. Individuals displaying fear conditioned responses also attended the Games, however, they placed a greater reliance on good safety and security to feel comfortable with their attendance. Further research into emotional responses at sport events is needed to better explore the underlying complexities and relationships of the various reactions.

This project has provided further information on perceptions of terrorism amongst sport tourists through studying these occurrences at one specific sport event and one host location, the 2004 Olympic Games in Athens. There is need now for further research to be conducted to build a more extensive and expansive body of data and knowledge. Such information would be of use to sport event organizers and managers

so that the issues raised can be addressed during the planning and implementation of the event. It is suggested that future studies consider the adoption of multi-method approaches, including the conduct of surveys, interviews and media analyses to gain perceptions from a range of different stakeholders, not just attendees.

Future Olympic Games and major sport event organizers should be cognizant of different market segmentations and the differing perceptions of terrorism, safety and security that were demonstrated in the present study. The next Olympic Games will be held in Beijing in 2008 and the plans for the Chinese city's Olympic Village include the intensive presence of telecommunication technologies whereby the entire Village will be 'an e-community, with the existence of an on-line square devoted to all activities related to digital interaction ... that also guarantees safety with CCTV and sophisticated surveillance systems' (Muñoz, 2006, p.185). It remains to be seen if continued predictions of terrorism at a major sport event (Appelbaum, Adeland and Harris, 2005) will lead Games attendees at the next Olympics in Beijing feeling any more trepidation than was expressed by the Athens attendees.

References

- 2004 Bomb scare halts Real Madrid match. (2004). *The Age*, Retrieved December 13, 2004, from http://www.theage.com.au/news/soccer/Real-bomb-scare/2004/12/13/1102786984586.html?oneclick=true
- Agence France Presse. (2004, April 21). UK police foil stadium bomb plot. *The Sydney Morning Herald*, p. 15.
- Ai, A. L., Evans-Campbell, T., Santangelo, L. K., & Cascio, T. (2006). The traumatic impact of the September 11, 2001, terrorist attacks and the potential protection of optimism. *Journal of Interpersonal Violence*, 21, 689-700.
- Appelbaum, S., Adeland, E., & Harris, J. (2005). Management of sports facilities: Stress and terrorism since 9/11. *Management Research*, 28(7), 69-83.
- Atkinson, M., & Young, K. (2002). Terror games: Media treatment of security issues at the 2002 winter Olympic games. *Olympika: The International Journal of Olympic Studies*, 11, 53-78.
- Cardy, P., & Russell, A. (2004). Man U suicide bomb plot. Retrieved April 27, 2004, from http://www.thesun.co.uk/article/0,,2-2004180985,00.html
- Carey, J. (2004). Superdome, New Orleans step up security at game. Retrieved February 20, 2004, from http://search.epnet.com/direct.asp?an=J0e092086672804&db=afh
- Cashman, R. (2004). Athens 2004: The no show game: National forum online. *Online opinion* Retrieved August 15, 2005, from http://www.onlineopinion.com.au
- Chalip, L. (2006). Towards a distinctive sport management discipline. *Journal of Sport Management*, 20(1), 1-21.
- Dahlberg, P. (2004). US debates on sending team to Athens Olympics. Retrieved October 13, 2004, from

- $http://www.thebatt.com.news/2004/05/07/Sports/u.Debates.On.Sending.Team.\\ To.Athens.Olympics-679534.shtml?page=1$
- Diaz, G. (2001). Olympics stress safety: Salt Lake City officials will reevaluate the safety measures of the 2002 Olympic Games. Retrieved May 30, 2004, from http://search.epnet.com/direct/asp?=2W73967318095&db=nfh
- DiMaggio, C., & Galea, S. (2006). The behavioral consequences of terrorism: A meta-analysis. *Academic Emergency Medicine*, *13*(5), 559-566.
- Feigenson, N., & Park, J. (2006). Emotions and attributions of legal responsibility and blame: A research review. *Law and Human Behavior*, *30*, (2)143–161.
- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the united states on September 11th, 2001.

 **Journal of Personality and Social Psychology, 84(2), 365-376.
- Graves, K. D., Schmidt, J. E., & Andrykowski, M. A. (2005). Writing about September 11, 2001: Exploration of emotional intelligence and the social environment. *Journal of Language and Social Psychology*, 24, 285-299.
- Grohmann, K. (2004). Athens bombs raise new worries over Olympics. *Financial Times*, Retrieved May 5, 2004, from http://www.ft.com/home/asia
- Horne, J., & Manzenreiter, W. (2006). An introduction to the sociology of sports mega-events. *Sociological Review*, (s2), 1–24.
- Kennelly, M. (2005). *Business as usual: Elite Australian athletes' viewpoints of terrorism post 9/11*. Unpublished honours thesis, University of Technology, Sydney.

- Lerner, J., Goldberg, J., & Tetlock, P. (1998). Sober second thought: The effects of accountability, anger, and authoritarianism on attributions of responsibility. *Personality and Social Psychology Bulletin*, 24,563–574.
- Lerner, J. S., Gonzalez, R. M., Small, D. A., & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological Science*, 14(2), 144-150.
- Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgment and choice. *Cognition and Emotion*, *14*(4), 473-493.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, 81(1), 146-159.
- Lerner, J., Small, D., & Loewenstein, G. (2004). Research report heart strings and purse strings carryover effects of emotions on economic decisions.

 Psychological Science, (15) 5, p337-341.
- Loewenstein, G., & Lerner, J. (2003). The role of affect in decision making. In R. Davidson, K. Scherer, & H.Goldsmith (Eds.), *Handbook of affective sciences* (pp. 619–642). Oxford: Oxford University Press.
- Manchester United dismisses reports that Old Trafford is al-Qaida target. (2004).

 Retrieved Apr 27, 2004, from

 http://cnews.canoe.ca/CNEWS/World/WarOnTerrorism/2004/04/20/pf429980.html
- McGee, J. A. (2006). International special events. *FBI Law Enforcement Bulletin, January*, 10-18.
- Muñoz, F. (2006). Olympic urbanism and Olympic villages: Planning strategies in Olympic host cities, London 1908 to London 2012. *Sociological Review*, 54(S2), 175-187.

- Ohmann, S., Jones, I, & Wilkes, K. (2006). The perceived social impacts of the 2006 Football World Cup on Munich residents. *Journal of Sport & Tourism*, 11(2)129 – 152.
- Pelley, S., & Cowan, L. (2004). Spectators shun Olympic Games [TV]: CBS Evening News with Dan Rather: CBS.
- Reisinger, Y., & Mavondo, F. (2005). Travel anxiety and intentions to travel internationally: Implications of travel risk perception. *Journal of Travel Research*, 43(3), 212-225.
- Roche, M. (2006). Mega-events and modernity revisited: Globalization and the case of the Olympics. *Sociological Review*, *54*(S2), 25-40.
- Rufford, N. (2004, May 9). 24-hour guard for Olympians: Armed forces to protect our stars. *The Sunday Telegraph*, pp. 1-2.
- Sanan, G. (1996). Olympic security operations 1972-94. In A. Thompson (Ed.) *Terrorism and the 2000 Olympics*. Canberra: Australian Defence Studies Centre.
- Schimmel, K. S. (2006). Deep play: Sports mega-events and urban social conditions in the USA. *Sociological Review*, *54*(S2), 160-174.
- Schuster, M., Stein, B., Jaycox, L., Collins, R., Marshall, G., Elliott, M., Zhou, A, Kanouse, D., Morrison, J., & Berry, S. (2001). National survey of stress reactions after the September 11, 2001, terrorist attacks. *The New England Journal of Medicine*, 20(345), 1507-1512.
- Schwarz, N. (2000). Emotion, cognition, and decision making. *Cognition & Emotion*, 14(4), 433-440.
- Snider, M. (2002). Safety in numbers. *Maclean's*, 115(6), 22.

Solberg, H. and Preuss, H. (2005). Major Sporting Events - are there any long-term tourism impacts? In J. Allen (Ed.), *The Impact of Events*. Sydney: Australian Centre for Event Management, University of Technology, pp. 134-142.

Sunstein, C. (2003). Terrorism and probability neglect. *Journal of Risk and Uncertainty*, 26(2-3), 121-136.

.

- Taylor, T., & Toohey, K. (2006). Security, perceived safety and event attendee enjoyment at the 2003 rugby world cup. *Tourism Review International*, 11(4), 257-267.
- Toohey, K. & Taylor, T., (2005). <u>The Olympics and terrorism.</u> Unpublished paper presented at Australian Society for Sports History, Sporting Traditions XV, July, Melbourne.
- Toohey, K., & Taylor, T. (2006). 'Here by dragons, here be savages, here be bad plumbing': Australian media representations of sport and terrorism. *Sport in Society*, 9(1), 71-93.
- Toohey, K., Taylor, T., & Lee, C. (2003). The FIFA World Cup 2002: The effects of terrorism on sport tourists. *Journal of Sport Tourism*, 8(3), 167-185.
- Tremlett, G. (2002). ETA bomb targets Real Madrid's stadium. *The Scotsman*Retrieved April 24, 2004, from
 http://sport.scotsman.com/topics.cfm?id=471652002
- Wiener, R., Bornstein, B., & Voss, A. (2006). Emotion and the law: A framework for inquiry. *Law and Human Behavior*, 30 (2), 231-240.
- Whisenant, W. (2003). Using biometrics for sport management in a post 9/11 era. *Facilities*, 21(5/6), 134-141.

Wilson, S. (2004). IOC close to deal for cancellation insurance. Retrieved April 22, 2004, from http://slam.canoe.ca/Slam/Olympics/2004Athens/2004/04/19/428832-ap.html

Wu, P., Duarte, C. S., Mandell, D. J., Fan, B., Liu, X., and Fuller, C. J. (2006).
Exposure to the world trade center attack and the use of cigarettes and alcohol among New York City public high-school students. *American Journal of Public Health*, 96, 804-807.

Table 1: Respondent profile

Attribute	Percent		
Gender			
Female	30		
Male	70		
Age group			
Under 25 years	23.0		
25-34 years	34.7		
35-44 years	20.8		
45-54 years	11.7		
55+ years	9.9		
Place of residence			
Greece	25.3		
North America	12.2		
France	07.6		
United Kingdom	05.8		
Other Europe	20.7		
Australia & NZ	06.5		
Asia	10.9		
South America	04.4		
Attendance at previous Olympics			
Sydney 2000	28.9		
Seoul 1998	04.3		
Atlanta 1996	13.7		
Barcelona 1992	15.5		
	(n= 277)		

Table 2: Average scores of safety, security and terrorism perceptions

Item	Overall	Gender		Local	Other	Outside
		Males	Females	Resident	Greece	Greece
	Mean SD	Mean SD	Mean SD	Mean SD		
How safe did you feel at the Games?	2.13 (0.99)	2.09 (1.11)	2.26 (1.20)	1.73 (0.79)	1.83 (0.51)	2.20(0.54)
How did the security and safety measures impact your enjoyment of the Games?	2.96 (0.76)	3.10 (0.93)	2.90 (0.69)	3.21(.078)	3.10 (0.62)	2.82(0.98)
What impact did the threat of terrorism have on your decision to attend the Games?	2.79 (1.16)	2.73 (0.93)	3.03 (1.06)	3.07 (1.34)	2.86 (1.29)	2.92(1.08)

Table 3: Fear, anger, optimism and pessimism by gender

Impact of emotion		
Response tendency to	F= female	
perceptions of risk	M= male	
Fear	All the world is dangerous now (F)	
	Terrorism is now unavoidable (F)	
	Sport is a target – take precautions (M)	
Anger	We need to stand up to terrorists (M)	
	Terrorists have demonstrated that they will stoop	
	to any length to ruin what we call fair play. We	
	cannot let them succeed in their attempt to destroy	
	our freedom (F)	
	Look at the Madrid bombings – don't let them	
	scare us (M)	
	If we spend money on terrorism because we are	
	scared then the terrorists have won (M)	
	I am not going to bow to any terrorists (F)	
Optimism	Chances of being harmed are small (M)	
	There are absolutely no chances of danger to my	
	safety (F)	
	The Olympics are too important to be a target (M)	
Pessimism	You just can't predict where they will be (F)	
	Tighter security is needed at the venues (F)	
	Unfortunately, this (terrorism) might become a fac-	
	of life for the foreseeable future (F)	

Table 4: Anger and fear condition responses to security

	Response to security	
	Daunting to see machines guns but also	
Fear Condition	supporting to know security is close	
	If there had been less security I would have felt	
	less safe	
	Use better trained security and don't just hire at	
	the last minute	
	The security personnel should act professional	
	and be serious about the checks	
	Don't have too many US politicians in town at	
	the same time	
	Terrorism and sport should not mix, keep them	
Anger Condition	separate or else the terrorist has won	
	Too much security – Greece is safe you don't	
	need it	
	Beach volleyball is a happy sport – too much security is bad	
	The whole experience of being checked at the	
	airport, accommodation and not just the sport is	
	too much, it's too intrusive	
	This (the high security) is just making sport too	
	expensive and putting it out of the reach of	
	developing countries	
	People are paying a large sum of money for	
	accommodation we should not be treated like	
	terrorists	