Losing sight of people in a crowd can spell disaster, warns new report

July 10 2009

Focusing on technology instead of people is a key factor in events going wrong, according to a major series of reports into crowd behaviour and management, published this week.

Compiled for the Cabinet Office by researchers from two centres within Leeds University Business School (COSLAC and CSTSD), the reports also claim that over-reliance on technical and IT solutions means we fail to learn the lessons from past disasters.

The Understanding Crowd Behaviours reports are the first to bring together sociological and psychological research on events and crowd behaviour, reviewing over 550 academic papers and drawing on in-depth interviews with 27 specialists in the field (police, emergency planners and event managers) to produce detailed guidelines for event organisers. The findings will be of use to all those managing events involving large numbers of people and are particularly timely in the run up to 2012.

The reports are available on the Cabinet Office UK Resilience website (http://www.cabinetoffice.gov.uk/ukresilience/news/crowd-behaviour.aspx).

The researchers cite the recent debacle at the opening of Heathrow's Terminal Five as a prime example of a situation where faith in the power of new software and other technology meant that the importance of people - in this case, training and familiarisation in the new building and systems and involving those on the front line in decision making - was

overlooked.

Researcher in Organisational Psychology, Rose Challenger, and colleagues Professor Chris Clegg and Mark Robinson, believe that an approach which treats technical and sociological/ psychological considerations in parallel - known in organisational psychology as a 'systems approach' - is the best preparation for a crowd event. It would also, they believe, help us learn lessons from previous mistakes.

"A systems approach is widely seen as best practice in organisational management, particularly in managing change - and is clearly applicable in crowd and event management as well," says Challenger, who led the research. "Technical solutions will give you the engineering calculations to determine the ideal width of exits but you need to tie that in with understanding how people will behave and use those exits in given situations and how you will communicate with people in an emergency to ensure best use of them.

"Believing new technology can be the answer to all problems means we are more likely to overlook basic lessons from past events. For example, what happened at the Kings Cross Underground fire is unsurprising given all that is known about human psychology and behaviour from existing research."

In the reports, the team highlights gaps in knowledge and areas where further research is needed, including more detailed analysis of the different types of crowd and their behaviour and better simulation models which take the complexity of behaviour into account.

Also identified is a need for more sophisticated risk assessment tools, which can ensure a full range of 'what if' scenarios are taken into account. The reports highlight how the chaos at Terminal Five was caused not because of one major failure, but when lots of smaller and

otherwise manageable problems had a cumulative effect.

"There can be a tendency when planning events to prepare for the big dramatic 'what ifs' but ignore the smaller, less visible although more likely ones which collectively can cause serious problems," says Challenger. "It's important to ensure your risk assessment isn't blinkered. For example, at Hillsborough there was an over emphasis on hooliganism as that was the big issue of the day, but other more generic safety issues were overlooked. Today, we may tend to focus on the risk of a terrorist attack and ignore more banal risks such as power or transport failures or a gas leak."

Source: University of Leeds ([news](#) : [web](#))

Citation: Losing sight of people in a crowd can spell disaster, warns new report (2009, July 10) retrieved 26 April 2024 from https://phys.org/news/2009-07-sight-people-crowd-disaster.html