Multiple Dimensions of Work Intensity: Ambulance Work as Edgework

Abstract

Working life in public sector professions is undergoing significant change and becoming increasingly demanding. This paper explores work intensity in NHS ambulance services in England, describing four distinct but interrelated dimensions of intensity: temporal, physical, emotional, and organizational. We use the concept of edgework to explore the complexities involved in how emergency workers attempt to negotiate the rewards and risks associated with multidimensional work intensity. Although certain parts of ambulance work may be intrinsically intense and can provide an important source of validation, organizational elements have the potential to push work intensity to unnecessary extremes. Ambulance services are 'professionalizing', but as work in ambulance trusts continues to intensify, issues over dignity, staff retention, and the meaning of work are becoming ever more challenging, just as they are in other public service professions.

Keywords

Introduction

Professional work often demands the complex negotiation between work intensity and high levels of intrinsic reward (Boxall and Macky, 2014; Gregg, 2011; Hewlett and Luce, 2006). Intensification emerges from many sources, such as technological change, organizational restructuring, growing demand, expanding organizational complexity, and resource shortages. Some of these pressures are felt especially keenly in public sector professions experiencing

austerity-related cutbacks and reorganizations (Kitchener 2000; Noordegraaf, 2016; Turnbull and Wass, 2015). Work intensity is clearly associated with increased risks of employee ill-health and organizational failure. On the other hand, some feeling of intensity or high-involvement can be rewarding and meaningful for employees, and can be partially unavoidable as an intrinsic feature of certain kinds of profession, especially those focussed on protection of the public, such a policing and fire and rescue.

This paper explores work intensity in England's ambulance service. Emergency services are well-known to feature high levels of stress, physical and emotional exhaustion, high burnout rates, and work strain. Recent research has suggested that the paramedic role is one of the most dangerous occupations in the advanced world (Maguire et al, 2014). Ambulance services in the UK have among the worst scores for employee satisfaction and ill-health across the NHS (Authors, XXXX). On the other hand, emergency ambulance work also carries intrinsically rewarding elements: the work can be fast-paced, varied, and unpredictable, it involves discretion and autonomy, and there are clear rewards associated with helping the public in times of need. Informed by a range of literature on work intensity, and by a critical reading of the concept of 'edgework' (Lyng, 1990, 2005) our ethnographic study of one of England's ten ambulance trusts demonstrates that ambulance work features four distinct but interrelated forms of work intensity, namely temporal, physical, emotional, and organizational. Ambulance workers engage in edgework as they negotiate the boundaries between the various forms and levels of intensity. Certain degrees of intensity are considered worthwhile and welcome; others are not. Edgework in ambulance services is a continuous struggle for dignity and meaning, with organizational intensity often the most serious of the challenges that staff have to negotiate.

Ambulance work has received relatively scant attention from sociology (with some exceptions, see Hughes, 1980). When it does appear, it tends to be incidental (Greatbatch et

al., 2005; Oborn et al., 2013; Prichard et al., 2014;) or framed as 'other' in relation to the healthcare workforce (Kessler et al., 2012). However, detailed, meaningful and evocative accounts exist (Authors, XXXX; Boyle and Healy, 2003; Charman, 2013; Corman and Melon, 2014; Kyed, 2016; Mahony, 2001; Nurok and Henckes, 2009; Reynolds, 2008; Scott and Tracy, 2007; Seim, 2017; Tangherlini, 2000). This relative neglect is in contrast to research on healthcare professions more generally (Ackroyd and Bolton, 1999; Adams et al. 2000; Buchanan et al., 2013; Cooke, 2006), and a voluminous literature on the sociology of uniformed professions (Charman, 2013; Loftus, 2009; Maynard-Moody and Musheno, 2003; Moskos, 2008; Reiner, 1992, and many more). Our paper makes an unique contribution by providing a multifaceted account of work intensification in ambulance services, drawing attention to four specific forms of intensity and the daily struggles of staff in trying to balance them. While derived from the specific field of ambulance services, this framework of work intensity could also potentially illuminate the challenges and rewards of working life in other high-pressure occupations, especially in uniformed professions which currently face severe organizational and operational challenges (Loftus, 2009; Seifert and Sibley, 2010; Turnbull and Wass, 2015).

The paper begins by exploring the concepts that inform our analysis, namely those surrounding work intensity across various disciplines, followed by the sociological notion of edgework. We go on to introduce the design and methods of our study, before our research findings are explored in four subsections. The paper ends with discussion and conclusion sections which highlight the ways in which the conflicts and imbalances surrounding work intensity suggest deep uncertainty over the meaning and dignity of work in public service professions.

The multiple dimensions of work intensity

For the last three decades, researchers have observed rising intensity across multiple organizational and professional contexts (Authors, XXXX; Burke et al., 2010; Cooke, 2006; Felstead et al., 2013; Green 2004). Various strands of literature emphasize different forms of work intensity. A particularly commonly conception is simply workload versus time; fast pace of work, long working hours and a sense of never-ending workloads (Felstead et al, 2013; Green, 2004). Certain occupations seem to be particularly prone to long-hours cultures, especially white-collar and professional work. Hewlett and Luce (2006) discuss the rise of 'extreme jobs' held by senior professionals (corporate executives, investment bankers, surgeons) who routinely work in excess of sixty hours per week in high-intensity, high-risk roles. While the intensity of the work and the risks involved are a struggle, a central part of Hewlett and Luce's framing is the elevated sense of value and 'exhilaration' experienced by extreme job holders. An important feature of high-pressure, professional jobs is that work can be both exhilarating but also personally overwhelming.

Closely related to time pressures are physical pressures associated with intensity such as work strain, tiredness, and physical or psychological injury. Research on workplace safety is a major cross-disciplinary research field, involving areas such as ergonomics (Luczak, 1991), work psychology, and medico-legal research and policy, with the focus often on technical matters of establishing 'safe' working limits to control the risks of work-related injury.

Research on the service sector has also reflected the emotional intensity of work, especially when clients and managers expect ever-greater investment into soft skills or emotional labour (Deery et al. 2010; Hochschild, 1983; Korczynski, 2003; Wharton, 2016). Emotional intensity is harder to quantify and limit than physical and temporal strain, and much of the literature has focused on formal and informal coping strategies (Boyle and Healy, 2003; Lewis, 2005).

Organizational challenges are also a major element of work intensity, with many employers pursuing downsizing, resource cutbacks, tightened managerial control, and employment restructuring. While organizational change can clearly drive work intensification, it can also potentially disturb employees' professional identities which tend to be rich sources of work satisfaction and meaning. Intensified managerial control over work and its measurement can rob employees of professional judgement and autonomy.

Work intensity is thus *multidimensional* and we suggest that it is useful to refine our understandings of these dimensions. Much of the literature on workplace safety or employee burnout is psychological in orientation. But sociological discussions of working life also include contests over employee autonomy and the broader meanings and purposes of work. Meaning and purpose are magnified in emergency services or other 'extreme' settings which often involve life-and-death situations (de Rond and Lok, 2016). A sensitivity to questions of dignity and meaning of work in extreme conditions drew us to focus in particular on the mechanisms by which emergency professionals attempt to negotiate the risks and rewards associated with work intensity. For this, we turn to the concept of edgework.

Edgework (Lyng, 1990; 2005) is an analytical framework for understanding intentional high-risk behaviours. Focusing on extreme sports activities such as skydiving, Lyng proposes edgework as a sociological conceptualization that captures both the experiential intensities of very high-risk activities and helps to explain the motivations of participants. The term derives from Lyng's observation that those engaging in certain intentionally risky (but skills-based) activities do so actively – using their skills to negotiate (or work) the boundary (edge) between order and disorder, between life and death. A key element of Lyng's framework is that it seeks to explain such behaviour partly as a reaction to living and working in the over-administered and generally risk-averse world of late capitalism. Lyng positions edgework as an activity that allows people who are underwhelmed and alienated by their job to exercise

other skills in a self-actualising manner, attaining a sense of meaning, mastery, and self-determination and generating attractive and welcomed forms of intensity that are absent from their work life.

Ambulance staff are in some sense edgeworkers in that they are attracted to the ambulance service because of its high-stakes, risky, and fast-moving nature. In contrast to Lyng, however, these edgeworkers are employees, meaning that many of the risks they confront are imposed rather than voluntarily sought-after. Ambulance service employees face severe work intensification and they often express resentment with their employers for creating such unnecessarily risky and demanding environments. Although key elements of edgework are present in the ambulance occupation (death and destruction, rapid response, joking and bantering, storytelling about extreme events), there is also a strong sense in which organizational pressures are making the work more demanding than it needs to be, raising issues of employee and patient safety, staff retention, work-life balance, stress and ill-health. Edgework is used in our paper as a way of conceptualizing how these workers attempt to negotiate (not always with success) the multiple dimensions of work intensity.

Work intensity in ambulance services

Literature on emotional, temporal and physical risks in ambulance services suggests that such work may be inherently intense (Alexander and Klein, 2001; Bennett et al., 2004; Clohessy and Ehlers, 1999; Corman and Melon, 2014; Mahony, 2001; Pajonk, et al., 2011; Sterud, et al., 2006, 2011; Young and Cooper, 1995). Ambulance professionals are regularly involved in rushing to the scene of emergencies and taking rapid action in unstable and unfamiliar environments (Cydulka et al., 1989). Responding at high speed or what Metz calls 'running hot' (Metz, 1981) is arguably 'the most intense time in ambulance work' (1992: 22). Even where ambulance work does not involve 'emergency encounters' (Mannon, 1992) routine

non-emergency work, such as transporting chronically and terminally ill patients, also imposes demands which can be emotionally exhausting (Sterud et al., 2011).

Those on the road, and across the service, have to 'deal with people in panic, shock, difficulties and stress, and thereby see a most unflattering side of humanity… they have to cope with blood, pain, distorted bodies and sickness in every shape and form' (James, 1988: 319). Dealing with these issues remotely, in the role of a call handler or operations centre manager, can also be emotionally intense and stressful (Adams et al., 2014). These are some of the 'intrinsic' factors of which Young and Cooper (1995: 28) write, which set ambulance work apart from many other forms of activity (although there are some clear links to other uniformed professions, see Kop et al, 1999; Loftus, 2009; Seifert and Sibley, 2010). The unpredictability, the responsibility and the challenge inherent in ambulance work require 'intense application' for periods of time; this is both a potential source of stress and an attraction of the job (James, 1988: 320). Beyond factors 'intrinsic to the job' organizational structure and processes - and in particular organizational change - are significant stressors (Michie and Williams, 2003; Sterud et al., 2011; Young and Cooper, 1995). Physical, emotional, temporal and organizational pressures regularly combine in ambulance work.

Issues of work intensity also feature in more intangible discussions about employees' and professionals' orientations to work and their understandings of the essence and purpose of it. There is a growing sociological literature which provides deeper understandings of these elements of ambulance work, based on in-depth qualitative inquiry. Probably the first was Donald Metz's (1981) ethnography of a commercial ambulance provider in the USA (Metz 1981). Mannon (1992) produced a similar monograph also based on long-term observation of a US ambulance service. These and other accounts (Authors, XXXX; Boyle and Healy, 2003; Charman, 2013; Corman and Melon, 2014; Mahony, 2001; Palmer, 1983; Reynolds, 2008; Seim, 2017; Scott and Tracy, 2007; Tangherlini, 2000) go beyond psychological, ergonomic,

or risk and safety issues to consider the culture, activities, organization and contested social meanings of ambulance work. The present paper builds on this tradition, mobilizing the notion of edgework as a way of exploring the meaning of work for professionals operating in such challenging contexts.

Research methods and approach

Data for this paper are derived from recent research with a National Health Service (NHS) ambulance trust in England. Delta Trust (a pseudonym for purposes of anonymity) has over 100 ambulance stations and employs around 5000 staff. Delta serves over 6.5 million residents across 5200 square miles. We were given wide access across the organization to conduct interviews and ethnographic observations of managers, ambulance crews, call handlers and emergency dispatchers. The project received ethical approval [details anonymized for review purposes]. NHS ambulance trusts often allow the accompanying of emergency crews on shifts for the purposes of observation, education and training and we were permitted to do this for the purposes of fieldwork research, subject to agreeing to Delta Trust's observation policies.

The research questions that motivated the study are as follows. We were interested in exploring organizational change at the trust (how it was dealing with robust performance targets and making efficiency savings), and how these pressures were experienced by different employees (managers and 'road' staff). The objective was to understand the contested meanings of work pressure and work intensity. How well were the organization and its employees coping with demand? How do employees account for the meaning and purpose of emergency work when resources were perpetually in shortage? What draws people in to wanting to work in such an environment, and what informs their decisions to stay or leave?

We conducted 80 interviews of between 60-90 minutes. Of these, 31 were with operational managers such as clinical team leaders and area managers, almost all of whom were also current or former 'road' staff. We interviewed 12 currently operational paramedics, 11 control room staff and 26 senior managers/directors. Interviews were semi structured and informed by the above questions about demand pressures, organizational resources and the meaning of work. We also conducted around 150 hours of observations, both of crews working on vehicles, and call-handling and managerial staff working in emergency control centres. When observing crews we were exposed to a huge range of social and organizational issues, but we made sure we questioned the crews on work-life balance, work pressure, managerial and organizational structures, and the essence of emergency work as a profession. Interviews were digitally recorded and transcribed. Fieldnotes were simply recorded as scratch notes in notebooks wherever and whenever it was feasible and appropriate to record them. These notes were then typed up into detailed and evocative stories of life on the road. A twelve-hour shift could easily generate 20-25 pages of stories, impressions, scenes and comments from the researcher and crew. Ethnographic methods offer the researcher and thence the reader a sense of immediacy, and gave us insights into the varied understandings and meanings of work activities. This approach generated multi-vocal texts that contained a range of interpretations (Ybema et al., 2009). Our approach to analysing this mass of textual material was to work as a team of 5, individually and collectively reading the transcripts and each other's typed-up fieldnotes. We took a thematic approach to data analysis (Clandinin and Connelly, 2000; Wolcott, 1994), identifying and classifying themes that most closely addressed our research questions.

All manner of elements of social life were included in these texts; social comment on poverty and exclusion, complaints about 'frequent flyers', technical discussions about call prioritizing, vehicles, clinical protocols, and workplace gossip. We progressively focused our

attention most tightly on the specific themes of work intensity and the meanings of work. Over time we identified four distinct but often overlapping dimensions of work intensity, which form the sub-sections of the data presentation below.

Findings

Temporal intensity

Temporal intensity is intrinsic to ambulance work and is reflected in fast responses, driving, decision-making and action. National targets for ambulance trusts in England stipulated that calls categorized as 'Red 1' and 'Red 2' ('immediately life-threatening' or 'life-threatening but not immediately time-critical'), be responded to within 8 minutes in at least 75% of cases (National Audit Office, 2017: 64-5). Speed, therefore, was an important organizational imperative.

Navigating red lights, hard acceleration and braking, and weaving through traffic on lights and sirens sometimes carried an element of excitement, although crews were keen to indicate that the 'novelty soon wears off'. On a 12-hour shift it would be common for a vehicle to be sent 'on blue lights' to around ten emergency calls (and would often be 'stood down' and diverted from one call to another). Depending on geographic area it was not unusual for a crew to drive on lights and sirens for ten or twenty minutes at a time, perhaps longer if repeatedly diverted. If working solo on a Rapid Response Vehicle (RRV: an adapted road car), the responder has to drive for the whole shift. A two-person crew would typically swap driving duties half-way through. Blue-light driving demands intense concentration; it requires intensification of kinetic and spatial risk awareness, as well as accelerated decision-making and physical actions. Some managers did characterise road staff as 'adrenaline junkies', for

whom the 'action' (Lyng, 1990: 862) of racing to save a patient's life is fulfilling in both ontological and professional senses:

> [O]ur staff, […] they're recruited to be, if you like, the adrenaline junkies, they get there, they save someone's life, they drive somewhere else, deliver the patient to a team that's all… it's like the telly isn't it? That's why people join… (Senior Board Executive 'a')

Paramedics we interviewed and observed did reflect on speed although they usually didn't characterize blue-light response as exciting or exhilarating. Emergency vehicles are not exempt from road safety regulations; they must, for example, change siren tones when approaching red lights and proceed through them at reduced speeds. The persona of the adrenaline junkie or trauma junkie (Palmer, 1983) did exist to some degree, but public or media 'heroic' discourses of speeding ambulances and desperate life-saving actions were ridiculed (Lois, 2005; Scott and Tracy, 2007). While staff acknowledged blue-light driving as intense and interesting, the intensity was also widely associated with unpleasant senses of risk and danger – invoking feelings of pressure, the need for professionalism, and an entrenched problem of a 'blame culture' in ambulance trusts that is exacerbated by arbitrary response-time targets lacking clinical justification:

> We might have a responsibility to get to calls quickly but we also have a duty of care to other road users, pedestrians/cyclists and also fellow colleagues to get them to the calls safely, so imagine the pressure on the driver getting to these calls. If he has an accident *en route* he is prosecuted by the police or sued by the injured party and gets no support from Delta (Senior Paramedic 'c').

The above is a good example of edgework; the balancing of themes of intensity and enjoyment with those of professionalism, safety, and a perceived lack of management support.

Ambulance trusts in England in 2008-9 received 7.48 million emergency calls, rising to 9.08 million by 2012-13, a rise of 25% over five years (Association of Ambulance Chief Executives, 2014: 17). Growing demand has not been matched by increasing resources, meaning increased work intensity. Crews spoke of a time perhaps ten years ago when they would expect long periods of idle time between calls, but now they described near-continual mobilization, even on night shifts. The temporal dimensions of work intensity were becoming extremely challenging, although even this interacted with certain limits. Amid growing general demand, the total number of actual care episodes for each crew per shift could rarely go beyond eight to ten. Ironically, episodes per shift could be declining in some regions due to chronic shortages at A&E departments causing slow handovers. Crews did have mandated dining breaks, and these would often be the only time during the shift that they returned to their base station. Even these could be set as 'interruptible' meaning a crew on a break could still be allocated a call. Limited time on station 'between jobs' could be filled with paperwork, cleaning up and checking equipment and drugs. Senior executives acknowledged that the increased level of activity may not be sustainable:

> …if you are constantly asking people to stretch and go to 90/95%, you know, initially people will deliver that performance for you but that's not how you can motivate people to actually keep doing it (Senior Board Executive 'b').

Five day weeks are compressed into 13 or 14 twelve-hour shifts per month. While the intention may be to have a 'normal' work week in terms of hours, this was not always achieved. One emergency call handler told us that on occasion she has worked twelve-hour

shifts on seven successive days. Responders also regularly found themselves pushed into enforced overtime:

> You […] work a twelve-hour shift and with five minutes to go to finishing, you clear at a hospital and are given a further emergency which could be many miles away […] then you have to make your way home. A total of maybe sixteen to seventeen hours of being up and about away from home, only to find that the next day is exactly the same again because control managers are just sending the first ambulance that becomes available regardless of the distance you have to travel (Senior Paramedic 'c').

This kind of 'social dislocation' (Metz, 1981: 43) occurs because what flexibility there is in the system is derived from responders themselves. Exhaustion was a common theme, experienced as mental fatigue from the high tempo, high stakes nature of the job, and physically from the demands of treating and transporting patients over long shifts plus travel time home.

Physical intensity

Ambulance work can be intensely physical, such as the strain involved in lifting and moving patients and equipment (Hignett, 2015; Maguire et al, 2014). Patients also need to be manoeuvred around obstacles or carried down flights of stairs:

> The crew tell me that one of the hardest things can be getting people downstairs. There is supposed to be a chair that is specially designed to walk people downstairs. One ambulance station trialled one but they won't get them because they are too expensive. (Observation notes).

Responders often need to carry a heavy-duty defibrillator / monitor weighing around 10kg from the vehicle to the patient, who can be far from where the ambulance is parked. Physical intensity can mean injuries:

> I've worked in Delta seven years. I used to be road-staff, but I hurt my back lifting. I always said I'd always be on the road and would never do an office job. But things have changed…(Trainee Customer Support Manager).

Dealing with violent patients and bystanders is an occasional reality of ambulance work (Mannon, 1992: 177-180; Metz, 1981: 131-134; National Audit Office, 2003; Reynolds, 2006). Violence elevates risk to its most unsettling and unpleasant form. Sitting in an ambulance station before heading out on a shift, two of us listened to a crew returning off the night shift tell a tale of a drunken, violent 'kickboxing champion' in the city centre. A rapid response car paramedic that we accompanied stated that she has been assaulted by patients 'a few times.'

But amid the conflict and strain many of our research participants found that certain forms of intensity can have a positive effect on how they felt – in keeping with the concept of edgework as an activity in which intensity and risk are celebrated and sought out. An ECC manager spoke of feeling 'keyed up' for, and by, intense and fast-paced organizational work rather than stressed in a purely negative sense. Road staff spoke of the experiential highs that a 'good job' (highly demanding in terms of skills and expertise, and with a positive outcome for the patient, see Reynolds, 2008: 86) can bring:

> You could go on for weeks and weeks feeling partly down…But then you have a job when you thought you made a difference. That is an amazing feeling and it kick-starts you for the next few weeks or months (Paramedic 'c').

An 'amazing feeling' speaks directly to the attractive and actively-sought elements of edgework that are inherent in ambulance workers' professional identity and self-worth.

Emotional intensity

Previous research (Boyle and Healy, 2003; Mannon, 1981: 162) suggests that ambulance work, alongside nursing and other caring professions, 'has skilled emotion management at the centre of its labour process' (Lewis, 2005: 570). Emotional labour in ambulance work concerns the ability to perform one's job professionally in the face of trauma and death. Call handlers, ambulance crew and managers must be able to deal with the worst kinds of human tragedy at one moment, and more mundane matters such as a drunken member of the public, a twisted ankle, or staff holiday rotas the next. 'Life-and-death' responsibility (Boyle and Healey, 2003: 361; Lyng, 2005; Mannon, 1992: 191; Metz, 1981: 39) was reflected on in interviews:

> someone who may have been working in a factory making a widget, but now is actually going to go out there and save someone's life and meet them at the most vulnerable point in their lives. It's a stark reality (Senior Training Manager).

Delta staff are able to draw on training, experience, and clinical protocols to help them know that they have done their job well. But the emotional demands of ambulance work can be intensive enough to have lasting effects:

> I don't know about the other subconscious frustrations of having, over a 13-year period, seen so many people die, you know, and so many people in real agony, in real-life situations, hearing the screams of mothers when you hear the doctor or yourself tell them that their child has died and/or a relative or an adult has died. Dealing with

people in their cars that are trapped and screaming, dealing with people on the trains, […] when their legs are hanging off and they're still conscious (Senior Paramedic 'b')

Emotion management also took place in Emergency Control Centres, and was complicated and varied. Sometimes it involved forms of distancing in that patients' and bystanders feelings of pain, fear, anxiety and sadness can in some senses be 'parked' or blocked out:

We asked one call handler aged in his early twenties how he copes with what looks like a stressful and emotionally intense job: 'Everything becomes second nature. You can become detached. It's as though it's not a real person on the end of the phone.' But some jobs are more traumatic, he admitted. One involved a woman discovering an eight year old child dead. After dealing with that he 'had to take one hour out'. A young woman colleague noted that there are experienced supervisors on hand in Control who are able to offer support and guidance. In apparent contrast to her colleague's attempts at ontological detachment, she does sometimes check up on patients to see what has happened to them. As we observed, she checked the computer to see what had happened to a woman she dealt with earlier, who was in cardiac arrest. The woman had died.

(Observation fieldnotes)

The boundary between life and death was an everyday feature of emergency medical work and was normalized by staff in what seemed to be disarmingly straightforward ways, such as scrolling through 'jobs' on a screen and noting or selecting 'Patient Deceased'. But blocking out and normalizing death was not always straightforward, and issues relating to 'secondary trauma' would sometimes intrude, often in unpredictable ways. Emotional stressors could also be compounded by organizational imperatives, as we shall see in the next section.

Organizational intensity

A cluster of organizationally-related issues emerged in our research at Delta, including performance targets, organizational change and lack of resources. These interconnected with the other elements of intensity discussed above and were understood by our respondents as instrumental in increasing levels of intensity over recent years. Research participants were to a considerable extent able to rationalize the emotional, temporal, and physical stressors by saying they 'come with the territory' and 'it's what we do', largely in keeping with the proactive seeking of intensity associated with edgework. They were much less happy to describe organizational intensity as natural or unavoidable. A common response was to comment that it is not the actual emergency work that is challenging, but 'everything else around it', meaning organizational and managerial issues.

Performance targets (especially the 8-minute response target) were clearly linked to work intensification. The following response - to the question of when performance monitoring was brought in - is instructive:

> It's always been there… I've been doing this role 3 years. But recently things have got a lot worse. I was in a meeting the other day and I was saying to myself 'I can't do this anymore!' [bemused laughter] I actually thought of you and your study! I remember I said to you a few months back, things aren't so bad, it's a decent job, but it's got a lot more intense and at the moment it's heavy. I can't do this! Since April there's been lots of pressure, they've looked at the budgets and there's an overspend (Customer Support Manager).

Failure to achieve targets, and poor performance scores are seen by senior managers at Delta as a sign of personal failure, and a threat to their career. At the same time, they are under pressure not to let standards of care slip:

…managers are feeling that pressure, do I go with performance, because if I don't go with performance, then I know I'm going to be in trouble, or do I go with quality, because if I don't go quality and a complaint comes in, I am going to be in trouble, […] I think managers are in between a rock and a hard place (Customer Support Manager).

Performance targets heighten intensity for ambulance workers but also posed a challenge to the professional meanings of ambulance work. Disjuncture appeared between the 'reality' of the situation out on the road, and as it is understood by Control staff. For the dispatcher or manager, the objective is meeting response time targets by utilising resources as 'efficiently' as possible. For the ambulance crew, this often translates into being sent to a whichever 'job' happens to be nearest, even when close to shift end time, or immediately after another, possibly traumatic, callout. This conflicts with their objective, which is to provide the best care for their patient; more difficult when one is 'fatigued, rushed and forced to cut corners' (Mahony, 2001:139). The extended quote below illustrates how the intense pressure of the response targets system:

[P]aramedics on RRV vehicles are Start/Stop on most of their calls. They say they are getting stressed out being given a 999 call, starting off at high speed only to be cancelled off from the call, either a few seconds/minutes into the call, in other cases arriving at a call and while giving a handover to an ambulance crew they are being called up to be given further 999 calls because ambulance control are rushing to get the call covered. I am witnessing very experienced paramedics becoming quite agitated at the workload being forced on them… I don't think any of the senior managers of Delta could cope with these levels of stress every working day. It's not fair (Senior Paramedic 'c').

Organizational change is a permanent reality across NHS organizations which have been undergoing constant restructuring over the last thirty years, both at the level of policy and the individual trust. This 'organizational turbulence' (Fischer, 2012, see also Young and Cooper, 1995) adds to the pressures of ambulance work:

> You know, the pressure, the amount of change, everywhere in the ambulance service, […] working reactively isn't good if you're doing it on a constant basis (Resilience Development Manager).

There was a widespread sense in the organization that workloads had increased and that work had become more intense. Delta is, like others in the NHS, an organization that faces increasing demand for its services, but seeks to meet this demand without a proportionate increase in staffing and resource costs. Ambulance work will always have the 'draw' that one might associate with edgework, but organizational pressures are making it excessively intense and thereby potentially disrupting its meaning, creating staff anxiety and resentment.

Discussion

This paper has evaluated four dimensions of work intensity in what might be seen as a paradigmatically 'intense' workplace. In what follows we return to the notion of edgework in our attempt to provide an understanding of the social meanings of intensity in ambulance work. Strong parallels exist in relation to Lyng's notion of edgework. While this concept initially emerged out of research on leisure activities, the attractive and self-affirming elements of risk and intensity have been documented in paid employment such as aid work (Roth, 2014) cycle couriering (Kidder, 2006) and day trading (Zwick, 2006). Mountain rescue teams have also been analysed as a form of edgework (Lois, 2005), sharing some obvious similarities with paramedics; the stakes are life and death, the goal is altruistic and the work is focused on healthcare emergencies. Edgework clearly can feature as a part of

formal employment, in the use of one's skills to negotiate inherent risk, and of gaining a sense of self-actualization from work. Edgework is characterised as an activity requiring both self-control and mental toughness (Lyng, 1990: 859) and these elements clearly apply to emergency ambulance response.

The issue of risk in ambulance work can be understood somewhat differently when compared to, for instance, extreme sports. The archetypal edgework experience is one in which the individual's failure to meet the challenge at hand will result in death or, at the very least, debilitating injury (Lyng, 1990: 857). In this sense edgework does capture the intense experience of using one's skills to overcome the 'high-stakes' challenge of emergency healthcare. However, risk in edgework tends to be positioned squarely in terms of risk to the edgeworker. Although we did find that ambulance staff face considerable risks to themselves, this was perceived to be risk enforced on employees rather than voluntarily sought-after. Patients are the primary focus of risk in ambulance work. To describe ambulance work as edgework is not to characterize emergency responders as reckless thrill-seekers. Ambulance responders have a professional bearing and look to minimize patient risk, but they also gain the most meaningful forms of professional validation from patient episodes that feature a balanced mix of temporal, physical and emotional intensity.

Extreme organizational pressures are making it increasingly hard to find this balance. Finding it is the hallmark of engaged, sustainable and professional employment. Lyng positioned edgework as a response to the predominance of alienating labour under capitalism. Yet ambulance work *is* precisely that - employment, rather than an escape from it. We met many ambulance staff who were stressed, tired, and dissatisfied with how work at Delta was organized, and this speaks to alienation. But it was perhaps more accurate to think of this as low morale; paramedics and call-handlers, even under intense pressure, also described much of their work as meaningful and implicitly worthwhile. As we explain in the conclusion,

discussions over professional self-worth and the sustainability of their own employment were substantial as they reflected on the various ways in which they tried to negotiate and balance the welcome and unwanted elements of work intensity.

Conclusion: Accounting for edges and extremes

Our study of the work culture of an ambulance trust unearthed an intriguing mixture of edgy and intense elements melded with mundane, operational, bureaucratic work life. Many frontline responders complained bitterly about working in the ambulance trust yet also frequently described life on the road serving the public as 'the best job in the world.' Extremes and edges refer to limits or endings. While burnout is far from a new issue in emergency work (Clohessy and Ehlers, 1999; Johnson et al., 2005: 184; Pajonk et al., 2011; Sterud et al., 2011: 8; van der Ploeg and Kleber, 2003; Wagner et al., 2002), a major and growing problem facing ambulance services is staff retention in a situation where personnel have apparently reached their limits. Many ambulance trusts in England have high vacancy rates, with paramedics in particularly short supply (National Audit Office, 2017: 10). Ambulance work has become another manifestation of the healthcare 'variant' (Buchanan et al., 2013: 647) of extreme jobs. Resources can only be cut so far before intensifying work to unsustainable levels, and this should not be seen as inevitable. Like Metz, we found that ambulance workers were by and large 'idealistic without being naïve' (1981: 39) in that their motivation was to help patients, but within the context of both human and organizational limits. This idealism is open to exploitation (Johnson, 2015) in terms of how far work can be intensified.

The paramedic role has been formally professionalised (Author XXXX; Association of Ambulance Chief Executives, 2011), a process involving all-graduate entry requirements and

the establishment of the College of Paramedics. Paramedics and students are encouraged to think of themselves as autonomous clinicians. 'Good jobs' or 'working jobs' are the essence of emergency services. This core meaning of the work will always contain elements of risk, romance and excitement (Palmer, 1983). But the routine pressures placed on ambulance services, resources shortages, restrictive targets, a blame culture, and simply massive demand (much of it clinically unnecessary), are making 'real ambulance work' harder to realize. Contests over the meaning of professional work are very visible in the ambulance world and are increasingly common features of other occupations undergoing intense change and scrutiny (Kitchener, 2000; Noordegraaf, 2016).

Professional employment involves conflict between elements of work that are fulfilling, worthwhile and rewarding, and those that are unpleasant, tiresome and unwanted. Certain elements of emergency and uniformed work are intrinsically intense (temporally, physically, emotionally) and these elements are part of what imbues these occupations with meaning. Organizational pressures were typically described as the most challenging and the least worthwhile form of intensity, posing a considerable challenge to the sustainability of employment in these professions. High work intensity is expected, and to some extent actively sought out, by ambulance workers because nothing can be more worthwhile than saving lives and assisting the public in need. Like Buchanan et al (2013), however, we found that multidimensional intensification - a ratcheting up of work levels across temporal, physical, emotional and organizational levels - had led to ambulance employees 'working the edge' (Lyng, 1990) under unnecessarily extreme conditions. Employment in the uniformed professions does not need to be a form of 'extreme work'. Rather, it needs to be sustainable if emergency work is to remain a rewarding profession.

References

Association of Ambulance Chief Executives (2011) *Taking Healthcare to the Patient 2: A review of 6 years' progress and recommendations for the future*. London: AACE.

Association of Ambulance Chief Executives (2014) *Annual Report 2013-14*. London: AACE.

Ackroyd S and Bolton S (1999) It is not Taylorism: Mechanisms of Work Intensification in the Provision of Gynaecological Services in a NHS Hospital *Work, Employment and Society* 13 (2): 369–387.

Adams A, Lugsden E, Bond S, Chase J and Arber S (2000) Skill-Mix changes and work intensification in nursing. *Work, Employment and Society* 14(3): 541-555.

Alexander DA and Klein S (2001) Ambulance personnel and critical incidents. *British Journal of Psychiatry* 178: 76-81.

Bennett P, Williams Y, Page N et al. (2004) Levels of mental health problems among UK emergency ambulance workers. *Emergency Medicine Journal* 21: 235-236.

Boyle M and Healy J (2003) Balancing Mysterium and Onus: Doing Spiritual Work Within an Emotion-Laden Organizational Context. *Organization* 10(2): 351-373.

Boxall P and Macky K (2014) High-involvement work processes, work intensification and employee well-being. *Work, employment and society* 28(6): 963–984.

Buchanan D, Parry E, Gascoigne C, and Moore C (2013) Are Healthcare Middle Management Jobs Extreme Jobs? *Journal of Health Organization and Management* 27(5): 646–64.

Burke RJ, Singh P and Fiksenbaum L (2010) Work intensity: potential antecedents and consequences. *Personnel Review* 39(3):347-360.

Charman S (2013) Sharing a laugh: the role of humour in relationships between police officers and ambulance staff. *International Journal of Sociology and Social Policy* 33 (3/4): 152-166.

Clandinin DJ and Connelly FM (2000) *Narrative Inquiry: Experience and Story in Qualitative Research.* New York: Jossey-Bass

Clohessy S and Ehlers A (1999) PTSD symptoms, response to intrusive memories and coping in ambulance service workers. *British Journal of Clinical Psychology* 38:251-265.

Cooke H (2006) Seagull management and the control of nursing work. *Work, Employment and Society* 20(2): 223-243.

Corman MK and Melon K (2014) What Counts? Managing Professionals on the Front Line of Emergency Services. In: Griffith AI and Smith DE (eds) *Under New Public Management: Institutional Ethnographies of Changing Front-Line Work.* Toronto: University of Toronto Press, 148-176.

Cydulka RK, Lyons J, Moy A, Shay K, Hammer J and Matthews J (1989) A follow-up report of occupational stress in urban EMT-paramedics. *Annals of Emergency Medicine* 18: 1151-1156.

Deery S, Iverson R and Walsh J (2010) Coping strategies in call centres *British Journal of Industrial Relations*, 48(1): 181-200.

De Rond M and Lok J (2016) Some Things can Never be Unseen: The Role of Context in Psychological Injury at War. *Academy of Management Journal* 59(6): 1965-1993.

Felstead A, Gallie D, Green F, and Inanc H (2013) *Work Intensification in Britain: First Findings from the Skills and Employment Survey 2012*. London: Institute of Education.

Fischer D (2012) Organizational Turbulence, Trouble and Trauma. *Organization Studies* 33(9): 1153-1173.

Greatbatch DG, Hanlon G, Goode J, O'Cathain A, Strangleman T and Luff D (2005) Telephone triage, expert systems and clinical expertise. *Sociology of Health & Illness* 27(6): 802–830.

Green F (2004) Why has work effort become more intense? *Industrial Relations*, 43(4): 709-741.

Gregg M (2011) *Work's Intimacy.* Cambridge: Polity Press.

Hewlett SA and Luce CB (2006) Extreme Jobs: The Dangerous Allure of the 70-Hour Workweek. *Harvard Business Review*, December.

Hignett SM (2015) Musculoskeletal injury risks for ambulance workers. *Journal of Paramedic Practice* 7(6): 226-227.

Hochschild AR (1983) *The Managed Heart.* Berkeley: University of California Press.

Hughes D (1980) The Ambulance Journey as an Information Generating Process. *Sociology of Health & Illness* 2(2): 115–132.

James A (1988) Perceptions of stress in British ambulance personnel. *Work & Stress* 2(4): 319-326.

Johnson EK (2015) The business of care: the moral labour of care workers. *Sociology of Health & Illness* 37(1): 112–126.

Kessler I, Heron P and Dopson S (2012) Opening the window: Managing death in the workplace. *Human Relations* 65(3): 291-312.

Kitchener M (2000) The bureaucratization of professional roles: The case of clinical directors in UK hospitals, *Organization*, 7(1): 129-154.

Kidder J (2006) "It's the Job that I Love": Bike Messengers and Edgework. *Sociological Forum* 21(1): 31-54.

Kop N, Euwema M and Schaufeli W (1999) Burnout, stress and violent behaviour among Dutch police officers, *Work & Stress*, 13(4):326-340.

Korczynski M (2003) Communities of Coping: Collective Emotional Labour in Service Work. *Organization*, 10(1): 55-79.

Kyed M (2016) Masculinity, Emotions and 'Communities of Relief' among Male Emergency Medical Technicians, in Ericson M and Mellstrom U (eds) *Masculinities, Gender Equality and Crisis Management*. Abingdon: Routledge, 34-46.

Lewis P (2005) Suppression or expression: an exploration of emotion management in a special care baby unit. *Work, employment and society* 19(3): 565-581.

Loftus B (2009) *Police Culture in a Changing World.* Oxford: Oxford University Press.

Lois J (2005) Gender and emotion management in the stages of edgework. In Lyng S (ed.) *Edgework*. Abingdon: Routledge, 117-152.

Luczak H (1991) Work under extreme conditions. *Ergonomics*, 34(6): 687-720.

Lyng S (1990) Edgework: A Social Psychological Analysis of Voluntary Risk Taking. *American Journal of Sociology* 95(4): 851-86.

Lyng S (ed) (2005) Edgework: The Sociology of Risk-Taking. London: Routledge.

Maguire BJ, O'Meara PF, Brightwell RF, O'Neill B and Fitzgerald GJ (2014) Occupational injury risk among Australian paramedics: an analysis of national data. *Medical Journal of Australia* 200(8): 477-480.

Mahony KL (2001) Management and the creation of occupational stressors in an Australian and a UK ambulance service. *Australian Health Review* 24: 135-145.

Mannon JM (1992) *Emergency Encounters: EMTs and Their Work*. Boston, MA: Jones and Bartlett.

Maynard-Moody S and Musheno M (2003) *Cops, Teachers, Counselors: Stories from the Front Lines of Public Service.* Ann Arbor: University of Michigan Press.

Metz DL (1981), Running Hot: Structure and Stress in Ambulance Work. Cambridge, MA: ABT Books.

Michie S and Williams S (2003) Reducing work related psychological ill health and sickness absence: a systematic literature review. *Occupational Environment Medicine Journal* 60:3-9.

Moskos P (2008) *Cop in the Hood: My Year Policing Baltimore's Eastern District.* Princeton: Princeton University Press.

National Audit Office (2003) *A safer place to work*. London: HMSO.

National Audit Office (2017) *NHS Ambulance Services.* London: HMSO.

Noordegraaf M (2016) Reconfiguring Professional Work: Changing Forms of Professionalism in Public Services. *Administration & Society* 48(7): 783-810

Oborn E, Barrett M and Dawson S (2013) Distributed Leadership in Policy Formulation *Organization Studies* 34(2): 253-276.

Pajonk F-G, Andresen B, Schneider-Axmann T, Teichmann, A, Gartner U and Lubda J et al (2011) Personality traits of emergency physicians and paramedics. *Emergency Medicine Journal* 28: 141-146.

Palmer CE (1983) "Trauma Junkies" and Street Work: Occupational Behavior of Paramedics and Emergency Medical Technicians. *Journal of Contemporary Ethnography* 12(2): 162–83.

Prichard J, Turnbull J, Halford S and Pope C (2014) Trusting technical change in call centres *Work, employment and society* 28(5): 808–824.

Reiner R (1992) *The Politics of the Police*. Toronto: University of Toronto Press.

Reynolds L (2008) *Beyond the frontline: A critical ethnography of a statewide ambulance service provider.* PhD Dissertation, University of South Australia.

Reynolds T (2006) *Blood Sweat and Tea.* London: Friday Books.

Roth S (2014) Aid work as edgework. *Journal of Risk Research* 18(2): 139–155.

Scott C and Tracy SJ (2007) Riding Fire Trucks and Ambulances with America's Heroes. In: Drew SK, Mills MB and Gassaway BM (eds) *Dirty Work: The Social Construction of Taint.* Waco, TX: Baylor University Press.

Seim J (2017) The Ambulance: Toward a Labor Theory of Poverty Governance. *American Sociological Review* 82(3): 451-475.

Seifert R and Sibley T (2010) It's Politics, Stupid: The 2002-2004 UK Firefighters' Dispute, *British Journal of Industrial Relations* 49(s2):s332-s352

Sterud T, Ekeberg O and Hem E (2006) Health status in the ambulance services: a systematic review. *BMC Health Services Research* 6:82.

Sterud T, Hem E, Lau B and Ekeberg O (2011) A comparison of general and ambulance specific stressors: predictors of job satisfaction and health problems in a nationwide one-year follow-up study of Norwegian ambulance personnel. *Journal of Occupational Medicine and Toxicology* 6:10.

Tangherlini TL (2000) Heroes and Lies: Storytelling Tactics among Paramedics. *Folklore*, 111: 43–66.

Turnbull P and Was V (2015) Normalizing extreme work in the Police Service? Austerity and the inspecting ranks. *Organization* 22(4): 512-529.

Watson T (2011) Ethnography, Reality and Truth: The Vital Need for Studies of 'How Things Work' in Organizations and Management. *Journal of Management Studies* 48(1): 202-217.

Wharton A (2016) Interactive Service Work. In: Edgell S, Gottfried H and Granter E eds. *The Sage Handbook of the Sociology of Work and Employment.* London: Sage, 329 – 347.

Wolcott HF (1994) *Transforming Qualitative Data.* London: Sage.

Ybema S, Yanow D, Wels H and Kamsteeg F (2009) Studying everyday organizational life, in Ybema S, Yanow D, Wels H and Kamsteeg F (eds) *Organizational Ethnography*. London: Sage, 1-20.

Young M and Cooper C (1995) Occupational stress in the ambulance service: a diagnostic study. *Employee Counselling Today* 7(5): 25–32.

Zwick D (2006) Where the Action Is: Internet Stock Trading as Edgework. *Journal of Computer Mediated Interaction* 11: 22-43.