

Emergency Services Conference:
Second Biennial Event

**Themes in Planning,
Response and Recovery**

ES2014

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Themes in Planning, Response and Recovery (ES14)
November 11, 2014
Nottingham Conference Centre

8.30 – 9.00	Registration and Coffee
9.00-9.15	Welcome and conference opening (Adams Room) Prof Mick Gregson Head of Psychology Division, Nottingham Trent University
9:15-10:00 (Chair: Viv Brunsden Room: Adams)	Keynote: Workplace Trauma Support: Who Cares? Steve Regel OBE Director at the Centre for Trauma, Resilience and Growth, Nottinghamshire Healthcare NHS Trust

Parallel Sessions	Session 1A (Adams Room): 'Responding' (Chair: Noreen Tehrani)	Session 1B (Hooley Room): Psychological Wellbeing and Mental Health of Emergency Responders (Chair: Rowena Hill)
10.00-10:30	Police response and experience in the 'Golden Hour' Chris Alcott (De Montfort University)	Personality and Mental Health in Canadian Firefighters: Reviewing Our Program of Research Shannon Wagner (University of Northern British Columbia)
10.30-11.00	The Psychology of Incident Command Sabrina Cohen-Hatton (CFOA/Cardiff University)	A Grounded Theory Exploration into the Experience of Deploying to Mass Fatality Disasters by Responders Gail A. Rowntree (Buckinghamshire New University)
11:00-11.30	Inter-operability: Preparing for mega or large scale sporting events Perry Stanislas (De Montfort University)	The Effects of Fire Department Shift Schedules on Sleep Quality Joel M. Billings (Oklahoma State University)

Parallel sessions	Session 2A: (Adams Room) Research Methods & Ethical Practice (Chair: Genevieve Goatcher)	Session 2B: (Hooley Room) Interventions to Promote Responder Wellbeing & Health (Chair: Ann Eyre)
11.30–12.00	Leaving the Ivory Tower; Getting out of the Academy into the real world Lisa Sanderson, Duncan Guest, Rowena Hill & Vivienne Brunsden (Nottingham Trent University)	The "Rescue Personality" profile - A key to effective prevention and treatment of mental health issues in the emergency services Stephanie Klee (University of the German Armed Forces in Munich)
12.00–12.30	From Florence Nightingale to Kathy Charmaz: the methodological journey to constructivist grounded theory with firefighters. Leigh Blaney (Nottingham Trent University/Vancouver Island University), Glenn Williams, Rowena Hill, & Viv Brunsden (Nottingham Trent University/)	Just a house fire...? Laura Lawrence & Steven Malley (Tyne & Wear FRS)
12.30-13.00	Cascading effects in disasters: implications for disaster management Kim Hagen (Trilateral Research & Consulting)	On-line child abuse: protecting officers and staff Noreen Tehrani (Independent Scholar/ Metropolitan Police)
13.00-13:45	Lunch/Networking/Poster Displays	

13:45-14:30 (Chair: Viv Brunsden)	Keynote (Adams Room): Visual search and hazard perception in emergency response drivers Prof. David Crundall Division of Psychology, Nottingham Trent University	
Parallel sessions	Session 3A (Adams Room): Airway Management (Chair: Noreen Tehrani)	Session 3B (Hooley Room): Fire-setting (Chair: Genevieve Goatcher)
14:30-15:00	Airway Management in UK NHS Ambulance Services: Where are we today? Pete Gregory (University of Wolverhampton), Tim Kilner (University of Worcester), Sally Arnold-Jones (East Midlands Ambulance NHS Trust), Malcolm Woollard (Edith Cowan University)	Keys to Success in Juvenile Fire-setting Joanna Foster, Robin Morris-Jones and Prof. David J. Kolko (fabtic Ltd, CCF and the University of Pittsburgh)

Parallel sessions	Session 4A (Adams Room): Safety (Chair: Noreen Tehrani)	Session 4B (Hooley Room): Natural Disaster (Chair: Genevieve Goatcher)
15:00-15:30	Using Behavioural Insight To Save Lives Steve Chu (South Yorkshire FRS)	Natural Disaster Response: Ethical Jus-tifications for Intervention Lauren Traczykowski (University of Birmingham)
15:30-16:00	Managing risk strategically: South Yorkshire Fire and Rescue community risk model Stephen Dobson (Sheffield Business School/European Academy of Manage-ment), Nicola Smith (South Yorkshire FRS), & Arun Sukumar (Sheffield Business School)	Firefighters and the winter 2013-14 floods: the FBU perspective Paul Hampton (Fire Brigades Union)
16:00-16:30	Health and safety gone mad! Comparing the emergency services views on staff safety Natalie Howson (Yorkshire Ambulance Service & University of Leicester)	Measuring Social Disruption Through Infrastructure Patterns Caroline Hackerott (Oklahoma State University)
16.30-17:00 (Chair: Viv Brunsden)	Presentation Of Prizes (Adams Room) <ul style="list-style-type: none"> Emergency Services Research Unit: <i>Best Student Poster Award</i> O2 Best Paper on Communications given by a member of the Emergency Services International Journal Of Emergency Services: <i>Best Paper Award</i> <i>ES14 Award for Excellence in Emergencies Related Endeavour</i> 	

Prof Mick Gregson

Head of Psychology Division,
Nottingham Trent University

Mick Gregson is the Head of Psychology at Nottingham Trent University. This houses the Emergency Services Research Unit. Mick's own research interests have at many times focussed explicitly upon the emergency services, specifically the police. Within this he has collaborated extensively with external organisations concerned with crime and acts of disaster or terrorism. These include Crime Concern; The Home Office; The Northern Ireland Office; Drugs Prevention and Youth Offending teams; Police and Probation Services; and the Tim Parry Johnathan Ball Trust

Mick's support, and that of the wider School of Social Sciences Management Team, has been crucial in developing **Emergency Services: Themes in Emergency Planning, Response and Recovery**; and for establishing this as a biennial event, bringing together academics and practitioners to share their research and contextualise this in practice.

Workplace Trauma Support: Who Cares?

Stephen Regel

Centre for Trauma, Resilience & Growth

This opening presentation will consider the traumatic exposure routinely faced by operational personnel within the emergency services. It will explore the potential impact of such exposure and consider ways in which personnel can be supported to deal with this. It will also consider whether the will to do just that sufficiently exists within, and outside of, emergency service organisations.

Stephen Regel is Principal Psychotherapist and Director of the Centre for Trauma, Resilience and Growth, Nottinghamshire Healthcare NHS Trust. He is also an Honorary Professor in the School of Education, Nottingham University and a Senior Fellow of the Institute of Mental Health, Nottingham. Since 2002, he has been a visiting therapist/consultant at the Family Trauma Centre in Belfast, Northern Ireland. He has over 30 years experience working with trauma and Post Traumatic Stress Disorder (PTSD) with his time divided between clinical and academic activities.

Steve has worked extensively with the emergency services, particularly the Police. He has also worked extensively with humanitarian aid organisations including being on the Board of Overseers of the Children and War Foundation and being a consultant to the International Federation of Red Cross and Red Crescent Societies (IFRC) Reference Centre for Psychosocial Support. Assessment and training missions for the IFRC have included assignments in Korea, Japan, Estonia, Kenya, Somalia, Russia, Scandinavia, Uganda, Sri Lanka and following the conflict in Georgia. Alongside this work of international importance his work also has a UK focus; for example, through his long involvement with Victim Support, including acting as both an advisor and trainer to their National Homicide Service. In 2013 Steve was appointed an OBE for services to victims of trauma.

Visual search and hazard perception in emergency response drivers

Prof David Crundall
Nottingham Trent University

Driving for an emergency service is highly demanding and requires refined visual search and hazard perception skills. This talk will discuss basic visual search processes in driving, and how these relate to hazard perception, before discussing specific research investigating the visual skills of pursuit-trained police drivers. Finally Professor Crundall will discuss an exciting new project about to begin: developing a hazard perception test for fire appliance drivers.

David Crundall is a Professor of Psychology researching the skills that emergency service personnel develop over time: such as how police drivers manage high speed pursuit situations; how to reduce motorcycle collisions; and how simulation can be used as a training tool for driver training, emergency event management, and developing situation awareness. He has worked with both Nottingham and Merseyside police services, and has presented his work on two separate occasions to the Blue Light Users conference. He also teaches a specialist course on transport psychology through Cranfield University, which continues to attract emergency service personnel for professional development. He is looking forward to continuing his research with the police through Nottingham Trent University and the Emergency Services Research Unit, and extending his research into applications that would benefit other emergency services.

Police response and experience in the 'Golden Hour'

Chris Alcott - De Monfort University

From the Police perspective high levels of planning and resources are directed at legal contingency arrangements and the building of multi-agency response capabilities in order to deal effectively with major incidents. These responses are traditionally dealt with by well-trained and experienced departmental Police staff and managed by senior Police Officers, painting a picture of a well organised, resourced and supported area of business. Arguably this focus potentially fails to recognise a vital concern around the skills and abilities of those practitioners initially attending the major incident in the 'golden hour' response stage. For the most part these are some of the least time served and least experienced officers within the organisation. This represents a potential risk as the quality of this initial response by these inexperienced officers directly impact on the effectiveness of the overall response, the speed of return to normality and any subsequent investigation. Although new-to-role officers may have more recently received training in this area, research carried out in Sweden suggested that experience in initial incident response is an important element for effective relevant decision making (Gunnarsson and Stromberg 2009). This risk is further increased by the perceived recent decentralisation of initial police training, replaced by a multitude of training providers with a potential loss of a consistent approach to initial scene response.

Chris Alcott is currently working as a lecturer with De Montfort University within their School of Health and Life Sciences (Criminal Justice team). Chris is research active in the area of community problem solving and evidenced based policing as part of an ongoing research doctorate. He is an experienced manager with 30 years of policing experience in the areas of operational and community policing with specific responsibility for the development of vocational learning and development programmes.

From Florence Nightingale to Kathy Charmaz? the methodological journey to constructivist grounded theory with firefighters.

Leigh Blaney - Nottingham Trent University/Vancouver Island University

Glenn Williams, Rowena Hill, Viv Brunsden- Nottingham Trent University

This presentation will highlight the methodological journey to Constructivist Grounded Theory, and provide rationale for the choice of methodology and methods for the exploration of firefighters' experiences with stress and coping in the work context. Firefighters are under-represented in health and resilience literature hence this research is unique in its context and will add to the existing body of knowledge about firefighters' experience with health, coping, resilience. As well, there is a dearth of literature on health promoting or salutogenic approaches to high stress professions, although some work is beginning in the context of 'post-traumatic growth' after stressful events. In Canada firefighters are trained as 'first responders', and the majority of calls to the FRS are no longer related to fire suppression but are medical aid in nature; this shift in responsibility/role results in firefighters coming into close and routine contact with human suffering - a significant shift away from simply being the 'hose monkeys' of old - yet with little consideration or understanding of how firefighters cope with the changes to role and to the exposure to ongoing and often very intense suffering. The presentation will highlight the study's preliminary findings about processes used by firefighters to make meaning of, and to maintain, health in high-risk professions."

Leigh Blaney is currently undertaking PhD study at Nottingham Trent University, exploring Canadian firefighters' experiences with, understanding and meaning of, trauma, coping, & resilience. Leigh's background is as a mental health nurse and clinical counsellor; Leigh currently teaches on an undergraduate nursing program at Vancouver Island University. Leigh's work with firefighters spans 20 years as a consultant and as a provider of critical incident stress management (CISM) education and intervention; Leigh is currently the clinical coordinator of the Archipelago CISM Society, engaged with about 40 fire rescue services (FRS) in rural Canada.

Glenn Williams is a Senior Lecturer in the Division of Psychology at Nottingham Trent University. His research interests lie primarily in the areas of psychological well-being, health and health care and in community psychology. As a community psychologist he is committed to addressing inequalities, fostering inclusivity and challenging marginalisation and facilitating empowerment in the populations he works alongside in his research.

Rowena Hill is a Principal Lecturer in Psychology at NTU with a primary interest in the work-home interface of emergency service workers.

Viv Brunsden is a Principal Lecturer in Psychology at NTU where she also heads the Emergency Services Research Unit.

The Effects of Fire Department Shift Schedules on Sleep Quality

Joel M. Billings - Oklahoma State University

The purpose of this study is to investigate how fire department shift schedules affect sleep quality as measured using a modification of the Pittsburgh Sleep Quality Index (PSQI).

This study included 109 participants from six medium-size career fire departments, with two departments representing three typical fire department shift schedules: 24on/48off, 48on/96off, and the Kelly (OXOXOXXXX) schedule. Each department averaged a volume of 4,000-5,000 calls per year, operated out of 4-6 stations, and were staffed by 60-100 firefighters.

Of the 109 firefighters interviewed in this study, 80 (73%) suffer from poor sleep quality. The 24on/48off schedule allows better sleep quality than either the 48on/96off and Kelly. Predicted probabilities of poor sleep quality are greatest for the Kelly schedule. In addition, nearly 64% of the firefighters have second jobs, which also adversely affects sleep quality.

The policy and practice recommendations emanating from this study include the need to monitor sleep quality more carefully in all shift schedules, particularly in those likely to result in more sleep debt. In addition, departments should consider structural enhancements such as private sleep quarters, improved sound insulation, lighting control, temperature control, and improved alerting systems to increase sleep quality.

Joel M. Billings is a Ph.D. student at Oklahoma State University in the Fire and Emergency Management Administration Graduate Program. His undergraduate degree is from Lake Superior State University in Fire Science where he became interested in sleep quality in the fire service. Joel earned an M.S. from Oklahoma State University. His thesis research is entitled "The Effects of Fire Department Shift Schedule on Sleep Quality" under the direction of Professors Will Focht, Bob England, and Anthony Brown. He served four years as a volunteer firefighter and Emergency Medical Technician-Basic at the Waterford Township Fire Department in Michigan.

Using Behavioural Insight To Save Lives

Steve Chu - South Yorkshire FRS

This presentation will; Explain what behavioural insight work is; Outline how we believe behavioural insight work can be applied to the Fire Service; Describe the two pilot studies we have run so far, their methodologies, results and outcomes, and Summarise conclusions, learning points and suggested areas for future studies.

Steve is the Head of Strategy and Engagement at South Yorkshire Fire & Rescue (SYFR), a remit that covers performance, data analysis, research and intelligence, and all aspects of communication, customer services, consultation and engagement. Until September 2013 he was their Head of Corporate Communications & Administration, leading a team that is the current CIPR Yorkshire and Lincolnshire 'Outstanding In-House Public Relations Team.' They were also the first Fire Service ever to win an LGcommunications award, for 'Best Community Safety Campaign', in May 2013. Previously he worked for over six years as Communications Manager at Sheffield Wednesday Football Club. Steve is an Accredited Practitioner with the CIPR (Chartered Institute of Public Relations), a league table tennis player, and a novice triathlete. You can follow him on Twitter @stevechu75.

The Psychology of Incident Command

GM Dr Sabrina Cohen-Hatton

Cardiff University/CFOA/South Wales FRS

This research was conducted to inform the National Operational Guidance for Incident Command. It aims to increase firefighter and public safety by improving our understanding of the processes that drive operational decision making. Data was gathered from Incident Commanders at 33 incidents over a six-week period, in six UK Fire and Rescue Services, and their decision-making processes were analysed.

Current decision-models assume Incident Commanders use analytical processes. This study found that this is not necessarily the case, and commanders often directly responded to the situation. There was little evidence of the highest level of situational awareness, anticipation. This may leave commanders vulnerable to decision traps, such as basing decisions on an element of the situation without considering the wider picture. There is a need for ongoing decision-models to consider the ways in which decisions are naturalistically made, particularly non-analytical processes. The proposed Incident Decision Framework facilitates both analytical and non-analytical processes. It introduces the concept of Decision Controls designed to guard against decision traps that may occur as a consequence of the type of decision process naturally adopted for the situation. Further research has been commissioned by CFOA to build on the findings, testing the efficacy of the proposed model.

Dr. Sabrina Cohen-Hatton is an Operational Group Manager and experimental psychologist. She gained her doctorate in Behavioural Neuroscience at Cardiff University, where she now holds an honorary position. Her prize-winning research has been published in several scientific journals, and she has presented internationally.

Sabrina is currently seconded to CFOA leading research into the Psychology of Incident Command. Sabrina was the lead author on the section of NOG for Incident Command that considers Non-Technical command skills.

Sabrina has conducted research in several countries, and was awarded the Winston Churchill Memorial Trust Medallion by HM the Queen in recognition of research investigating violence against firefighters, used to protect firefighters in Wales (2006).

Managing risk strategically: South Yorkshire Fire and Rescue Service community risk model

Stephen Dobson - Sheffield Hallam University

Nicola Smith - South Yorkshire FRS

Arun Sukumar- Sheffield Business School

An important part of the South Yorkshire Fire and Rescue (SYFR) Integrated Risk Management Plan (IRMP) 2013-17 has involved the creation of a community risk model. Through the geo-demographic mapping of Mosaic lifestyle profile data the model is expected to inform prevention work, and help identify the people in those communities who are most at risk from fire. This targeted approach is expected to focus community fire safety activity where it will have the most impact and therefore help ensure an effective service. This has been an important phase of work in modelling the potential likelihood of fire and also its impact, especially considering the vulnerable. The work reported here represents collaboration between SYFR and Sheffield Hallam University in evaluating and refining the SYFR community fire risk model. Key areas of focus for the presentation include a) the role of defining the problem situation at the conceptual model stage and b) the influence of social amplification of risk in model construction and use in terms of strategic decision-making."

Dr Stephen Dobson is a senior lecturer in Business Systems at Sheffield Business School and the UK representative for the European Academy of Management.

Keys to Success

Joanna Foster - Managing Director, fabtic

Robin Morris-Jones - Managing Director, Cognitive Centre

We will present how Keys to Success offers a range of tools that can be used independently or collectively to help reshape and develop services for children and young people who are engaged in firesetting behaviour. We will explain how the starting point of this work has to be assessment, in order to determine the level of risk and the critical needs of individuals. This determines what level of service might be offered and the nature of that intervention. After assessment comes training in developing and establishing appropriate interventions. Training addresses key areas such as communicating with children, boundaries of engagement (where does the organisations' role and remit begin and end when working with these children?) inter-agency environment and the resources that might be used when working directly with fire-setter children and their families. The Keys to Success manual contains a specific and detailed therapist's guide, which accompanies the child and adolescent workbooks and intervention modules. Crucially, good practice points towards the involvement of parents or carers when addressing children's behaviour, and a ground-breaking parallel programme is included in the Keys to Success manual to help provide a more inclusive and dynamic approach.

Since graduating from Magdalen College Oxford, **Joanna** gained over sixteen years' experience in the public and not-for-profit sectors, including ten years managing the London Fire Brigade's fire setter programme. Joanna is recognised as a leading expert in the fire setting field, having completed a post-graduate certificate in Child and Family Mental Health, worked directly with hundreds of fire setting children and featured in a BBC documentary entitled The Kids That Play With Fire. Since launching fabtic in June 2013, Joanna has delivered training to 21 UK brigades and personnel from mental health, police, education and social work in the US, UK and Europe.

Robin qualified in law before completing his CQSW and obtaining a post-graduate diploma in social work. He worked for over 25 years in the probation service, retiring in 1999 as an Assistant Chief Officer. Robin has extensive experience of delivering and managing intervention programmes for high-risk offenders, was involved in the first pilot that introduced risk assessments into the probation service and has subsequently been involved in assessing the validity of such instruments. Since joining the Cognitive Centre, Robin has trained extensively in the UK, Sweden, Switzerland, Singapore and Australia. He is also the author of the 'Fire safe' programme.

Airway Management in UK NHS Ambulance Services - Where are we today?

Pete Gregory - University of Wolverhampton

Sally Arnold - East Midlands Ambulance Service NHS Trust

Dr Tim Kilner - University of Worcester

Prof. Malcolm Woollard - Edith Cowan University/
University of Surrey

Effective airway management is essential in the treatment of critically ill or injured patients. In the UK, out-of-hospital emergency airway management is normally the responsibility of an ambulance service practitioner. UK ambulance services employ a number of different practitioners to deliver care and each level of practitioner has a different skill-set in relation to airway management. Recently, new and advancing roles have been emerging for UK paramedics and a range of new titles have come into existence. This has caused confusion as there is no nationally agreed scope of practice beyond initial registration and no nationally agreed curriculum for any paramedic. There have been many innovations for airway management over the last decade but whether NHS ambulance services have embraced new technology or continued to use devices and techniques that pre-date the more recent innovations is unknown. This presentation reports the findings of a national survey that was conducted to identify the airway management equipment that is available to those responding to calls on emergency vehicles in UK NHS Ambulance Services, the qualifications required to utilise different airway skills and the factors considered by Ambulance Services when procuring equipment and deciding which level of practitioner can utilise which skill.

Pete Gregory is senior lecturer in paramedic practice at Birmingham City University. He is a member of the College of Paramedic's Education Advisory Committee and a consultant editor on the Journal of Paramedic Practice. Pete's research interests include airway management and resuscitation as well as paramedic education. He has undertaken studies relating to the use of intubation aids by paramedics as well as the effectiveness of an app to guide resuscitation in the lay-public. Pete has co-authored two books; the very successful Manual of Clinical Paramedic Procedures and the UK version of Mosby's Paramedic Textbook.

Measuring Social Disruption Through Infrastructure Patterns

Caroline Hackerott - Oklahoma State University

During the afternoon of May 13, 2013 Moore, Oklahoma was hit by an EF-5 tornado. In the course of 17 minutes, the tornado heavily damaged two elementary schools and the Moore Medical Center, damaged over 12,000 homes which impacted 33,000 people, induced 61,500 power outages, damaged a major water treatment center, created over \$2 billion dollars in damage and resulted in 337 injured individual and 24 fatalities which included 7 elementary school children. As a community, Moore provides an opportunity to examine the social time rhythms of a community throughout the disaster cycle. Using the concept of social time as described by Chen, Neal and Zhou (2013), infrastructure utilization patterns reflect a community's rhythm of life. By examining pre-impact, emergency response and recovery fluctuations in infrastructure patterns, it may be possible to quantify the transition from impact through recovery. This quantification may identify key factors contributing to differential disaster experiences. The identification of infrastructure factors which contribute most significantly to community resilience will assist in allocating resources to reducing both hazard exposure as well as reducing overall social vulnerability.

Caroline Hackerott is a PhD student within the Fire and Emergency Management Program at Oklahoma State University. Her professional background includes higher education administration and disaster-based volunteer coordination. As an experienced educator, curricular development and knowledge transfer within the emergency management field is an area of concentration. Currently focusing on social time in the disaster setting, other research interests include the interaction among social capital, community resilience and long-term recovery, community empowerment strategies to reduce vulnerability and increase community resilience and disaster resilient campuses.

Cascading effects in disasters: implications for disaster management

Kim Hagen - Trilateral Research & Consulting

Disasters are rarely singular events; they commonly comprise a series of events triggered by interrelations between systems and infrastructures. How these interrelations lead to cascading effects in a disaster, and how a disaster unfolds as a result thereof, impacts the ways citizens and their environments are affected, as well as influencing their capacity to respond and recover. Due to the unexpected and disruptive nature of disasters, it is difficult to predict which cascading effects will occur in a given disaster. However, it is possible to analyse the dynamics of how such cascading effects unfold. This makes it possible to detect vulnerabilities in the complex interactions of actors and systems, which is of great importance in enhancing planning and preparedness for future disasters.

This paper presents the findings of research carried out for the FORETRESS (Foresight Tools for Responding to cascading effects in a crisis) project. Nine historical crisis case studies were examined to analyse cascading effects. Addressing both man-made and natural disasters in which one event led to notable disastrous impacts through a chain of events, factors triggering cascading effects were identified, categorised and mapped. The study explored the various interrelations and dependencies, foreseen and unforeseen, between disaster managers and physical infrastructures. The most commonly occurring interdependencies are discussed in this paper with the aim of providing a valuable evidence-based contribution to developing strategies for disaster response.

Kim Hagen 's areas of expertise and interest are centred on the interaction between people and their environment, including community resilience and disaster preparation, response and recovery, natural resource management, international development, and qualitative research methods. Before joining Trilateral she worked in the fields of natural resource management and sustainable development, both in academia and in NGO's. Kim is close to completing a PhD on community resilience to natural hazards at The Open University in partnership with the British Geological Survey. She is currently also the assistant-editor to the jour-

Firefighters and the winter 2013-14 floods: The FBU perspective

Dr Paul Hampton - Fire Brigades Union

Firefighters have long responded to flooding, but there has been a notable increase in activity in recent years (such as the 2007 floods). However official statistics published by DCLG have only provided a sketchy picture of this activity, leading some leading commentators to suggest fewer incidents. The winter of December 2013 ? February 2014 was the wettest on record with over 7,800 homes and nearly 3,000 commercial properties flooded. Firefighters responded to a large number of incidents and received widespread praise from politicians and the public. However the full extent of this contribution has not been revealed by government publications. Research carried out by the FBU has sought to fill this gap and grasp the extent of firefighter activity during these floods. Freedom of Information requests as well as surveys of leading FBU officials were utilised to obtain figures for the number of incidents, casualties and rescues carried out during the floods. These data also revealed problems of quantification and under-reporting of firefighter activity, as well as industrial relations concerns with pay, equipment and other conditions. The findings of this research are highly relevant to ongoing policy discussions on the role of the fire and rescue service in flood response.

Dr Paul Hampton is Research and Policy Officer at the Fire Brigades Union. He is the author of numerous publications, including *In the Line of Duty*, *Lessons of the 2007 Floods - the FBU's contribution to the Pitt review* and *Climate Change: Key issues for the fire and rescue service*. He holds a PhD in climate change and employment relations, focusing on the role of trade unions in tackling global warming.

Health and safety gone mad! Comparing the emergency services views on staff safety

Natalie Howson - University of Leicester/Yorkshire Ambulance Service NHS Trust

Health and safety has gone mad! This is a common opinion across the UK. However statistically the workplace is safer for it. But how do we feel about our safety as frontline workers? This research collated opinions from all three emergency services and provided an excellent insight to incidents which happened and frontline staffs attitudes to their own safety.

Natalie Howson has a Bsc Hons in Bio-medical science with Molecular Biology from the University of Aberdeen. She has worked for the NHS since 2008 and became a paramedic in 2010 by getting her diploma with Teeside University in partnership with the North East Ambulance. In July of this year she graduated from the University of Leicester with a Masters degree in Risk, Crisis and Disaster Management.

The 'Rescue Personality' profile? A key to effective prevention and treatment of mental health issues in the emergency services

Stephanie Klee - University of the German Armed Forces

The presentation will first explain the 'Rescue Personality' profile as claimed by Jeffrey Mitchell and outline its crucial relevance to debriefing methods currently used in professions which are confronted to traumatic situations in rescue work (police, firefighters, EMS personnel and soldiers). In the second part the results of our research with German EMS personnel and soldiers will be presented. First steps in the development of selection and prevention procedures for professions at risk for developing posttraumatic stress disorders and other mental health problems as a result of traumatizing work experiences will be discussed. Ideas for interventions that are able to increase resilience prior to traumatizing events in these risk professions as well as personality specific treatment possibilities will be presented. The last part of the presentation will consist of outlining ideas for future research on this topic, possibilities for implementing our research results into practice and overcoming structural barriers as well as some recommendations for mental health professionals, supervisors and personnel managers who are in contact with EMS personnel and related professions.

Stephanie Klee is a doctoral candidate at the Department for Psychology at the University of the German Armed Forces in Munich. She is a scholarship holder of the German National Academic Foundation and studied medicine and psychology. Stephanie Klee is also a paramedic, worked in several crisis intervention teams, held trainings in emergency medicine and debriefing methods and volunteers for the Bavarian Red Cross. She has experience in working with severely traumatized children and emergency service workers. Her research interests include differential and personality psychology, diagnostics, clinical psychology and development of alternative treatment methods for severe posttraumatic stress disorders.

Just a house fire?

Laura Lawrence, Steve Malley - Tyne & Wear FRS

This is the case study of a house fire attended by Watch personnel and the subsequent Trauma Support Sessions that took place.

Laura Lawrence is currently employed as the Welfare Officer with Tyne & Wear Fire and Rescue Service and has been in post for 12 years. Previous employers include Northumbria Police and LVCSS (Leicester Victims of Crime Support Scheme). She is a qualified counsellor with some 30 years experience. She initially specialised in Trauma related work i.e. Relatives of Murder Victims and Survivors of Rape and/or Sexual assault and for the last 20 years specialised in occupational stress and mental ill health particularly in relation to 'Blue Light' service personnel. She was fortunate enough to travel to India, whilst employed with Northumbria Police as part of a British Council project, to deliver training to two groups of NGO's so that they could provide support services to victims of rape, sexual assault and domestic violence. Laura also has an allotment and will espouse the benefits of growing your own vegetables to anyone who will listen.

Steve Malley has served with Tyne and Wear Fire and Rescue Service since February 1993. The vast majority of his service has been spent working on operational fire stations, with the exception of a three year secondment instructing at a Marine Fire Training Centre and an 18 month period as a middle manager responsible for two fire stations and their personnel. He has served at every rank at 'watch' level. His own early experiences of the way traumatic events were dealt with at station level, as well as his engagement in research by students in this field who visited his own watch, led him to apply for the Trauma Support Team in 2011.

He has taken part in and led several Trauma Support Sessions with crews, following attendance at potentially critical incidents. He believes that the training given to date has afforded him with the opportunity to make a difference in the initial stages following a traumatic incident. He is a passionate advocate of the team and will sell the benefits to Firefighters at any given opportunity. Steve is a guitar player, music lover and an avid reader.

A Grounded Theory Exploration into the Experience of Deploying to Mass Fatality Disasters by Responders

Gail A. Rowntree - Buckinghamshire New University

The presentation will offer an overview into the findings of a study that explores the experience of being a responder to mass fatality disasters. The grounded theory study offers a view what it means to deploy for a specific group of workers. They are volunteers or staff of an organisation who activate and deploy at short notice to worldwide disasters. The study has two purposes: to share the story of what it means to deploy and also what impact this may have on the participants when they do this on a regular basis. The presentation will concentrate on discussing the main themes that emerged from the primary research of interviews undertaken with 32 personnel who made up the sample group. The presentation also offers an overview of some of the difficulties the sample group experience and ultimately offers a theory of the cumulative impact that can leave a permanent imprint on the participants.

Gail Rowntree is a Senior Lecturer at Buckinghamshire New University specialising in Crisis Leadership and Organisational Psychology. The study being presented is part of a PhD study into deployment. When able to do so the presenter also deploys as a first responder for the case study organisation as Director of Family Assistance and Mental Health teams. The study grew from the desire to understand the impact of deployment on the teams that the presenter and supports.

Leaving the Ivory Tower; Getting out of the Academy into the real world

Lisa Sanderson, Duncan Guest, Rowena Hill & Vivienne Brunsden - Nottingham Trent University

Much has been written about the gap that exists between academics and practitioners and often academics have been perceived as being out of touch and having little to offer illustrated by the phrase 'it's academic' meaning that something is inconsequential or not practically important. Academic research has been criticised for failing to consider and recognise the realities of the practitioner's world and furthermore for providing answers to questions practitioners do not consider relevant. Thus it could be argued that in order to close this gap academics need to venture out of their ivory towers and into organisations in order to collaborate with practitioners which can both increase their credibility with practitioners and ensure that academic research is useful and pertinent. This is particularly important for academics wishing to engage in research centred on organisations such as the Fire and Rescue Service. Our society confers an almost mythical status on firefighters which is perpetuated by the media and can lead to assumptions about what being a firefighter involves. However the situational realities of the firefighters world is far removed from the media's portrayal and in reality the modern Fire and Rescue Service is a diverse, changing and evolving organisation within which there are many regional variations. Without entering this organisation and gaining some first-hand experience academics may fail to appreciate these realities and instead find that their research is based only on myths and assumptions.

Lisa Sanderson is a Postgraduate Research Student working with the Emergency Services Research Unit at Nottingham Trent University. She began her PhD in January 2014 having been awarded a Psychology PhD Bursary. She previously undertook her MSc in Psychology at NTU and her Masters research project 'We think we are invincible: An interpretative phenomenological analysis of help seeking behaviours in the military?' was submitted to the Emergency Services Conference, November 2012, where it won Best Student Poster. She has particular research interests in psychological reactions to trauma, with a particular interest in both the military and the Fire and Rescue Service.

Inter-operability: Preparing for mega or large scale sporting events

Perry Stanislas - De Montfort University

This presentation will explore how police organisations in various parts of the world prepare for mega or large scale sporting events and the role of senior police and other agency leaders in that process. It will examine how senior leaders plan for major events and the various considerations involved, the working relations with other key agencies and how they develop appropriate responses and the critical role of training and education in that process. The paper will also highlight some of the important problems with inter-operability and training and how these were overcome. The paper is based on the first attempt to study the police and preparation for mega-sporting events and seeks to highlight good practice with international import.

Dr Perry Stanislas has over 33 years experience in policing and security matters starting in the area of personal protection team leader for an international political organisation. He was the senior policy advisor for Bedfordshire Police in the area of strategic and organisational development and a key leader in the largest development initiative in its history called 'Towards 2000'. Perry taught at Bramshill Police Staff College for seven years. Dr Stanislas led a review team of specialists seconded to Bedfordshire Fire and Emergency services to examine recruitment, selection and training processes. He is author of *International Perspectives on Police Education and Training* (Routledge).

On line child abuse: protecting officers and staff

Dr Noreen Tehrani - Metropolitan Police

The Metropolitan Police Child Abuse Investigation Command employs over 600 officers and staff. There are some sixty officers and staff involved in investigating the activities of organised on-line child sex abusers and others involved in the manufacture and distribution of child abuse images. This work is supported by a computer forensic team providing intelligence on offender activities, covert on-line investigations and officers involved in interviewing offenders and their child victims. A review was conducted into the risks that this work presented to staff and the mechanism required managing that risk. Previous research had indicated that this work presented a risk and that dealing with child sex abuse involved many variables which could only be managed using a holistic approach and skilled professionals. With the support of a specialist psychologist a comprehensive review was undertaken to identify who needed support and what kind of support would be most effective. Each officer within the unit has been through psychological screening and a structured interview. This initial screening has been followed up with regular follow up screening. This presentation will provide results from the screening and evidence of the factors which lead to increased resilience.

Noreen has a special interest in psychological trauma she has worked with victims of the Manchester Bomb, the Paddington and Potters Bar rail crashes and victims of the terrorist attacks on the World Trade Centre Buildings and the London Bombings. She has also supported victims of a wide range of other traumatic incidents including child abuse, murders, rapes, fatal accidents and road crashes. Currently she is working with a number of police forces to reduce the incidence of primary and secondary trauma in officers and staff involved in work involving undercover operations, firearms, road deaths and child abuse.

Natural Disaster Response: Ethical Justifications for Intervention

Lauren Traczykowski - University of Birmingham

For very practical reasons, national leaders should be in charge of large-scale natural disaster response. National leaders are geographically close to the incident and thus will provide timely as well as locality-specific assistance. National governments also have a civic responsibility to help their citizens respond to and recover from a natural disaster. In some natural disaster scenarios, though, a national government may be unable (because they too have been devastated by the disaster) or unwilling (because they are apathetic to the needs of their people) to support those affected. One of the key factors which inhibit international intervention in these situations is the emphasis on sovereignty in international law. However, and as I will show, key components of sovereignty, particularly the requirement for consent and reinforcement of state level responsibility, hamper effective aid delivery and do little to support leadership needs in real world scenarios. Indeed, sovereignty directly and negatively impacts leadership in natural disaster emergency response. With this, I will argue that foreign intervention may be ethically justified, morally required, and practically necessary to overcome leadership problems in natural disaster scenarios.

Lauren Traczykowski is a second year PhD student in Global Ethics at the University of Birmingham. Her research focuses on finding ethical natural disaster response policies that put the individual as their focal point. In 2009, she obtained her MA in International Studies, Globalisation & Governance (Birmingham) and, before that, a BA in International Relations from Boston University (US). Lauren's interest in global affairs has seen her work for government, non-governmental and political offices in her native United States, Ireland and the United Kingdom. She became interested in natural disaster research specifically while working at the US Federal Emergency Management Agency.

Personality and Mental Health in Canadian Firefighters: Reviewing Our Program of Research

Shannon L. Wagner, PhD, R. Psych

University of Northern British Columbia

This presentation will review a firefighter-focused program of research, completed over the last decade. Paid professional and volunteer firefighters have participated in a series of studies related to mental health and occupational stress for fire service members. Data have been collected from firefighters and community comparison participants with respect to mental health, personality, job/marital/life satisfaction, coping, and emotional intelligence. In addition, subsequent intervention and qualitative research were completed, recruits have been followed through the same decade, and a 2nd wave of data collection with the original participant firefighters is currently in process. Previous results have suggested that both paid professional and volunteer firefighters are at higher risk of traumatic stress when compared to comparison samples. Also, paid professional firefighters appear to be at increased risk for many other mental health issues, despite the fact that our subsequent research demonstrates that firefighter recruits are initially at lower mental health risk than community members. The current presentation will provide a short review of the methodology for each study and then concentrate on the results and implications of the individual studies as well as the program of research as a whole.

Dr. Shannon Wagner is Professor and Chair for the School of Health Sciences at the University of northern British Columbia. Her research focus is occupational mental health, especially as it relates to disability management, occupational stress, trauma, and family-work interface. Dr. Wagner's teaching interests are focused on topics of occupational health and safety, disability management, psychological assessment and methodology (e.g., statistics and epidemiology). Dr. Wagner is also a registered psychologist and maintains a small clinical practice. Her practice provides general psychological assessment for both children and adults and provides specific local expertise for issues of occupational mental health, especially workplace related traumatic stress.

Nature/Culture Discourses in Tourism and their Relationship to Wildfire Hazard in the Peak District

Bryan Boyle - Nottingham Trent University

Using community engagement to strengthen resilience

Genevieve Goatcher - Coventry University

Family members and the facilitation of successful coping in emergency service personnel

Rebecca Howell, Viv Brunsden and Rowena Hill
Nottingham Trent University

JESIP, and Joint Decision Making

Joy Flanagan - CFOA

Developing reflexive and ethical leadership in the UK FRS

Rowena Hill, Vivienne Brunsden, Jeff Goatcher
ESRU, Nottingham Trent University

How can the fire and rescue service can use social media to promote safety messages?

Freyja Nash, Rob Wilding, Viv Brunsden, Rowena Hill &
Duncan Guest - Nottingham Trent University

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