Protective security measures for major sport events: Proposing a baseline standard for the United States

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Aim of paper and research questions
Major sporting events are considered terrorist targets because of the potential for mass casualties. In 2007, thirty-four incidents of suspicious activities at arenas and stadiums were reported to the United States Federal Bureau of Investigation (FBI) (Esposito, 2008). The purpose of this study was to identify baseline protective measures for security management of major sport events in the United States. Baseline protective security measures are implemented as standard operating procedures to serve as routine inspection for a facility (Department of Homeland Security, 2008). The two primary research questions that directed this research project were:

1. What baseline security measures are needed for effective security management of major sport events in the United States?
2. What is the perceived level of importance for the security measures?

Literature review
Protective security measures are designed to devalue, detect, deter, and defend a facility from attack and mitigate consequences of an incident (Department of Homeland Security, 2008). Sport organisations should institutionalise security measures in policy and procedures. The analysis conducted after an incident will assess steps taken dependent upon the availability of security measures, industry standards, and potential threat of terrorism (Hurst, Pratsinakis & Zoubek, 2003). Voluntary best practices, planning options, and guidelines aid facility managers in their security efforts; nonetheless, without mandating adherence to specific standards, security policies and procedures will vary across venues (Hall, 2006). At present, no sport governing body in the United States has enforced safety and security standards for sport stadia. However, in England, the English Football Association (FA) and British government implemented legislation and safety standards for operational acceptance at all soccer stadia in the top four divisions. Specific pieces of legislation prohibited hooliganism, categorised offenses that an individual would be charged with, and covered both domestic and international terrorist threats to sport stadia (Stadia Safety and Security, 2005).

Research design and data analysis
Security standards previously identified by Hall (2006) were assessed using a three round Delphi survey and focus group study. Purposive sampling was used to select participants. The Delphi panel (n = 15) comprised of sport security professionals, including facility managers, emergency managers, police, and government security representatives. Rankings for security measures were assessed during Delphi Round 1 and items ranked in the top quartile were retained for further study. Participants also added items that were missing from Hall’s original
To enhance credibility, transferability, dependability, and confirmability of this study the researcher utilised peer debriefing and member checks. Importance ratings were assessed on a 5-point Likert scale (1 = very low; 5 = very high) during Round 2 and 3. Round 2 and 3 Delphi questionnaire results were analysed using SPSS. Descriptive statistics (mean, median, and standard deviation) were provided for each item. The researcher set an elimination level at 3.5 or below to ensure only the most important measures were retained. A focus group study (n=4) was conducted to validate the Delphi study findings and achieve consensus among key stakeholders. The researcher chose to conduct a Delphi study and focus group study because new knowledge from different sources via different methods (triangulation) would strengthen the validity of the study (Phillimore & Goodson, 2004).

**Results**
The Delphi panel and focus group study participants produced a total number of 33 baseline protective security measures in six categories: **Physical Security**, **Technical Security**, **Access Control**, **Emergency Management**, **Training and Exercise**, and **Weapons of Mass Destruction**. Twelve respondents successfully completed all Delphi Rounds (80%). The mean, median, and standard deviation were recorded. Mean scores ranged from 3.73+/−0.79 to 4.83+/−0.38. The top three mean scores reported included: interoperable communication capabilities (4.83+/−0.38), adequate facility lighting (4.83+/−0.39), and staff security awareness training (4.83+/−0.38). The lowest three mean scores reported included: utilise telephone trap and trace (3.80+/−0.83), electronically scan tickets (3.75+/−0.75), and conduct inspection of stadium using bomb squads after facility lockdown (3.73+/−0.79).

**Discussion and conclusion**
The projections of this study serve as a valuable planning tool for facility managers. Given available resources and limited budgets, security measures considered highly important have been identified to help prioritise efforts. Upgrading security systems can be cost prohibitive (i.e. enhancing interoperable communication capabilities), however, facility managers should consider procedural changes to enhance security levels. For example, conduct in-house staff training programs to address relative threat levels and industry-wide concerns. Sport governing body endorsement for sport stadia baseline security standards in the United States is the ultimate paradigm shift from planning options, guidelines, and best practices. Further analysis is needed to prioritise security efforts based on venue location, capacity, average attendance, and relative threat intelligence.

**References**