

Viral change and the quest for resilience

Torben Andersen
(toa@btech.au.dk)

Aarhus University

1. Draft

Paper for: 14TH EIASM COLLOQUIUM ON ORGANISATIONAL CHANGE AND DEVELOPMENT
December 8, 2020 – ONLINE.

Abstract

In this conceptual paper the resilience phenomenon, which most recently has been associated with the COVID-19 outbreak, is mapped and put into an HR and change management perspective. The various approaches to resilience are discussed, with particular emphasis on the level of analysis and possibility of aggregation. The question is how companies and organisations in general, are to be successful in their attempts to become more resilient, while avoiding the classical management fashion dead-end. In meeting the increasingly complex and fast changing environments (called disruption, distortion, viral change etc.), the purpose is to provide management with a broader and deeper understanding of what resilience is based on, how it works and what the implications of it is.

Introduction

Looking at the first 10 months the COVID-19 pandemic it has resulted in a massive and partially unexpected, sudden disruption to billions of employees around the World. Organizations have been forced to transform their operational routines virtually overnight. The new normal resulting from COVID-19 is based on adopted technology-driven responses, and human resources departments around the globe are suddenly in the spotlight. In companies as well as well as various types of organizations, HR teams play a vital role in a range of the urgent issues like helping to monitor and protect employees' health; improve engagement and morale; overseeing a mammoth work-from-home experiments and applying for Government salary subsidy schemes directly or indirectly through employers' associations. According to a recent Korn Ferry's survey of nearly 4,000 executives (in 98 countries and 23 sectors), companies are furloughing staffs at a rate three times greater than layoffs, and about 15 % of global organizations are instituting salary cuts and freezes. In addition, one in three Danish managers expects to have to fire employees again, when their company can no longer receive Government compensation (see Ledernes Hovedorganisation, 2020). Under these circumstances HR-leadership depends on whether organizations are able to make the crises situation manageable, through orchestrating various roles, instead of being overwhelmed by the different demands, crisis management is also here in demand (Alliger et al. 2015). It is basically to adopt a systematic approach to here-and-now problem-solving, and still relate to the overall policies and programs formulated earlier. HR - crisis management and - resilience, it could be labelled, has not seen been studied in dept before, seen in the light of the relatively stable routine descriptions of the function (Nilakant et al. 2014 and Bardoel 2014), and resilience is yet again being promoted as the new important phenomenon, which individuals and collectives like companies and organizations have to possess in order to survive in this yet increasingly turbulent and fast changing environment caused by COVID-19. Without entering into the debate on how and what to be done to fight horrible virus, we will in this paper try to look deeper into the managerial implications, and myriads of suggestions, following the economic close-down of many sectors in almost all countries. Resilience is no longer a nice-to-have, it's an imperative for businesses and continuities. Weekly, and for some even daily, suggestions sent from the large consultancy agencies, universities and the like, mainly in form of smaller articles and webinars, where management advice is delivered, see the two examples below:

"(...) the pandemic has shown us the high price we are paying for the modern focus on efficiency at the expense of resilience" and "(...) the relentless drive for efficiency above all else has also eliminated any redundancy or buffers that might exist. Business school professors might call such redundancy and buffers "waste" or "slack." I think the better word is resilience because two important features of systems that can bounce back from adversity are the alternative mechanisms by which they can operate and the availability of buffer stocks for unanticipated swings "(Roger Martin in Washington Post, March 27, 2020).

Besides emphasizing resilience as the solution, it is here seen as the opposite of efficiency, and suggested synonymous with phenomena like waste and slack, which are considered positive in this quote. The claim is, that the phenomenon – defined in various different ways, and at many analytical levels – makes the owner(s) able to handle crises situations in a competent and constructive way, and even be able to thrive under a high level of uncertainty and change. It is in many ways presented as a panacea towards a broad variety of challenges in corporate life, and this naturally triggers questions about the character, composition and real potential of the phenomenon. This in order to understand how individuals perceive and cognitively process crisis events and related (post)crisis behaviour at an individual as well as a collective level.

The various resilience approaches

Looking back on resilience, the number and variety of approaches to this reintroduced concept are more than usually seen; ranging from different sub-disciplines in psychology, pediatric research, (social)ecology to archeology. In addition, many elements within the resilience theory have been studied earlier under several other etiquettes within organizational behavior and psychology and various types of management literature (change management, agile organizations/agility, crisis management etc.). Still, the very explicit link to change management is relatively new, and the several analytical levels – not least the strategic, where the community practitioners is on a continuous search for new and more fruitful approaches - makes the phenomenon interesting in its own right.

In today's work life both individuals and organizations have faced stressful situations, major setbacks and failures following autumn 2008 - the financial crisis - and the spring 2020 – the people-based crisis (Caliguiri et al. 2020). However, we have also seen fast recovery, strategies and initiatives towards totally new business models. To put it in older and more general terms, we

have experienced a much higher levels of uncertainty, change and latest: disruption of old categories and demarcations, which has contributed to an increasing focus on what to do and how to tackle this situation. Here resilience has been presented as one of the most suggested options, and in many respects, if implemented properly, a solution to any major challenge. This is – as we normally see with newly promoted solutions in the management domain - to a limited degree based on empirical findings through either deep case studies or broader tests of degree of use of (parts of) the phenomenon. This way resilience has followed the usual route for new managerial concepts, the intuitively obvious solution to all. Still the challenges which have prompted the growth of research, and consultancy, into individuals and organizations on how to cope with theses phenomena, have indeed been experienced by managers and employees in many organizations and companies. So even though it can be claimed, that resilience has had a highly normative point of departure, being presented almost as a panacea, it is to a lesser extent based on precise problem situations, which only a few companies have experienced, everybody is challenged, even in good economic times. The difficulty with mapping and understanding resilience lies more in pinpointing what is it and what does it consist of? In addition, what are the potential antecedents, elements, processes and outcomes of resilience? What is the link to change and continuity? Can it be leveraged and if so how? Can it be aggregated from an individual level to an organizational level? Branicki et al. (2015) talks about the opening of the black box of resilience. We need more conceptual clarity and later empirical findings in this domain, and during a COVID-19 pandemic is an excellent time.

Earlier defining studies

Resilience theory is, as mentioned above, an expanding body of ideas, that attempts to provide explanations for the source and role of change in adaptive systems. Particularly the kinds of change that are transforming the systems. The scholars from various disciplines have contributed to the current state of this formulation. Mainly in psychology there has been a larger group of researchers, who have used the term and carried out more thorough investigations, eg. research in child psychology (children's ability to overcome and sometimes even thrive in response to traumatic experiences) (Bardoel et al., 2014). Several studies have shown, how children are capable of surviving "almost everything", and resilience has been elevated to being the

explanatory factor. Markman and Venzin (2014) describes it as an ability to adapt, endure and bounce back (Markman and Venzin, 2014 p. 1106 see also Cooper et al 2014, p. 2466). In particular, the “bouncing back” has been stressed in the psychological literature, whereas the skills and capacity to be robust has been emphasized in much of the organization and management literature (Cooper et al. 2014). In particular reflections in direction of: why do some people have the ability to manage negative emotions and find meaning and overcome very stressful situations, while others are descending into deep depression? How come they can remain effective in the face of tough demands and difficult circumstances, and actually grow stronger of the process? And following this question, if it is possible for individuals to behave and act to successful, how can companies promote this this through strategies and policies and can this be elevated to the collective, organizational level?

Some of the empirical studies have been focusing in more extreme situations, eg. among survivors of the 2010-11 earthquakes in Christchurch New Zealand (see Walker et al, 2013 and Walker & Nilakant, 2014). In the New Zealand group of researchers, the natural catastrophe findings have been broadened out to “organizational life” in general. The Canterbury earthquakes in 2010-11 introduced severe and unique challenges to the region, including organisations dealing with loss of buildings, customers, and employees dealing with relocation, restructuring, rebuilding. Many of the challenges that were originally prompted by the earthquakes are now part of the everyday life in many of the local New Zealand organisations, resulting in a “new normal”, which both managers and employees have adjusted to. The extent to which organisations survive and thrive in these changing circumstances may be partially attributed to organisational resilience, which in turn depends on organisational ability to learn and adapt, but also on employee engagement. The researchers at The Resilient Organizational Research Programme (ResOrg.org.nz) also found, that organisations benefit from incorporating employee resilience in their continuity and contingency plans. HR has in other words yet another job in this situation: A key issue is the need for the human resource function to reframe its practices in a post-disaster context, developing a specific focus on understanding and addressing changing employee needs and monitoring the leadership behaviour of supervisors. In addition, the importance of flexible organisational responses, based

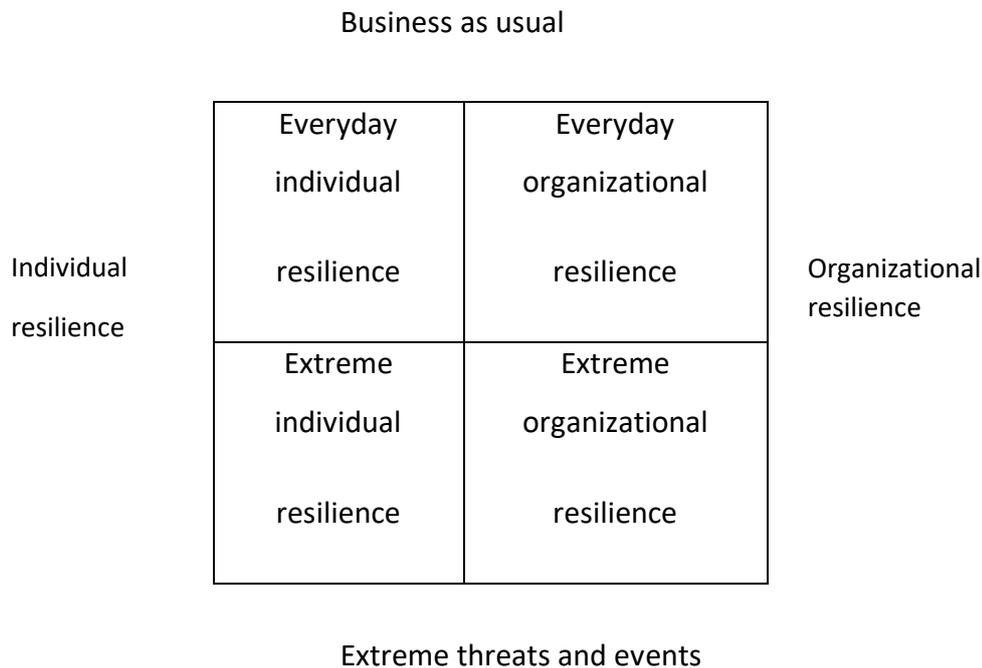
around a set of key principles concerning communication and employee perceptions of company support, was emphasized (Nilakant et al. 2013). Along the same lines, Van der Vegt et al. suggest that resilience is characterized by:

“[A] potential traumatic event that is collectively experienced, has an acute onset, and is time delimited; disasters may be attributed to natural, technological or human cases” (Van der Vegt et al., 2015).

The concept states, that when an organization is threatened by its survival, employees in the organization could develop the ability to effectively handle the threat and come out even stronger and learn from experience, which can be used in more daily routines.

The situational perspective

Part of the resilience literature is making a more or less explicit distinction between the everyday and the extreme situation, in which resilience is unfolded. The above-mentioned New Zealand research group studied two major earth quakes, and how “normality” was reinstalled, actually combining the two concepts – everyday and extreme situations. Branicki et al. (2015, p.4), also makes this distinction and operates with four types of resilience:



This way the authors are providing a framework for including a broader variety of situations and activities, and paving the way for linking the different analytical levels. It is however, also treating resilience as distinct categories, and thereby not as a continuum, where varying degrees of resilience can be present. The distinction opens for the discussion what kind of link there is between being resilient in the daily routines and the extreme situations and secondly what the link are between the individual and the organizational level (we will discuss this below).

Another question we would like to raise is whether everyday resilience and ability to carry out continuous changes, prevent a demand for radical changes, and therefore necessitate extreme situation resilience? The argument has been presented between incremental versus radical change, or continuous change versus episodic change. Will the former prevent the latter, ie. implying a trade-off between the types of change necessary. Or do we see a link between the two types of resilience – that the build-up of everyday resilience will make people better at tackling extreme situation resilience.

Aguinis; Villamor and Gabriel (2020) have also discussed employee responses to COVID-19 on the behavioral level, but mostly related to corporate social responsibility. Here the argument goes, that successful implementation of policies is highly dependent on the centrality and level of embeddedness of the policies. To be effective, CSR (and HRM), has to fully integrated into the organization, else employees will not engage with it in their everyday work. People have shown negative reactions to CSR support initiatives targeted at COVID-19 victims, because it was not integrated effectively into the company's (Amazons) routines and operations (p.427).

Level of analysis

One of the first more thorough attempts to combine resilience on an individual, collective or organizational level is Lengnick-Hall et al., who defined organizational resilience as:

“[A] firm's ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organizational survival” (Lengnick-Hall et al., 2011).

The engagement in collective transformative activities is to a large degree based on employee resilience, ie. ability to change successfully, while using these capacities to overcome challenging situations. The authors focus is on specific cognitive abilities, behavioral characteristics, and contextual conditions, and it is precisely through challenging situations, employees can both develop and maintain resilience, if a variety of HR principles and policies are initiated at the company level (Lengnick-Hall et al., 2011). When organizations are in a difficult situation or undergoing change, employees can often feel confused and threatened about losing control and in the end their job. But some companies have developed an ability to survive these conditions, though they may appear frequently. To do this, Lengnick-Hall et al. have suggested key elements, which organizations need to develop to create capacity for resilience. This includes:

“[A] set of individual level knowledge, skills, and abilities and organizational routines and processes by which a firm conceptually orients itself, acts decisively to move forward, and establishes a setting of diversity and adjustable integration that enables

it to overcome the potentially debilitating consequences of a disruptive shock” (Lengnick-Hall et al, 2011).

The emphasis on knowledge, skills and abilities (KSA's) is quite similar to more general demands placed on employees under HRM, they are however, in this case, targeted more towards specific circumstances. Also Van der Vegt et al. argue, that it is the employee's characteristics that are important, when developing resilience:

“Many employee characteristics might be important in this regard, including individuals’ skills and abilities, cognitions, affect, behaviors, and self-regulatory processes. Examples include intelligence, self-efficacy, emotional stability, openness to experience, social support, emotion recognition, self-discipline, resourcefulness, and cognitive flexibility” (Van der Vegt et al., 2015).

These skills are part of the development of systems, and tools that should help the employees to withstand potential external disturbance and response in an effective way. The focus on developing collective resilience though individual level, employee, resilience is based on the finding that people who are better equipped to deal with challenges, both to the internal as well as external organization's environment. When employees are put in this situation which includes restructuring, workload, and changes in personal circumstances, they could can develop new capabilities and expand abilities, in order to perform better for the organization. Lengnick-Hall et al. (2011) suggest, that the elements should over time be implemented into a strategic human resource management system, which would make the organization as a whole more resilient. In other words, resilience is also a demand placed on managerial level, resilient managers creating conditions for employees to develop resilience. In addition, HR of course has an extra obligation in this situation. Walker et al. (2013) have made a guidance for HR practitioners, when managing in disaster situations and post-disaster recovery. Here focus is on demands placed in (in particular) (middle)managers and the need held by employees, ie. resilience is not just yet, another demand placed on hard working employees, but also a more focused leadership behavior on surveilling, communicating and reporting back (Walker et al. 2013, p. 9ff).

Moving to resilience at team level, this has been studied for a while (even though the attention to this compared to individual resilience focus has been much higher) (see West et al. 2009; Stephens et al. 2010, Bennet et al. 2013 and Alliger et al. 2015). The focus on teams and their abilities have become relevant with the high workloads and limited resources often characterizing organizations and companies today. Here team performance and cohesion is expected to sustain (and perhaps even strengthened), even under intense pressure. Team resilience literature is also to a high degree characterized by the “bouncing back”-metaphor (see eg. West et al. 2009, p. 253), and focus is similarly on extreme situations, like difficult assignments, severe time pressure, high consequences, challenging conditions, hazardous work, crisis events etc. Focus is on planning and adapt, through the following team behaviours:

- Anticipating and planning contingencies, understand current readiness, understand early warning signs and prepare to handle stressors.
- Assess challenges (quickly and accurately, address “chronic” stressors, maintain processes under pressure and seek guidance
- Regain situation awareness, conduct team debrief, address concerns of risk points and express appreciation

Some authors even mention an institutionalization of resilient team behaviour, leading to a team resilience culture (see Alliger et al. 2015, p. 183).

Team resilience is however, according to Alliger et al. (2015, p. 176), distinguished from individual resilience, ie. a group of resilient individuals does not make a resilient team for many reasons (for example communication breakdown, leadership disputes, lack of shared mental models etc.). It is in other words not possible to aggregate resilience at lower levels to reach it a higher. It is distinct categories, which paves the way for a change in approach towards a social systems perspective.

The systems perspective

In a systems theory perspective, resilience is studied in order to understand the source and role of change, particularly the kinds of change that are transforming, in adaptive systems (Holling et al. 2002:5, Levin 1999). The theoretical basis is dynamic cycles, which are linked across spatial and temporal scales, and resilience is the amount of change a system can withstand while retaining certain functions and/or structures (Rappaport 1968, Holling 1973, Levin 1999). Resilience is the ability of a system to remain functionally stable in the face of stress and to recover following a disturbance (Redman and Kinzig, 2003). Reducing this to a single word, it is the capacity to be flexible. Flexible and adaptive capacity is enhanced by a rich social memory of alternative situations and responses, and by the accumulation of social capital in the form of the networks of trust, shared knowledge, and actual materials needed to facilitate those responses. Very much in line with organizational and to some extent team resilience. A paradox, however, is that many human systems organize toward efficiency, which can reduce flexibility. So what happens then to resilience? Efficient behaviours, such as specialization, reduction of redundancy, and streamlining of connectivity, allow a system to produce more at a lower cost of labour, at the expense of here and now adaptation. The question emerges as to whether we can substitute type of resilience (flexibility) for another (efficiency) (Redman and Kinzig 2003)? The key to enhancing system resilience is for individuals, their institutions, and society at large to develop ways to learn from past experiences, and to accept that some uncertainties must inevitably be faced.

Nordic work life studies have for many years claimed, that employees in companies and organizations in this particular region, over time have become more active co-leaders of operations (see eg. Torvatn et al. 2015 for a the more recent contribution), where a high level of autonomy means more agency and influence leading to faster economic recovery in crisis situations (Gustavsen 2012). By empowering employees, many tend to develop a feeling of trust, togetherness and high level of commitment towards work and the entire unit (Parry, 2015). Andersson explains, “co-workership is a potentially important social resource that generates organizational resilience” (Andersson, 2014). Further on Van der Vegt et al. (2015) who argue that:

“During crises, formal role descriptions usually no longer suffice; new procedures have to be invented, and new ways of cooperation may need to be developed. Such adaptive responses require the ability to quickly transform the formal structure and to use decentralized, team-based or network approaches to problem solving. Case studies related to organizational resilience indeed suggest that highly bureaucratic, command-and-control style structures impede creativity and adaptive behaviors of employees”.

By developing a capacity for resilience at “lower levels”, it increases the overall resilience of the system, according to van der Vegt et al. (2015, p. 977). This is reinforced by key HR-institutions like being represented in top management teams (TMTs); written down HR strategies and HR-involvement in change from the outset (Andersen & Hällstén 2015, p. 104). The awareness of the importance of HR elements for the whole organization and management (Brewster and Larsen 2000 and Lindeberg et al. 2013). Besides the Nordic researchers also Bardoel et al. (2014) have presented result, demonstrating that resilience can be developed through a variety of HR practices. They suggest that these resilience-enhancing HRM practices may be defined as:

“HRM practices that are intended, implemented and perceived to offer employees opportunities to ‘spring back’ from adversity and to develop and maintain resources that strengthen the resilience dimension of psychological capital.” (Bardoel et al. 2014).

It is in this light tempting to conclude, that resilience is old win on new bottles, these practices have been present for a while in companies with a high level of employee autonomy and discretion. However, the resilience phenomenon has in the literature mainly been initiated at the individual level (Bardoel et al., 2014) and aggregated to an organizational context (Lengnick-Hall et al., 2011). The Nordic contributions have, mainly argued to be further elevated to a collective institutional level (see eg. Andersen and Hällstén, 2015). This collective level is claimed to be present in many companies in the Nordic countries, because of unique Nordic work life model, developed over several decades (see Gustavsen, 2012). Here resilience is a more or less indirect

outcome of a management approach, based on co-workership or “medarbetarskap” (Swedish term).

“The concept could be describing as the opposite of leadership and more than the passive followership. Co-workers, in this sense, are active co-leaders of joint operations” (Andersen and Hällstén, 2015).

It is in other words a collective process where employees’ high demands for management and vice versa about being good employees, under responsible autonomy. Workers are responsible for their own work and for their relations with their colleagues and their employer, who on his side is responsible for humane work and employment relations. There is a mutual process between them that one has to deliver, and this cooperation has been key (Gustavsen, 2012, p. 4). If the partners in a company could cooperate, any problem could be tackled, the only thing you’d need would be local agreement; rules, criteria and diagnosis. Finally, the autonomy is often linked to learning opportunities at workplace level, ie. treating people at the workplace as active and creative actors, will pay off in as much as adjustment to new and difficult situations will trigger initiative and innovative behavior, rather than leaning back, waiting for the management to take over and solve the problem.

In the Nordic case, we do see establishment and maintenance of positive, sustainable relations, where HRs role is more than just formulating policies and composing bundles of effective HR-practices. The link between individual level resilience and organizational level is often presumed, ie. the often complex interplays very seldom described empirically. And the number of processes by which individual resilience influences organizational resilience is not empirically supported. The link between individual and organizational resilience is not one of simple aggregation due to the complex interdependencies between levels of analysis, strong and flexible institutional frames, within which company relevant employment and work relations can unfold. Branicki et al. (2015) found in their empirical study (of 137 resilience managers in 127 public and private sector organizations in UK and France), that resilient managers often had difficulties in the relationship with employees, actually having rather poor quality interaction with co-workers. Similarly, Kahn et al (2013) talk about unhealthy relations processes jeopardizing organizational resilience, so

resilience is not necessarily a preferred solution in all situations. It has to added, that Branicki et al. (2015) focus on the nature of resilient work, and how the respondents faced core challenges in their day-to-day work, which they saw as inherent to resilience work. Mainly impossible work, pointless work, unsupported work and unpleasant work was identified, and the following cognitive, emotional and physical stressors associated with this, actually undermining resilient, and sometimes even stigmatizing, resilient managers and workers.

We have summarized the main levels of analysis in the table below:

Level	Definition	Content	How it is promoted
Individual resilience	The ability to recover quickly from disruptions in functioning.	The developable capacity to rebound or bounce back from adversity, conflict, and failure or even positive events, progress, and increased responsibility.	Resilience-enhancing HRM practices that are intended, implemented and perceived to offer employees opportunities to 'spring back' from adversity and to develop and maintain resources that strengthen the resilience dimension of psychological capital.
Organizational resilience	A firm's ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organizational survival.	An organization's capacity for resilience is embedded in a set of individual level knowledge, skills, and abilities and organizational routines and processes by which a firm conceptually orients itself, acts decisively to move forward, and establishes a setting of diversity and adjustable integration that enables it to overcome the potentially debilitating consequences of a disruptive shock.	Strategic human resource management systems are instrumental in developing the requisite knowledge, skills, abilities and other attributes (KSAOs) and in invoking the appropriate collective routines and processes to generate resilience outcomes.

Conclusions

In a medium-time perspective - will radical global changes happen more frequently, and if so is the demand for extreme individual resilience, as a basis for organizational resilience increase also? And can, or should, this be based on an everyday resilience among average employees in a normal company or organization?

These are some of the questions posed in the wave of the COVID-19 pandemic. Whether training in resilience is the answer to all disruptive changes is difficult to say. The resilience findings are perhaps characterized by a certain degree of self-selection - mainly emerging from studies of "the survivors" stories on how they tackled the disruptions. Resilience could therefore be seen as a behavioral expression of cognitive, sensemaking processes behind, and it open for a lot of conceptual and methodological questions.

But in the absence of better concepts to describe how individuals can explain what is going on, and companies can pursue collective level training goals, resilience seems to be a plausible solution. Seen in relation to the present COVID-19 pandemic, HR-strategies emerges more and more central, but most of the policies and programs have been made for managing people at the workplace, not at home.

References

- Alliger, G.M.; C.P. Cerasoli; S.I. Tannenbaum and W.B. Vessey (2015). Team resilience: how team flourish under pressure, in *Organizational Dynamics*, 44, 176-184.
- Andersen, T. and Hällstén, F. (2015). 'Nordic HRM – Distinctiveness and Resilience', in Dickman, M.; C. Brewster and P. Sparrow (eds.): *Contemporary HR issues in Europe*, 3rd ed. London: Routledge.
- Andersson, T. (2014). Sociala resurser avgörande för organisatorisk resiliens - även i teknikorienterade organisationer, in Tengblad, S. & M. Oudhuis: *Organisatorisk resiliens - vad är det som gör företag och organisationer livskraftiga*. Lund: Studentlitteratur.
- Aguinis, H.; I. Villamor and K.P. Gabriel (2020): Understanding employee responses to COVID-19: a behavioral corporate social responsibility perspective, in *Management Research: Journal of the Iberoamerican Academy of Management*, Vol. 18, No. 4, pp. 421-38.
- Bardoel, A. et al. (2014) Employee resilience: an emerging challenge for HRM. *Asia Pacific Journal of Human Resources*, 52, 279-297.
- Bennett, J.B.; C.A. Aden; K. Broome; K. Mitchell and W.D. Rigdon (2010). Team resilience for young restaurant workers: research-to-practice adaptation and assessment, in *Journal of Occupational Health Psychology*, vol. 15, no. 3, pp. 223-236.
- Branicki, L.; V. Steyer and B. Sullivan-Taylor (2016). Why resilience managers aren't resilient, and what human resource management can do about it, in *International Journal of Human Resource Management*.
- Caiguiri, P.; H. De Cieri; D. Minbaeva; A. Verbeke and A. Zimmerman (2020): International HRM insights for navigating the COVID-19 pandemic: implications for future research and practices, in *Journal of International Business Studies*, June 2, 1-17.

- Cooper, C. L. et al. (2014): CALL FOR PAPERS: Resilience, HRM practice and impact on organizational performance and employee well-being, in *International Journal of Human Resource Management*, 2015 Special issue.
- Cynthia A. Lengnick-Hall, T. E. Beck & M. L. Lengnick-Hall (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resources Management Review*, 21 (2011) 243-255.
- Elsbach, K. D. (2003). Relating physical environment to self-categorizations: Identity threat and affirmation in a non-territorial office space. *Administrative Science Quarterly*, 48, 622-654.
- Gustavsen, B. (2012): Workplace cooperation key to Nordic model's success, in *Nordic Labour Journal*, December, p. 1-7.
- Hendrix et al. (1994). Organizational and extraorganizational factors affecting stress, employee well-being, and absenteeism for males and females. *Journal of Business and Psychology*, December, Volume 9, Issue 2, pp 103-128.
- Hollings, C.S. (1973). Resilience and stability of ecological systems, *Annual Review of Ecology and Systematics*, 4:1-23.
- Jørgensen, P. S. (2017): *Robuste børn - Giv dit barn ansvar, livsmod og tiltro til sig selv*, Kristeligt Dagblads Forlag.
- Kotter, J.P. (2012). Accelerate, in *Harvard Business Review*, November.
- Levin, S.A. (1999). *Fragile dominion: complexity and the commons*, Reading MA: Perseus Books.
- Nilakant, V.; B. Walker; K. Rochford and K. van Heugten (2013): Leading in a Post-disaster Setting: Guidance for Human Resource Practitioners, *New Zealand Journal of Employment Relations*, 38(1): 1-13.
- Prehn, A. (2014): "Framestorm", Ch. 8., in Gørtz, K. and T. Gaihede (eds.): 2014): *Coaching i nyt perspektiv- en metodebog*, Copenhagen: Hans Reitzels Forlag.
- Rappaport, R.A. (1978). "Maladaptations in social systems", pp. 49-87, in J. Friedman and M.J.

Rowlands (eds.): *The evolution of social systems*, Pittsburg PA: UP.

Redman, C.L. and A.P. Kinzig (2003). Resilience of past landscapes: resilience theory, society and the longue durée, in *Conservation ecology*, 7(1): 14.

Stevens, J.P.; E.D. Heaphy; A. Carmeli; G.M. Spreitzer and J.E. Dutton (2013). Relationship quality and virtuousness: emotional carrying capacity as a source of individual and team resilience, in *The Journal of Applied Behavioral Science*, XX(X)1-29.

Svenstrup, J. et al. (2016): *Vejen til sund robusthed - en komplet guide med 18 kraftfulde øvelser til træning af sund robusthed - styrk dit mentale immunforsvar*, Empowermind Books.

Tengblad, S. et al. (2007). Medarbetarskarp: *Från ord till handling*. Malmö, Sweden: Liber.

Torvatn, H.Y.; O.H. Sørensen; H. Talja and B. Eriksen (2015): *Good Nordic Management Practices*, TemaNord, 2015:525. Nordic Council of Ministers.

Van der Vegt, et al. (2015). From the editors, managing risk and resilience, *Academy of Management Journal*.

Walker, B. et al. (2013), *Managing in disasters: Interim Guidance for HR practitioners*, Christchurch: University of Canterbury, NZ.

Walker, B. & Nilakant, D.R. (2014), ResOrgs: High performing today, agile for tomorrow, thriving in the future, *Human Resources*, August/September 2014, p. 8-9.

West, B.J.; J.L. Patera and M.K. Carsten (2009). Team level positivity: investigating positive psychological capacities and team level outcomes, in *Journal of Organizational Behavior*, 30, 249-267.