Why resilience managers aren’t resilient, and what human resource management can do about it
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Why Resilience Managers Aren’t Resilient, And What Human Resource Management Can Do About It

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Abstract

Prior resilience research typically focuses on either the individual or the organizational level of analysis, emphasises resilience in relation to day-to-day stressors rather than extreme events, and is empirically under-developed. In response, our study inductively theorises about the relationships between individual and organizational resilience, drawing upon a large-scale study of resilience work in UK and French organizations. Our first-hand accounts of resilience work reveal the micro-processes involved in producing resilient organizations, and highlight the challenges experienced in doing resilience work in large organizations. We show that these micro-processes have significant implications for resilience at both individual and organizational levels, and draw implications for how HRM interventions can help to promote individual, and thus organizational, resilience.

Keywords: Resilience, human resource management, conceptual taint, dirty jobs, taint management strategies
Why Resilience Managers Aren’t Resilient, And What Human Resource Management Can Do About It

High levels of uncertainty, change and disruption globally have contributed to a significant rise in scholarly, policy and practice interest in resilience (James, 2011). Countries, companies and individuals have been affected by global financial crisis, austerity measures and job losses, terrorist attacks, pandemic diseases, and extreme weather events (e.g. Momani, 2010; Nijssen and Paauwe, 2012; Steyer and Gilbert, 2013; Sullivan-Taylor and Wilson, 2010; Zagelmeyer et al., 2012). These varied challenges have prompted the growth of research into individuals and organizations coping with stressful, stretching and extreme situations (e.g. King et al., 2015; Wilson et al., 2010). Whilst a wide variety of definitions of resilience exist, it can generally be described as the ‘...ability to adapt, endure, bounce back...’ (Markman and Venzin, 2014:1106). Carmeli and Markman (2011) argue that resilience can enable survival, or even flourishing, despite an individual or organization being stretched to, or past, breaking point.

Extant resilience research is highly fragmented, with discrete clusters of research focusing on resilience at the individual and at the organizational levels of analysis, and emphasising different threats to continuity, performance and survival. Much of the extant literature focuses on the resilience of individuals in the face of common, but stressful and potentially debilitating, workplace pressures (e.g., Gittell, 2008; Kao et al., 2014; King et al., 2015; Zagelmeyer and Gollan, 2012), and individual resilience research is frequently theorised in relation to well-being, emotion and identity (e.g. Avey et al., 2011; Dunn et al., 2008; Jackson et al., 2007; McLamon and Rothstein, 2013). In contrast, organizational resilience literature emphasises how organizations respond to, and recover from, extreme events
In spite of their different foci, these literatures both assume that resilience enables individuals and organizations to do better in the face of challenge and that resilience can be developed by organizations (Bardoel et al., 2014; Lengnick-Hall et al., 2011; Luthans et al., 2008; Van der Vergt et al., 2015; Weick and Sutcliffe, 2007).

While research on resilience is developing, a number of key problems with the extant literature require further attention. First, the diversity and fragmentation found within the existing literature (Linnenluecke, 2015) presents an analytical challenge as existing theory and evidence often conflates individual and organizational resilience, and fails to distinguish between resilience for business as usual and against extreme events. Second, extant research on resilience has tended to focus at either the organizational or the individual level, with little or no research examining the micro-processes that link resilience at individual and organizational levels of analysis (Jaaron and Backhouse, 2014). Third, much of the extant research on resilience is conceptual in nature and there is a dearth of empirical work that explores the practices and processes involved in promoting organizational resilience (Van der Vegt et al., 2015). Barton and Sutcliffe (2009) identify both evidential and conceptual gaps in relation to the micro-processes that impede or produce organizational resilience, and Feldman and Rafaeli (2002) argue that there is value in opening the ‘black box’ of resilience.

In this paper, we address these gaps by providing new large-scale empirical evidence regarding the micro-processes of resilience work in organizations, in order to inductively theorise the link between individual and organizational resilience. Resilience work is becoming increasingly professionalised within large contemporary organizations (Herbane et al., 2004; Power, 2007), and we draw upon
first-hand accounts of the day-to-day activities of these emergent professionals to identify the impact of everyday individual resilience upon organizational resilience in the face of extreme events. Our detailed examination of the experiences and perspectives of these managers, and of the challenges we identify in their roles, affords us a unique opportunity to provide insights into the HR practices - skills, training, role structures - necessary to support improved individual and organizational resilience.

In so doing, we make three significant contributions to the literature. First, we contribute to calls for greater integration between strands of resilience research (Linnenlueke, 2015), by proposing a novel organizing framework for the extant literature that differentiates between levels of analysis and between resilience in the face of routine business activities and resilience in the face of extreme events. Second, we contribute significantly to calls for resilience research to cross levels of analysis (Jaaron and Backhouse, 2014) by building on novel and detailed empirical evidence to inductively theorize regarding the micro-processes that connect resilience at individual and organizational levels of analysis. Third, through our in-depth analysis of resilience work as practiced by professional managers in their organizational settings, we extend and enrich understanding of the role of context in relation to the challenges of achieving more resilient organizations. Through these contributions we both highlight productive avenues for further research, and inform the development of human resource management interventions that could significantly improve organizational resilience.

The next section proposes a new organizing framework for resilience research and reviews the literature. We then outline our methods of data collection and analysis. Our findings section identifies prominent themes from our data, which
we build on in a discussion section which develops a model of the role of HRM in promoting resilience at individual and organizational levels. A final section concludes by summarising our key theoretical contributions, the implications or our work for HRM, and avenues for future research.

**Resilience in prior research: distinguishing context and unit of analysis**

As a relatively new and evolving field, resilience research is fragmented and often sits within sub-disciplinary specific silos (Linnenlueke, 2015). Additionally, work often focuses on individual resilience, thus under-emphasising team and organizational resilience, and the relationships between resilience at multiple levels of analysis (Kossek and Perrigino, 2016). These different framings have led scholars to develop distinct approaches to defining and researching the resilience concept (Martin and Marsh, 2008:169).

The extant literature on resilience explores different stress triggers, which can be characterized by the degree of continuity – discontinuity in relation to the cause of change, pressure or challenge with which the studied individuals and/or organizations are confronted. At one end of this continuum lie ‘everyday’ situations, i.e. situations where individuals and/or organizations face the ‘setbacks, challenges and pressures that are part of ‘regular’ life’ (Martin and Marsh, 2008:169), that is the ups and downs of daily life and business-as-usual. As in classical conceptions of the everyday life in sociology (e.g. Douglas et al., 1980), we consider it as the ‘realm of the ordinary’ (Gardiner, 2002:6), marked by triviality, routine, mundane activities and repetition (Crow and Pope, 2008:597). ‘The everyday …. is the invariable constant of the variations it envelops’ (Lefebvre and Levich, 1987:10) and, as such, refers to a high degree of continuity in individuals’ sensemaking and practices.
The ‘everyday’ can be contrasted with singular events or large-scale changes (Smith, Plowman and Duchon, 2010), or environmental jolts (Meyer, 1982). Such extreme events include for instance severe weather events, infrastructure failure, fuel crisis, global credit crunch, flu pandemics and terrorism. Extreme events expose organizations, and the individuals within them, to abrupt disruptions in the flow of individual and organizational activities and routines, and create unusual settings and high levels of strategic uncertainty, which in turn call for new patterns of action (Sullivan-Taylor and Wilson, 2009; Weick, 1990; Weick, 1993).

Whether an event should be considered as mundane or extreme is however not self-evident. Hallsmith and Lietaer (2011) argue that whilst every financial crisis is perceived as a new extreme event that, in fact, such crises are a long-term continuity of market behaviour. Work by James (2011), conversely, identifies the opportunity for ‘mundane’ learning from extreme events that can support improved business as usual performance. Just as more critical revival of the ‘everyday’ concept in sociology has endeavoured to ‘reveal the extraordinary of the ordinary’ (Lefebvre and Levich, 1987:10, see also Gardiner, 2002) highlighting among other things the connectedness of the micro and macro social (Crook, 1998).

From our initial analysis of the literature, we have therefore constructed an organising framework that we present as figure 1 that enables us to examine both the contrast and connectedness between ‘everyday resilience’ and ‘resilience to extreme events’, and to explicitly consider level of analysis. More specifically, this framework characterises existing research in relation to two key dimensions: (A) context of resilience – specifically, the degree of continuity – discontinuity in relation to the cause of change, pressure, or challenge, and (B) individual-organizational level of analysis. As discussed above, it is important to note that each
of the dimensions sits on a continuum and that some individual articles span quadrants. Notwithstanding this, our framework indicates four principal clusters of resilience research which we now discuss in turn.

Figure 1 about here

Quadrant 1: everyday individual resilience

Research concerned with resilience at the individual level in relation to day-to-day pressures is relatively well developed, and is associated with positive psychology (Bardoel et al., 2014). In much of this research, resilience is related to the work intensification caused by increased competitive rivalry, globalization, and economic turbulence, which in turn generate stress at the individual level (Gittel, 2008; King et al., 2015; Zagelmeyer and Gollan, 2012). This research sees resilience as an individual attribute or characteristic, defining it as, ‘the developable capacity to rebound or bounce back from adversity, conflict, and failure’ (Luthans, 2002:702). Research also suggests that managers and organizations can develop their employees’ resilience (Luthans et al., 2008; Moenkmeyer et al., 2012; Russo, 2015), and highlights the role of HRM policies, such as offering job security, in this process (Lengnick-Hall et al., 2011).

Resilience is associated with a range of positive individual attitudes (Fredrickson, 2004; Kaplan et al., 2013; Sommer et al., 2016; Tugade and Fredrickson, 2004), and behaviours, including receptivity, adaptability, and flexibility, to change (Bimrose and Hearne, 2012; Chen and Lim, 2012; London, 1997; Shin, Taylor and Seo, 2012), and a greater capacity for learning (Youssef and Luthans, 2007). Social support and the quality of interpersonal relationships are seen as key resilience resources (e.g. Flach, 1997; Jackson et al., 2007; Kossek and
Perrigino, 2016; Powley 2009; Stephens et al., 2013; Tugade and Fredrickson, 2004). Research has also found that positive feedback and praise from managers and co-workers, favour employees’ development, thriving and resilience (Carmeli and Russo, 2016; Hodges et al., 2005), and that leadership plays an important role in building the resilience of team members (Sommer, et al., 2016). Bimrose and Heane observe that ‘self-esteem, self-efficiency, subjective well-being, self-determination, locus of control and support systems’ act as ‘protective factors’ (2012:339).

Through these attributes and mechanisms, resilience helps individuals to outperform their peers whilst under stress, and maintain well-being in high-pressure environments (Dunn et al., 2008). As a contributing factor towards employee psychological capital, alongside self-efficacy, hope and optimism (Dawkins et al., 2015; Linnenlueke, 2015; Youssef and Luthans, 2007), resilience has been demonstrated to increase performance, job satisfaction, psychological well-being, organizational commitment and citizenship (Avey et al., 2011). Additionally, resilience supports cross-cultural skills (Dollwett and Reichard, 2014; Reichard et al., 2014), while combatting turnover and other undesirable attitudes and behaviours, such as anxiety, stress, cynicism and deviance (Avey, et al. 2011).

**Quadrant 2: everyday organizational resilience**

Research that examines organizational resilience in the context of business as usual is sparser and often explicitly seeks to define itself in juxtaposition to the more well-developed analysis of organization-level resilience in relation to extreme events. For example, Hamel and Valikangas argue that, ‘strategic resilience is not about responding to a one time crisis. It’s not about rebounding from a setback. It’s about continuously anticipating and adjusting to deep, secular trends that can permanently
impair the earning power of a core business’ (2003:53-54). Similarly, Herbane et al., state that resilience is more than a ‘functional process with a limited remit and impact. Instead, it can be considered as a capability [...] that underpins organizational development in complex environments’ (2004:437).

This research also sees resilience capabilities as susceptible to development through training, noting that ‘...just as U.S. Navy SEALs and British SAS go through training to improve their resilience, firms too can work to improve their resilience levels’ (Markman and Venzin, 2014:1106). Other research emphasises leadership attributes, with, for example, Carmeli et al., (2013) arguing that the composition and quality of senior management teams enables organizations to be resilient to turbulent economic conditions. Indeed, organizational resilience has been related to persistent superior performance among international financial services firms (Markman and Venzin, 2014).

Quadrant 3: individual resilience in the context of extreme events

A relatively small body of work focuses on individual resilience in the context of ‘highly disruptive’ events, such as ‘the death of a close relation or a violent or life-threatening situation, to maintain relatively stable, healthy levels of psychological and physical functioning’ (Bonanno, 2004:20). Research in this category defines resilience in terms of psychological robustness, for example, Waldman et al. (2011) highlight the role of compassion in creating the conditions for individual resilience in the face of terrorism. Re-emphasising relational factors, Quinn and Worline (2008) identify that the calls made to friends and family by passengers and crew members aboard Flight 93 on 9/11 increased resilience and enabled individuals to take courageous action.
**Quadrant 4: organizational resilience in the context of extreme events**

Here resilience has been theorised relatively extensively and is understood as a form of positive organising in the face of extreme events (e.g. natural disaster, pandemic disease and terrorism), ‘that can contain, repair and transcend vulnerability in organizational systems’ (Waldman et al., 2011:941; also see, Weick, 2003). For example, Normal Accident Theory, as propounded by Perrow (1984), adopts a systemic view of the production and management of crisis, for example arguing that ‘normal accidents’ occur in organizational systems shaped by high levels of complexity. In contrast, High Reliability Organization (HRO) theory emphasises managerial and employee agency in averting and responding to extreme events (Weick and Sutcliffe, 2007).

Regarding the antecedents of organizational resilience, it has been recognized that resilience ‘arises from a complex interplay of many factors at different levels of analysis’ (Van der Vegt et al., 2015:977) and that ‘business interruptions as a result of disasters are not equally challenging for all organizations’ (Lamanna et al., 2012:214). More specifically, the ‘characteristics of employees’, i.e. their knowledge, skills, abilities, cognitions, affects, behaviours and self-regulatory processes – including their individual resilience (e.g. Shin et al., 2012) – constitute the system’s potential (Lengnick-Hall et al., 2011; Van der Vegt et al., 2015). Social connections are a crucial factor in producing resilience (Van der Vegt et al., 2015), with researchers highlighting the importance of ‘interpersonal relationships’ (Stephens et al, 2013:14), deep social capital (Lengnick-Hall et al., 2011), and the significance of internal ‘relational reserves’ (Gittell et al., 2006; Powley, 2009). Of specific importance is the quality of the firm’s relational system (Kahn et al., 2013), which should promote respectful interactions (Weick, 1993), mindfulness (Vogus and
Sutcliffe, 2012), and psychological safety (Lengnick-Hall et al., 2011), as negative interactions could undermine organizational resilience (Paulus and Nijstad, 2003; Van der Vegt et al. 2015).

Organizational resilience is also found to be promoted by a strong sense of organizational purpose (Lengnick-Hall et al., 2011), organic, decentralized, team-based or networked organizational structures, with diffused power and accountability (Lengnick-Hall et al., 2011; Weick and Sutcliffe, 2007), ‘financial reserves’ (Gittell et al., 2006), and the capacity for organizational learning (Crick et al., 2013). Finally, the capacities of the organization to access broad resource networks through connections with suppliers and other key stakeholders of its environment have been highlighted (Lengnick-Hall et al., 2011; Van der Vegt et al., 2015).

Integration across quadrants within existing research

Figure 2 maps the existing resilience literature onto the dimensions proposed in figure 1, positioning articles according to their focus. Thus, while we have so far characterised existing resilience research as being largely confined to discrete levels of analysis and to particular contexts of resilience, there is some examination of possible linkages across these dimensions in the literature. Gittell et al. (2006) and Weick (1993) relate the individual and organizational levels of analysis in relation to extreme events resilience, whilst further research proposes a more general link between high levels of individual resilience among organizational members and organizational resilience (Lengnick-Hall et al., 2011; Moenkemeyer et al., 2012; Van der Vegt et al., 2015). Kossek and Perrigino (2016) argue that ‘resilience is individually and occupationally determined as part of a multi-level system’.
(2016:730), and in particular their findings emphasise the need for further examination of the impact of occupational and organizational context upon individual resilience. Recent research also suggests that resilience can be spread across levels of an organization through a process of ‘social contagion’ (Dawkins et al, 2015). Further studies emphasise the role of resilient organizations, characterised by strong systems of social support and positive organizational cultures, in shaping resilient individuals (Carmeli and Russo, 2016; Dawkins et al., 2015; Hodges et al., 2001; Jackson et al., 2007; Powley, 2009).

Whilst possible interdependencies across levels of analysis are considered Jaaron and Backhouse (2014) argue that a gap in the literature persists, whilst Van der Vegt et al. recommend a cautionary approach as ‘developing capacity for resilience at lower levels does not automatically increase the overall resilience of the system’ (2015:977). Others find that organizational resilience is not simply an additive composite of individual capabilities (Ashmos and Huber, 1987), for example, a team of resilient individuals does not automatically constitute a resilient team (Alliger et al., 2015). Conversely, an organization could be resilient without resilient individual organizational members if it can compensate with other resources (for instance extensive slack in human resources). Thus, the relationship between individual and organizational resilience is complex and nuanced, and following Lengnick-Hall et al., (2011), this suggests an important role for HRM in promoting resilience.

**Methods**

*The research context and rationale*
Our study examines the concept of resilience as experienced by a sample of resilience managers within the context of their professional practice. Examining resilience by focusing on a specific occupational group is important because occupations vary in their need for resilience, the types of resilience required, and the forms of stress-triggers and adversity encountered (Kossek and Perrigino, 2016). Our multi-level examination of resilience as it arises within a specific occupation is partially, therefore, a response to the observation that ‘few studies delineate what sort of adversity, exactly, one is bouncing back from’ (Kossek and Perrigino, 2016:738).

Additionally, our focus on resilience managers is a reflection of the emergence of a new cadre of professional managers tasked explicitly with promoting organizational resilience in light of the increasing salience of extreme risks and uncertainties. The resilience function exists to call ‘management’s attention to different dangers and insecurities that threaten the company’s activity’ (Eriksson-Zettequist, 2010:7). This business function now has many of the formal characteristics of a profession (Ulrich et al., 2013), such as established professional bodies (e.g. Business Continuity Institute), codes of ethics and conduct, certification (e.g. BS25999-2, and ISO 22301), education (e.g. degree programmes at all levels) and training (e.g. Emergency Planning College), a clear body of knowledge, and legal status. Various job titles such as Resilience Manager, Emergency Planner, Chief Risk Officer or Business Continuity Manager (Herbane et al., 2004; Power, 2007) are used to denote this role. For simplicity we refer to organizational activities dedicated to building resilience as ‘resilience work’, and the managers that do such work as ‘resilience managers’.

Resilience managers experience a significant level of stress in their daily work, and occupy a unique organizational position as they are expected to be highly
personally resilient, be capable of fostering resilience in others, and lead the production of organizational resilience through their actions. In that sense, resilience managers are expected to be boundary spanners and as such their experiences are likely to reflect each of the four quadrants of figure one; that is resilience to both extreme and everyday events, and at both individual and organizational levels of analysis. Thus, focusing on resilience managers is highly suited to our goals to provide novel empirical evidence regarding the practice of resilience in organizations, and to theorize regarding the relationships between resilience at individual and organizational levels of analysis.

**Data collection**

Qualitative research uses an interpretive, naturalistic approach to its subject matter (Denzin and Lincoln, 1994), in which it is assumed that realities cannot be understood in isolation from their contexts. As such, qualitative research examines the processes and meanings associated with particular phenomena in the environments in which they naturally occur and using social actors’ perceptions to understand those phenomena (Gephart, 2004). Much of the extant research on resilience is quantitative, and has been critiqued because of its inability to provide ‘in-depth understanding using qualitative approaches of the lived experiences’ of actors in specific organisational settings (Lamb and Cogan, 2016:475). Similarly, Ungar (2003), advocates for further qualitative enquiry into the concept of resilience because of its comparative advantage in ‘accounting for the sociocultural context in which resilience occurs’ (Ungar, 2003:85). Thus, qualitative approaches to examining resilience are especially useful in contexts, like ours, where researchers aim to provide an enhanced understanding of how the human interactions, meanings,
and micro-processes that constitute real-life organizational settings unfold over time, something which quantitative research is unable to do. Moreover, qualitative research is especially useful in contexts where researchers seek to understand the processes and mechanisms (the ‘why’ and ‘how’) that underpin a particular organizational phenomenon – in our case, resilience.

We utilised 47 semi-structured interviews, 11 focus groups, and 40 hours of non-participant observation to collect in-depth data regarding the day-to-day practices, processes and activities of resilience managers. In particular, we sought to understand the attitudes, emotions, perceptions and behaviours of resilience managers in relation to their daily working lives and in their attempts to promote organizational resilience in a wide range of organizational contexts. In that sense, we aimed ‘to gather descriptions of the life-world of the interviewee with respect to the interpretation of the meaning’ (Kvale, 1983:174). Given that resilience work is little understood, and in light of our aim to build theory regarding the relationships between individual and organizational resilience, we aimed to collect rich qualitative data.

We used a purposive sampling approach to develop a cross-sectoral sample of 137 resilience managers drawn from 127 private and public sector organizations from the UK and France. Specifically, respondents were drawn from across a wide range of industries including: banking, business services, insurance, manufacturing, telecommunications, tourism and leisure, transport, real estate, retail, utilities, and from across a range of public sector organizations including local government, policing and the military. Given the commercial sensitivity of our data and in order to ensure anonymity of respondents, quotes and examples referred to in this paper are attributed simply to their country, with the designation ‘fr’ for France and ‘uk’ for
**Data analysis**

All interviews and focus groups were transcribed, and in total we collected over 1000 pages of textual data that we imported into the qualitative software package NVivo for coding and analysis. Our overarching analytical strategy involved a general inductive approach (Glaser and Strauss, 1967). Grounded approaches avoid both the ‘forcing’ of data into previous conceptual categories and generating large volumes of codes that hinder theoretical development processes (Bryant and Charmaz, 2007). We organized our data into core categories that ‘aid in linking actions and reactions, events and responses, in time and space’ via grounded coding (Glaser and Strauss, 1967) driven by simple inductive questions.

Data was coded by multiple team members to ensure inter-rater reliability until no further novel insights could be inferred from the total data set. Having established an initial thematic coding of our data, we assessed our themes for internal homogeneity and external heterogeneity (Patton, 2002). Internal homogeneity was evaluated by iterative reading of the themes and sub-themes for coherence. Unique data were then removed or combined with a suitable theme or sub-theme. External heterogeneity was then obtained through iterative reading of all the themes for distinctiveness. This procedure enabled us to, ‘develop a framework of the underlying structure of experiences and processes that are evident in the raw data’ (Thomas, 2006:238).

We then began to theorize from the materials generated. Through the use of a visual mapping strategy (Huberman and Miles, 1994), we developed a model of key themes, antecedents and outcomes to visually illustrate distinct conceptual relationships. This visual map allowed us to integrate all the themes tightly into a
coherent model grounded in the original evidence (developed as figure 3). As it became clear that our theorising was surfacing a novel construct, we were mindful of Suddaby’s (2010) advice that the criteria for qualitative construct clarity should involve a precise and parsimonious definition, clarity regarding relationships to other related constructs, consideration of scope conditions, and internal consistency.

**Findings**

In this section we report our findings in three steps, drawing upon the mapping of the extant resilience literature presented in figures 1 and 2. We first examine the nature of resilience work, as it is experienced, understood, and practiced by resilience managers. Next we examine the micro-processes through which resilience work impacts the ‘everyday individual resilience’ of resilience managers. The final stage of our analysis examines the relationships between the ‘everyday individual resilience’ of resilience managers and ‘organizational resilience in the context of extreme events’, thus providing a detailed empirical analysis of the direct and indirect processes that link quadrants 1 and 4 in figure 1.

*The nature of resilience work*

Our respondents shared a number of core challenges that they faced in their day-to-day work that they saw as inherent to resilience work. Through our process of data analysis, we identified and agreed upon four key themes, namely impossible work, pointless work, unsupported work and unpleasant work as presented in Table 1.

*Table 1 about here*
The first prominent theme we encountered in our data was that resilience managers reported that they have an ‘impossible job’, in the sense that regardless of their actions they are likely to be judged as having done too much or too little. To put it another way, they are ‘damned if they do, and damned if they don’t’. Resilience managers reported experiencing failure in their daily role in two key ways: the organization is not protected (under-reaction), or an event never occurs (over-reaction). One respondent told us, ‘if nothing happens, you are expensive. [...] You have very few rewards. You will never be thanked. I know that in a job like mine, no rewards should be awaited (fr).

Our respondents reported that even ‘successful’ resilience work might result in perceptions of a ‘non-event’ (i.e. mitigation leads to no observable impact), and that this brought into question both the resources expended on resilience and the reaction, or overreaction, of the resilience manager. An example of the phenomenon of the ‘non-event’ cited by multiple respondents was ‘Y2K’, or the ‘millennium bug’:

‘I was actually doing Y2K testing... [country a] had two nuclear power stations go down because of Y2K on 1st of January and then the coast guard system in [country b] went down for three days because of Y2K. Now they are life safety issues. So I know afterwards, everyone said it was a damp squib and nothing happened and it was all fine but we spent billions on it. In actual fact that is not true because a lot of organizations globally did have big problems with it on the day, but it is a typical media response to say well actually it wasn’t a massive disaster so we shouldn’t have bothered’ (uk).

Related to the ‘impossible job’ theme is the association of resilience work with ‘pointless work’, as indicated by our respondents’ perception that their colleagues saw their activities as non-core and non-value-adding. Indeed, resilience work, by definition, handles what falls outside ‘business as usual’, and as such, resists the ‘clean rational logic of efficiency’ embedded in the managerial ideology (McMurray and Ward, 2014:1128). Resilience is therefore seen by some
organizational actors as diverting from legitimate core business functions, ‘the culture is actually against business continuity because it just gets in the way of the sales’ (uk). Numerous informants told us that there was also a perception that resilience managers were just preparing ‘bottomless’ plans. Being considered as pointless, a diversion from legitimate core business functioning, or as inherently ineffective, resilience work was therefore perceived by other organizational actors as (morally) illegitimate.

The third theme we identified was that resilience managers experienced ‘unsupported work’, which was particularly problematic given their need for wide-ranging input and buy-in from across their own organization. Our respondents reported two key ways in which their work was unsupported. Directly, through refusal to participate in planning and exercising, e.g. ‘I asked them to go to the recovery centre and they just refused’. Indirectly, through marginalization strategies such a highlighting the ‘pointlessness of the work’, e.g. ‘it won’t happen, just sign a piece of paper’ (uk).

The fourth theme we identified regards the experience of ‘unpleasant work’. Our respondents were working on influenza pandemics, nuclear, radiological, biological and chemical risks, suicide prevention, flooding, fire, earthquakes, terrorism and cyber-attacks. Through this focus on negative events the resilience manager reminds their co-workers that ‘the spectre of emotional turmoil is never far away’ (McMurray and Ward, 2014:1136) and that the worst could happen, as ‘we envisioned the worse, and to prepare for the worse, we communicated about the worse’ (fr). This necessary preoccupation with disruption, catastrophe, death, losses, and threats critically distinguishes resilience managers from other organizational members, as they work daily with these negative concepts and therefore have an
abstract, or conceptual, proximity with these phenomena. Moreover, the scale and scope of negative impacts was, we found, in some cases exaggerated by resilience managers in order to secure resources and commitment from their fellow managers and from the senior management team.

Perhaps most surprisingly in our findings, the majority of respondents reported some stigmatization experience within their own organization. One signifier of stigma being the experience of frequent mocking and jibes, as outlined in table 1, and exemplified in the following excerpt: ‘to require people to wear a mask all the day... there, I was really cursed [laugh]... you have to take it on... you have to endure the laughs... the gibes [laugh]’ (fr). Specifically, we found that resilience workers were often constructed by colleagues as ‘doomsayers’ and ‘wimps’, which contradicted traditional workplace values of ‘strength, robustness, boldness, stoutness, bravery, and not being womanish’ (Cooper, 1995:146-147). Mocking behaviour was often accompanied by a lack of understanding of how resilience managers could choose to work in impossible, pointless and unpleasant roles.

**Resilience work and the everyday resilience of resilience managers**

In this section we unpack the mechanisms by which the everyday individual resilience of resilience managers comes to be undermined. Here we return to our earlier examination of, the processes, mechanisms and variables identified in the extant literature as critical to developing and sustaining individual level resilience (see, figure 2). Additionally, we find support for the work of Kossek and Perrigino (2016) that identifies that job specific stressors – cognitive, emotional, and physical – lead to variations in the types of resilience required by an occupation or profession. The themes identified are summarised in table 2.
Firstly, as established in table 1, resilience managers’ report both high levels of professional risk and low levels of esteem from co-workers (Carmeli and Russo, 2015; Hodges et al., 2005). They subsequently can suffer from high levels of workplace stress, struggle with issues of ‘self-efficiency and self-determination’ (Bimrose and Heane, 2012:339), and lack ‘resilience resources’ such as social support and connection (Flach, 1997; Powley 2009; Stephens et al., 2013; Tugade and Fredrickson, 2004).

Secondly, resilience work entails a significant form of ‘emotional labour’ (McMurray and Ward, 2014; Rivera, 2015) as resilience managers are forced to imagine worst-case scenarios, both for themselves and others, e.g. ‘we can put the bomb proof film up, we can do security checks on people but potentially there will be a way in and then we’ll have to deal with it’ (uk). As a result these managers lack positive feedback (Hodges et al., 2005) which denies them an important source of individual resilience (Frederickson, 2004).

Thirdly, although less frequently, some workers related having felt ashamed of their organizational mission, in part due to the stigmatization of their role, this idea of ‘stigma as a cause of shame’ is supported by previous works (Lewis, 1998:127).

Finally, for a smaller sub-set of resilience managers, external negative perceptions became internalised and they suffered a personal loss of ‘belief’ in themselves and their role. Resilience is reduced because of an absence of Bimrose
and Heane’s (2012) ‘protective factors’, most notably ‘self-esteem’ and ‘subjective well-being’, and relatedly a loss of ‘hope’ (Luthans and Youssef, 2007). Despite in many cases having a strong sense of professional expertise and culture, some resilience managers had come to doubt the possibility of achieving their occupational goals, and had internalised their role as ‘pointless work’, e.g. ‘I don’t know how to explain that ... the job is necessary’ (fr). Loss of belief is important as it cuts the resilience worker off from the ‘philosophical resources’ (i.e. personal beliefs, principles and sense of purpose) that can foster resilience (Jackson et al., 2007; Lengnick-Hall et al., 2011).

**Links between resilience work, individual resilience, and organizational resilience**

The link between individual-level and organizational-level resilience is often presumed (e.g. Gittell et al., 2006; Weick, 1993), and yet, the detailed interplay appears not to have been explicitly described (Jaaron and Backhouse, 2014:2026). In this section we describe a number of processes by which individual resilience influences organizational resilience. Most notably, we find empirical evidence that the lack of support and connection (Flach, 1997; Lengnick-Hall et al., 2011) experienced between resilience managers and other organizational members and functions is the key process by which resilience comes to be undermined.

Relationships between individuals have been proved to be critical in producing resilient organizations (Gittell et al., 2006; Gittell, 2008; Stephens et al., 2013), and yet we find that resilience managers often lack access to internal ‘relational resources’ (Powley, 2009) for a number of inter-connected reasons. Resilience managers can also lack self-efficacy, in the face of stigmatization, and are therefore not sufficiently able to assert themselves which in turn undermines the legitimacy and influence of resilience work. For example, ‘if they view it as kind of a planning
exercise, tick-box, the employees don’t really respect or buy-in to it, and the organization doesn’t invest in it, and by that very nature you’re going to have less successful results’ (uk). Many resilience managers had experienced poor quality relationships with co-workers, which is significant because, Kahn et al., (2013) argue that unhealthy ‘relational processes’ jeopardizes organizational resilience. In effect resilience managers come to lack ‘deep social capital’ (Lengnick-Hall at al., 2011).

Discussion
The stigmatization experienced by resilience workers, described in tables 1 and 2, resonates with prior research about ‘dirty jobs’, which are types of work characterised as being ‘tainted’ (McMurray and Ward, 2014). For this reason, and in line with our inductive analytical approach, we build upon theories of tainted work in establishing our theoretical model. This is valuable because the potential dirtiness of white-collar jobs has not been fully explored (Stanley and Mackenzie-Davey, 2012).

Dirty work is defined as ‘tasks and occupations that are likely to be perceived as disgusting or degrading’ (Ashforth and Kreiner, 1999:413). The early dirty jobs literature focussed upon types of work that are viewed as physically tainted or socially/ morally unacceptable (Hughes, 1958), such as garbage collection, funeral direction and sex work. In recognition of the changing occupational landscape McMurray and Ward (2014) have recently introduced a new category of ‘emotional dirt’ which relates to the burdensome, and inappropriate emotions’ expressed by others (McMurray and Ward, 2014; Rivera, 2015). Whilst we acknowledge that resilience managers share common experiences with professionals that are impacted by moral taint (i.e. pointless work) and emotional taint (i.e. unpleasant work), we
suggest that in themselves these ‘taints’ are not sufficient to explain the processes by which resilience managers come to be undermined in their own organizations.

We find that resilience managers are frequently stigmatized because they are symbolically ‘polluted’ by their abstract, or conceptual, proximity to negative and unpleasant phenomena, and are perceived to ‘contaminate’ others in their organization with unpleasant thoughts about how fragile organizational order is. We suggest that one explanation for the stigmatization of resilience work is therefore its link to ‘dirty thoughts’ (Douglas, 1966). We therefore propose a new construct - ‘conceptual taint’- that reflects a subtler form of white-collar taint that we identify as frequently experienced by resilience managers in their daily work and that in turn undermines organizational resilience through its effects on relationships. Next, following Suddaby (2010), we clarify the definition of our proposed construct, specify its relationship to other extant constructs, and describe its scope conditions.

We propose ‘conceptual taint’ as an extension of the classification of ‘dirt-based’ taints (Ashforth and Kreiner, 1999). Building upon the work of Douglas concerning ‘dirty thoughts’ (1966) we define ‘conceptual taint’ as:

Symbolic pollution dirtying a task or an occupation that occurs when the worker is working with concepts and ideas relating to death, despair and crisis, and is in a position to ‘contaminate others’ with thoughts about how fragile social or organizational order is.

We also suggest that this form of taint more closely reflects the nature of ‘white-collar’ work, because it is situated within the world of ideas and knowledge. Put another way, these professionals are primarily confronted by cognitive, as opposed to physical and emotional, risks (see, Kossek and Perrigino, 2016).

We differentiate conceptual taint from physical, moral and emotional taint, whilst recognising that these are adjacent and inter-related concepts. Conceptual taint
is produced in the daily manipulation of threat, and death-related concepts (i.e. is abstract), whereas physical taint is about real proximity to dirt, moral taint is about engaging in, subjectively, immoral or illegal activity, and emotional taint is about the display of exhibited emotions (i.e. sadness and despair) (McMurray and Ward, 2014). We also recognise that abstract proximity to death-related concepts often involves resilience managers in intense emotional work, which sometimes put them in a position of creating 'emotional dirt' for others.

Regarding scope conditions, work is conceptually tainted if it is perceived as dirty because of a conceptual proximity to polluting concepts either by the worker him/herself or by his or her co-workers and interlocutors. This is consistent with the way taints have been described in the extant literature. As stated by McMurray and Ward, ‘the attribution of dirty status […] describes a subjective state assigned by either the individual evolved or outside observers’ (2014:1134). We do not discount the possibility that other ideas or concepts could be symbolically polluting, if they threaten the solidarity, self-conception and social order of a given community. This suggests that the conceptual taint construct may be useful beyond the context of resilience work.

Towards a multi-level theory of the relationship between taint, resilience and HRM

Having clarified the concept of conceptual taint, we now present a model of the relationships between our novel construct and how it is associated with resilience work, and resilience at the individual and organizational level. Our model is presented as figure 3.

Figure 3 about here
The first, and in one sense most critical, process outlined in our evidence is the role played by ‘conceptual taint’ in undermining the everyday individual resilience of resilience managers. This impacts self-efficacy, self-esteem and self-determination (Bimrose and Heane, 2012), thus depriving resilience managers of three recognized source of individual resilience. We find that resilience managers are trapped in a paradoxical situation. They raise the profile of the unpleasant threats faced by their organization to increase salience, and in doing so they become more conceptually tainted, which in turn undermines the resilience managers’ ability to perform. Thus, we propose,

Proposition 1: The greater the level of conceptual taint associated with resilience management in an organization, the lower the level of individual resilience among resilience managers.

Where these stigmatization processes occur we also find that the construction of organizational resilience as ‘unsupported work’ (see, table 1) damages the relational system of the organization (Kahn et al., 2013). We propose therefore that conceptual taints both directly and indirectly undermine organizational resilience, through the absence and degradation of social resources such as ‘social-capital’ (Lengnick-Hall et al., 2011) and ‘relational reserves’ (Gittell et al., 2006; Powley, 2009). These effects are magnified because resilience managers can’t do their job in isolation. Thus, we propose,

Proposition 2: The greater the level of conceptual taint associated with resilience management in an organization, the lower the level of organizational resilience.
The third principal effect captured in the model is the association between individual resilience and organizational resilience, as suggested by prior research (e.g. Lengnick-Hall et al., 2011). Thus, we propose,

**Proposition 3:** The greater the level of individual resilience among resilience managers, the greater the overall level of resilience at the organizational level.

However, as noted by Van de Vegt et al. (2015), the link between individual and organizational resilience is not one of simple aggregation due to the complex interdependencies between levels of analysis. For example, we propose that enhancing individual resilience will not be sufficient if HRM interventions are not put in place to reduce conceptual taint.

**Practical Implications for HRM**

Because organization-level resilience capabilities are more than just the sum of individual resilience capabilities (Ashmos and Huber, 1987), HRM has a key role to play in promoting resilience through developing supportive HR principles, architecture, and philosophy (Kossek and Perrigino, 2016; Lengnick-Hall et al., 2011). Figure 3 indicates that HRM can intervene at three levels to reduce taint, and thus support individual and organizational resilience.

‘Organization level taint management tactics’ are designed to enhance perceptions of resilience work by promoting resilience activities as legitimate and important aspects of day-to-day organizational life, and therefore encouraging a transformation in resilience work from unsupported work to supported work. This set of interventions therefore aims to build, and broaden, the ‘social capital’ (Lengnick-Hall et al., 2011) of resilience managers both inside and outside the organization, and also to increase the organizational status, esteem and prominence of resilience
managers. Reflecting the challenges encountered in the development of the health and safety function (Cooper, 1995), the HRM function can play a significant role in creating a ‘resilience culture’ in which resilience work is better understood, more widely engaged with, and consequently less tainted. Thus, we propose,

Proposition 4: The greater the extent of organizational level taint reduction tactics in an organization, the lower the level of conceptual taint associated with resilience managers.

‘Individual level taint management tactics’ are the second form of proposed intervention. These tactics involve strategies to increase the everyday individual resilience of resilience managers in relation to coping with, and managing the effects, of taint. Signals of esteem (i.e. through title, remuneration, board membership) need to be communicated to resilience managers, alongside positive feedback (see, Hodges et al., 2005). In particular the ‘protective factors’ of resilience managers (e.g. self-esteem) should be cultivated (Bimrose and Heane, 2012) in order to insulate the managers from the effects of taint. One concrete way in which resilience managers’ protective factors can be enhanced is via membership and participation in professional networks external to the organization that provide a supportive context and source of expertise, esteem, and self-efficacy. Thus, we propose:

Proposition 5: Individual level taint reduction tactics moderate the relationship between conceptual taint of resilience management in an organization and the level of individual resilience among resilience managers.

As established in the extant literature (see, Lengnick-Hall et al., 2011), and addressed in detail elsewhere in this article, individual resilience can be developed, and therefore training is central to enabling employees to exhibit resilience by encouraging positive cognitive framings of challenges, and supporting creativity in
problem solving. Building on this discussion of how HRM can contribute to enhanced resilience, we propose,

**Proposition 6:** The greater the extent of initiatives building individual level resilience, the greater the level of individual resilience among resilience managers.

Consistent with Bardoel et al., (2014), we argue that HRM interventions should be viewed as one element of a coherent and holistic set of resilience enhancing HRM practices that work across and between the individual and organizational levels of analysis.

**Limitations and future research**

In this study, we have significantly extended theorisation and evidence in relation to the nature of resilience work, and from this the micro-processes that link individual and organizational resilience. Limitations of our study are suggestive of a number of productive avenues for future research. Our focus on the perspectives of resilience managers comes with the limitation of seeing resilience through the lens of the resilience professional, and future empirical work could incorporate perspectives from a wider range of organizational actors in understandings of the processes by which resilience arises in organizations, possibly deductively testing our framework and providing useful validation of our findings and model. Second, resilience in relation to extreme events is inherently challenging to evaluate because such events are mercifully rare, and thus research tends to see resilience as a latent property of an organization. Embedded, longitudinal work in organizations offers the promise of witnessing the processes of resilience in, or at least proximate to, extreme events and would thus provide more useful and important insights into how resilience plays out in the context of extreme challenges. Third, it would be useful to complement our
qualitative evidence with larger-scale quantitative work that was able to develop metrics and measures of the key constructs in our model and of conceptual taint in particular. A scale-development study, for example, would complement our findings by providing independent evidence of the validity and dimensionality of our construct of conceptual taint, and would promote quantitative work that sought to understand the characteristics of organizations in which such taints, and thus challenges to resilience, were more likely to arise.

**Conclusions**

Prior research has largely addressed the phenomenon of resilience at either the individual or the organizational level of analysis, emphasised resilience in relation to day-to-day stressors rather than extreme events, and under-examined resilience empirically within organizational contexts. In response, in this study we have drawn upon a large-scale study of resilience work in UK and French organizations in order to inductively theorize about the relationships between individual and organizational resilience. Our findings have presented first-hand accounts of resilience work; the central challenges experienced by resilience workers within large organizations, and have thus revealed the micro-processes involved in producing resilient organizations. We have shown that these micro-processes, especially those associated with ‘tainting’ resilience work, have significant implications for resilience at both individual and organizational levels, and that HRM has a key role to play in making interventions that can help to promote individual, and thus organizational, resilience.

**References**


<table>
<thead>
<tr>
<th>Theme</th>
<th>Key features</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impossible Work</td>
<td>‘Damned if they do, and damned if they don’t’ as they have either over-reacted (i.e. successful preparation results in a non-event), exaggerated (i.e. threat doesn’t materialise) or not done enough (i.e. disruption)</td>
<td>- ‘Perception in the organization that you’re planning for something that’s never going to happen’ (uk)</td>
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<td>- ‘If pandemic influenza fizzles out, it’s all of the work of the crisis managers which will be called into question, accused of having overreacted’ (fr)</td>
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<td>- ‘We’re in very grave danger, that if this [pandemic flu] does not happen, of how people will regard business continuity in the future. And I’ve got real worries about it… if nothing happens, it will be really, really bad’ (uk)</td>
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<td>Pointless work</td>
<td>Experienced as non-value creating work which engenders symbolic engagement</td>
<td>- ‘I am annoyed by… I always speak about the same subjects. I must be creative to say to him I am not always doing the same thing, I progress. It gives the impression I’m not creative, [not] efficient’ (fr)</td>
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<td>- ‘They just see business continuity as a common sense thing, we shouldn’t really need to do it, we’re snowed under with day-to-day work, it’s just another regulatory hassle’ (uk)</td>
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<td>- ‘You guys, you’re all right, you just do what you need to do, that’s fine, if you sign the certificate that’s fine, we won’t dig any deeper, and that’s very much the attitude we’re given’ (uk)</td>
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<td>Unsupported work</td>
<td>The majority of the sample experienced a lack of buy-in from across their organization</td>
<td>- ‘There’s only one real barrier [to resilience] and its organizational culture, it’s a killer, it’s an absolute killer’ (uk)</td>
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<td></td>
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<td>- ‘There’s just a distinct lack of interest’ (uk)</td>
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<td></td>
<td>- ‘Everybody jumps about like fleas on a dog when something’s gone wrong… then all the interest dies away’ (uk)</td>
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<td></td>
<td></td>
<td>- ‘The managing director will say I’m too busy [to exercise]. I’ve got clients in here, I’m not going out and if that doesn’t come down from the top then the rest of the organization thinks why should I?’ (uk)</td>
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<td>Unpleasant work</td>
<td>Other organizational actors don’t want to engage in ‘nasty things’, and a sub-set of resilience workers experienced resistance to their work from colleagues through the use of both aggression and humour</td>
<td>- ‘[They say] I don’t want to know about nasty things thank you very much’ (uk)</td>
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<td></td>
<td>Experiences of embarrassment, impotency (i.e. refusals to follow instructions), stigmatization, risk to job and in extreme cases threat of prosecution</td>
<td>- ‘I find [the pandemic threat] quite fascinating. It is also frightening, very frightening’ (fr)</td>
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<td></td>
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<td>- ‘There’s no morale within the team, they see what they’re doing as a bit of a, almost a waste of time’ (uk)</td>
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<td></td>
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<td>- ‘…When I had forced everyone to wear a mask in December [for an exercise], I made a number of enemies, I piss everybody off… it’s a gadget… eh, your duck flu, it’s bullshit’ (fr)</td>
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<td></td>
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<td>- ‘…Must have been very embarrassing for that business continuity manager that they refused the exercise, actually he or she is a very lucky person because he or she knows now that if they won’t go for an exercise they’re not going to go in the event of a real incident’ (uk)</td>
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<td></td>
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<td>- ‘So I found it mildly amusing, although I perhaps wouldn’t if I found myself liable for criminal prosecution, for not complying with something I wrote and signed off, but that is actually the position I find myself in’ (uk)</td>
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Table 2. Mechanisms by which the everyday individual resilience of resilience workers comes to be undermined

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Impact</th>
<th>Mechanism</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Impossible</td>
<td>Certainty of failure</td>
<td>Resilience work becomes a type of ‘emotional labour’ (Rivera, 2015; McMurray and Ward, 2014)</td>
<td>‘If it doesn’t work, you are axed? … It is simple… Nothing will occur as envisaged, thus it will go inevitably badly’ (fr)</td>
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<tr>
<td>work</td>
<td>Sustained daily</td>
<td></td>
<td></td>
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<td></td>
<td>anxiety and stress</td>
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<tr>
<td>Pointless</td>
<td>Negative self and</td>
<td>Perception of (moral) illegitimacy of, and by, resilience workers</td>
<td>‘There’s no point’ (uk); ‘I asked them to go to the recovery centre across the city and they just refused’ (uk)</td>
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<td>work</td>
<td>role perception</td>
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<td></td>
<td>‘Tick-box mentality’</td>
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<td></td>
<td>Self-efficacy undermined</td>
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<tr>
<td>Unsupported</td>
<td>Experience isolation</td>
<td>Absence of resilience resources, i.e. social support and connection</td>
<td>‘…Because of the confrontational positions that we’re in, it gets immensely difficult to deliver what is perceived as the day-to-day’ (uk)</td>
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<td>work</td>
<td>Lack strong internal</td>
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<td></td>
<td>links</td>
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<td>Unpleasant</td>
<td>Focus upon extreme</td>
<td>Pollution of others with ‘dirt’ (Ashforth and Kreiner, 1999)</td>
<td>‘Everyone at the beginning looked [at] me, laughing, telling themselves really, he is working on such issues…’ (fr)</td>
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<tr>
<td>work</td>
<td>events is alienating;</td>
<td></td>
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<td></td>
<td>feel ‘tainted’</td>
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<td></td>
<td>Demoralising and</td>
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<td></td>
<td>embarrassing work</td>
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</table>
Figure 1. Two-dimensional framework for organising the extant resilience literature
Figure 2. Mapping the extant resilience literature

Business as usual

Tannenbaum, & Vessey (2015)
Dawkins, Martin, Scott, J. Sanderson (2015)
Merni, Veilin & Luthans (2013)
Hamel & Valkanas (2003)

Carmeli, Syretz & Dutton (2013)
& Backhouse (2014)
& Tipton, 2013
Crick, Heigrey, Huang, Coburn & Goldspink (2013)

Subcliffe (2012)
Carmeli & Markman (2011)

Organizational resilience

Barton & Subcliffe, 2009
Weick & Subcliffe (2007)
Sullman-Taylor & Wilson (2009)
Markman & Venzin, 2014
Kane, Barton & Fellows (2013)

Mahston & George (2015)
Kaplan, Laport, & Waler (2013)

Weick (2003)
Weick (1993)
Lamanna, Williams &Childers (2012)
Starbuck, & Farquhar (2009)
James (2011)

(2009)
Carmeli, Um & Rivas (2006)

Extreme threats & events

Luthans, Avey & Patera (2008)
Luthans (2002)
McLermon & Rothlein, 2013
Avey, Reichard, Luthans, & Mhatre (2011)
Kee, Rogers, Spitzmueller, Lin, & Lin (2014)
Zagelmeier, & Gollan, 2012
Hodges, Keasley & Grier (2005)
King, Newman & Luthans (2015)
Jackson, Firdal & Edentorough (2007)

Chen & Lim (2012)
Dunn, Iglewicz & Moulter (2008)
Vogus &

Lengnick-Hall, Beck

Van Der Vegt, Essens,
Sommer, Howell & Hadley (2015)
Quinn & Worline (2006)
Waldman, Carmeli & Halevi (2011)
Powell, Gittell,
Bonanno (2004)
Figure 3. Relationship between HRM interventions, taint, individual and organizational resilience

*Propositions P3 & P6 built on extant literature as summarised in figure 2, specifically Lengnick-Hall et al., 2011