

Editorial 3.1 Version 3

The five papers that make up the first issue of the current volume primarily examine the three main blue light emergency services, and also come from four different international contexts and perspectives. There are three contributions relating to the individual services of the police, health and fire & rescue services, which are complemented by two papers that examine the inter-relationships and interoperability between the emergency services themselves and the boundaries and inter-relationship between the emergency services and the public at emergency incidents. Intriguingly these latter two papers both originate from Sweden while the other contributions originate from Australia, the UK and the USA. However what is reassuringly consistent and commendable about all five of the studies we publish in this issue is the clear identification and articulation of the situational and other limitations to each of the authors' papers.

Margaret Loughnan and colleagues from Monash University have been examining risk assessment from a population or community perspective in relation to heatwaves. As they point out, heatwaves are the most dangerous natural hazard faced by Australians and, in common with a lot of natural disasters, they are predicted to become more frequent, more intense and of longer duration in the future. Heatwaves in Australia are often sudden events and can have almost immediate consequences with short-term increases in mortality and morbidity amongst the most exposed or vulnerable populations. Although previous studies have attempted to map the vulnerability of local populations and communities in parts of Canada, the USA and the UK, none of these studies have looked specifically at the implications for emergency service demand. The authors also highlight that, in the past, the response from the emergency services has also been 'predominantly reactive, dispatching ambulances and servicing overcrowded emergency departments'.

The primary aim of this study is therefore to provide an analysis of the spatial distribution of vulnerability with respect to urban populations to extreme heat events in each of the eight Australian capital cities (Perth, Adelaide, Melbourne, Hobart, Sydney, Canberra, Brisbane and Darwin), and from this to develop a spatial index of vulnerability that may be used to predict increases in emergency service demand during hot weather. Their index uses a basket of demographic, environmental and health variables and, using data already available at Postal Area (POA) scale, they are able to identify areas within Australian capital cities that represent 'high risks' in terms of emergency service demand and how risk patterns may change in the future. This information can potentially be used in emergency planning to identify high-risk periods and to operationalise implementation strategies, and service deployments and reconfigurations to minimise adverse impacts. The sensitivity of their data also demonstrates the differences between the eight cities and the need for locally appropriate responses to be designed. The challenge they correctly pose at the end of their paper is, 'how best to translate the science into policy that will lead to change at an individual, community, organisational, and national level'.

While Australian heatwaves may be becoming more numerous and predictable, the subject matter of our second paper, by **Stuart Kirby**, 'spree killings' may be becoming more numerous but yet remain largely unpredictable. Although still relatively rare at a global level, spree killers have become increasingly prevalent in the 21st Century with 43 mass shootings across twenty-five U.S states between 2008-2012 and high profile incidents in the UK (Hungerford, Dunblane) and in Europe (Norway, Belgium). Spree killers are differentiated from mass murderers and serial killers.

Their murders typically occur in a short time period often just one day, thereby creating ‘multiple crime scenes over a short period’. **Kirby** points out that the incidents of spree killings are increasingly attracting vulnerable people and terrorists, with the latter being drawn to a tactic that spreads disproportionate horror and harm. He examines, in detail, the spree killing that occurred on the 2nd June 2010 in Cumbria in the UK, where the killer travelled a 52 mile route, killing 12 people and attempting to kill 16 others. The author first identifies some unique operational challenges, such as being faced by a ‘conscious’ and mobile opponent who is able to choose his geographic area and methodology; adapt his strategy to police tactics; and may not be interested in escape, before going on to explore some the wider challenges that this incident generated for the police response. He also highlights some new challenges that these incidents create for the interoperability between the emergency services and, in anticipation of our two Swedish papers later in the edition, highlights how the effect of different agencies working to different operational objectives and principles can created a dilemma for the police officers on the ground.

Our third paper from **Todd Smith and David DeJoy** is based on a study of 398 career firefighters in three departments in the Southeast of the United States. It examines the ‘safety climate’ (organisational culture?), and tests a model for firefighting that adopts safety climate as a higher order factor comprising 4 sub-factors. It examines the contribution of each of these 4 sub-factors to the safety climate and to the number of injuries being sustained. Each year over 100 firefighter die on duty in the USA and approximately 80,000 are injured with disappointingly little improvement over the last quarter century. This has led commentators to call for radical change within the sector with claims that, ‘some fire service organizations may not assign sufficient importance to safety and thereby create work climates that allow or perhaps necessitate excessive risk-taking by firefighters in the performance of their duties’

There is of course extensive academic literature on the impact of a safety climate or safety culture in the general work environment, although surprisingly little of that is systematically related to firefighting. The authors’ model therefore attempts to draw from the overall safety climate literature but takes into account the ‘distinctive operational characteristics’ of firefighting. The four sub-factors identified from this review are the senior managements’ commitment to firefighter safety; the supervisors or line managerial support for safety; safety policy and programmes in the organisation and safety communication. The study tested the general hypothesis that these four sub-factors are contributing to a safety climate before asking whether perceptions of safety climate are positively associated with safety compliance and safety participant behaviours and negatively related to line-of-duty injuries; and whether safety compliance and safety participation behaviours are negatively associated with injuries.

This study therefore essentially confirms the applicability of the safety climate concept, as conceptualized and operationalized in the general safety literature, to the firefighting service. However the authors also highlight some specific issues arising from their work. These include, the particular importance of organizational and operating unit factors in shaping the firefighters perceptions of the organisational climate; the applicability and support for the climate-behaviour-outcome model that underpins much of the previous research and operational guidance in the sector; and the need to distinguish between compliant behaviour and active participant/citizenship behaviour and for both training and response to go beyond the former.

Our final two papers both result from qualitative studies that examine the inter-relationships between different stakeholders at incident or accident sites. The first by **Linda Kvanlof and Roine Johansson** examines the interaction between emergency personnel and members of the public at road traffic accidents. Their specific focus is members of the public, not as bystanders or neutrals but acting as 'organisationally unaffiliated volunteers', i.e. individuals who arrive at the incident site first and take some action to help the victims (such as calling the emergency service) and deliberately stay to interact with emergency personnel.

Incident sites are temporary workplaces where emergency professionals are obliged to work together and claim both legal and public authority. They are characterised by temporal, spatial and social uncertainty where the need for routines, control and management often increases. Unaffiliated volunteers are traditionally only temporarily welcome to this workplace and the authors investigate how jurisdictional claims (as a form of boundary practice) are used to construct this workspace 'just as much as to establish professional legitimacy' and to distinguish insiders from outsiders.

Although early work on boundary work emphasised the negotiation of boundaries, Kvanlof and Johansson contend (rightly in our view) that at emergency incident sites it is established by control and instruction as emergency personnel are rarely questioned by anyone present and the allocation of role and tasks is not subject to negotiation. The authors examine three boundary practises from their empirical work which emerged as the most distinctive and which are central to their theme of the construction and management of the 'workplace'. The first is in the establishment of the incident cordon and the creation of an arena for jurisdictional claims. The authors argue that cordoning off has material, social and symbolic power. Cordoning off can be inclusive or exclusive and can be used to temporally exclude unaffiliated volunteers or can be used to include them inside the cordon. The authors then consider how the emergency services control or manage the presence of unaffiliated volunteers calling this the 'division of labour' and show how the volunteers are again distinguished from the professionals. If cordoning off is the establishment of boundaries, the division of labour is more about boundary maintenance. Finally the authors examine what they refer to as 'conversations'. Once lives and property have been safeguarded the emergency services will need to investigate the accident and the unaffiliated volunteers are an important source of information. This information needs to be captured, volunteers included and boundaries displaced.

The paper concludes by claiming it is misleading to interpret boundary practises at emergency incident sites as a subject for 'negotiation' as they revolve around the legitimacy and initiative of emergency personnel rather than any negotiation. Similarly they argue that the use of the concept of collaboration is also misleading as rather than working together, albeit in an asymmetrical power relationship, unaffiliated volunteers are allowed to participate, 'only under the supervision of emergency personnel'. Unaffiliated volunteers are however an important source of information and, sometimes, an additional much needed resource. This study contends that if emergency personnel wish to include unaffiliated volunteers, their communication strategies need to be improved.

The paper by **Annika Andersson** and her team from Trollhätan and Gothenberg result from a study funded by the Swedish Civil Contingencies Agency to investigate inter-agency collaboration during large scale emergency exercises in Sweden. The intention is to develop a model to enable these exercises to increase inter-agency collaborative capacity at incidents. The research focussed

specifically on police, ambulance and fire personnel. All the team participated in the planning and delivery of four full scale inter-agency collaborative exercises based on four different scenarios with different participants during the autumn of 2011.

Although the exercises were intended to develop inter-organisational knowledge and practise, the empirical investigation showed that participants primarily practiced routines from their own organisations, utilised well known skills and only practiced collaboration when high workload or inadequate resources demanded it. Collaboration also tended to be practised by people in leadership positions and communication and organisation-specific language and concepts were a common challenge that repeatedly arose between the organisations. Although intra-organisational discussion after one of the exercises was considered fruitful, participants were critical of the lack of a joint evaluation which left them uninformed about their own performance and curious as to how the other organisations viewed their performance. The authors clearly consider that this is not good enough, ' It is important that the exercises fill a proactive function by bringing something more to the preparedness of the organisations than daily work, they should be...designed as an opportunity for participants to develop collaboration competence by identifying boundary objects, and by detecting the situations and phases of an incident where collaboration is a more appropriate solution than parallel work, and vice versa'

In its third year of publication, IJES has tried to adhere to our promise of acting as custodians of a management journal for emergency services researchers having abroad and inclusive view of this emerging management sub-discipline. The current volume aims to fulfil that promise by providing aneat balance between research papers and practitioner accounts. We are also very happy to share the impact IJES is making in growing the discipline and promoting the vocation of emergency services. The editorial team has taken IJES to major international conferences including the European Academy of Management (EURAM) and Public Administration Committee (PAC) Conference in chairing specific panels relating to emergency services. IJES has also made an application for listing to the Association of Business School (ABS) journal ranking list.

We again invite researchers, practitioners and academic alike, to join us in this journey.

Dr Paresh Wankhade

Centre for Research in Emergency Services & Training (CREST), Hope Business School, Liverpool Hope University, UK.

Peter Murphy

Nottingham Business School, Nottingham Trent University, UK.

Kirsten Greenhalgh

Nottingham University, UK.

