

Climate for Innovation: A Critical Lever in the Leadership of Innovation

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Abstract

Innovation involves an uncertain journey and, although leadership cannot ensure innovation success, it can certainly influence its odds. In this chapter we will explore the concept of organisational climate, an arena where leadership can have a significant influence, in the context of healthcare teams in the National Health Service (NHS) in England. Drawing on data from a longitudinal mixed methods study conducted between 2012-2017, this chapter draws insights from six case studies to explore ways in which leadership can influence climate to support or hinder innovation. We focus on the journey for three teams who improved their climate for innovation,

according to a team climate measure administered twice 12 months apart, and another three teams whose climate deteriorated. Including vignettes as illustrations, we identify climate dimensions and leadership practices that catalyse or act as a barrier in making innovation happen. The findings highlight the importance of: understanding the wider context; establishing an agenda for purposeful innovation; protecting ideas in their early, fragile stages through risk mitigation; bounded experimentation; and securing the support of senior influencers. The findings demonstrate climate for innovation is amenable to leadership interventions and practices. These practices can be adapted and adopted in many organisational contexts and will have particular resonance for innovation leaders in high-stakes and/ or highly regulated environments. We conclude by posing questions leaders can consider for improving the climate for innovation in their teams and organisations.

Keywords: climate, innovation, leadership, teams, SOQ[®], healthcare, case study

Introduction

Innovation involves an uncertain journey and, although leadership cannot ensure innovation success, it can influence its odds (Van de Ven, 2017). In this chapter we explore leadership of innovation through the lens of organisational climate, an arena where leadership can have a significant influence (Isaksen, 2007). Our research was conducted with a range of teams in the National Health Service (NHS) in England, from different disciplines but with a shared interest in innovations to improve patient care.

Whilst the context of the healthcare sector in England is specific, it has wider resonance. The sector is facing, and struggling to meet, a tsunami of challenges including: rising demand from an aging population with increasingly complex health needs coupled with static or shrinking budgets (NHS England, 2014; 2017); and an existing problem with staff shortages (Nuffield Trust, 2017) compounded by the uncertainty around the implications of Brexit for EU nationals. As with many organisations, across numerous sectors and geographies, this creates a pressing need to improve their capacity for innovation (Carruthers, 2011; Rose, 2015).

These challenges have encouraged a climate characterised by time pressures, with every minute routinised, where a focus on providing evidence-based management and audit trails (Ham, 2014) preferences predictability and control over risk, playfulness and idea-time associated with innovation (Isaksen et al, 2011). Thus, at a time when innovation has increasing importance, the climate poses barriers to innovation that are hard to surmount. Challenges may vary from sector to sector, but the experience of closer monitoring and competing demands for scarce resources is ubiquitous. It is in this context that we explore leadership practices and their influence on climate for innovation.

We next outline some key thinking on climate for innovation. We then summarise our research approach and drawing on insights from six case studies explore ways in which leadership can influence climate to support or hinder innovation. We conclude by posing questions leaders can consider for improving the climate for innovation in their teams and organisations.

Understanding the role of climate for innovation

The growing pressure for developing and delivering creative products and services has generated increased interest in innovation leadership among scholars and practitioners (Bryne et al., 2009). Despite its central importance to any organisation, because different disciplines have studied it from different perspectives, “the term ‘innovation’ is notoriously ambiguous and lacks either a single definition or measure” (Adams et al., 2006, p. 22). Other scholars (e.g. Baregheh et al., 2009) have aimed for a synthesis of these definitions, a task beyond the scope of this chapter. We define innovation as a “*multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace*” (Baregheh et al., 2009: 1334). We focus on the impact these changes make

directly on an organisation, like the magnitude of novelty and of progress the organisation experiences (Mulgan & Albury, 2003). Doing so allows us to distinguish between incremental (with minor magnitude and impact), radical (major breakthroughs) and transformational (fundamental, organisation-wide impacts) innovation (Mulgan & Albury, 2003).

Much remains to be understood about how best to facilitate innovation. Whilst it is widely accepted that innovation involves an uncertain journey and its success cannot be ensured (Van de Ven, 2017), leaders can influence the odds. By encapsulating and communicating their organisation's true priorities, leaders can have a significant influence on organisational climate and advance the organisational innovation outcomes (Isaksen, 2007; Hunter & Cushenbery, 2011).

Climate is described as the general psychological atmosphere in an organisation (Isaksen et al., 1995) as discerned through observable attitudes and recurring behaviour patterns. Daily exposure to a particular climate, defined as employee interpretations of their everyday experience of working in a given organisational environment, generates a lasting effect on employee behaviour (Ekvall, 1987), influencing their mental and physical efforts (Pace, 2003). This suggests a link between climate and organisational success. Climate differs from culture which reflects the deeper ideological foundations of the organisation at the level of values, beliefs, traditions (Isaksen et al., 2011). Climate is more amenable to deliberate change efforts than culture (Ehrhart et al., 2013; Isaksen, 2017) as it operates at the level of visible and audible behaviour patterns and processes which can be locally created by what leaders do (Schein, 2000).

Over time, improving climate can shift culture, changing how the organisation views innovation. For example, research suggests leaders of innovative organisations implement a developmental culture, and attach importance to generating ideas, tracking technological frontiers, flexibility and adaptability (Büschgens et al., 2013). Their employees' behaviour patterns, which may for example exhibit greater willingness to take risks, then differ from those working in a hierarchical culture that emphasises stability and following rules and procedures.

Growing evidence suggests that shifting climate enhances innovation (Patterson et al., 2005); hence shaping climate is a leadership priority (Amabile et al., 2004). Leaders then can play the role of 'tempered radicals' (Meyerson, 2008) to affect innovation through relatively small changes, shaping climate through their everyday leadership behaviour and using it as a lever to affect more radical responses. Understanding how to foster innovation through climate interventions can help leaders identify and build upon structures, processes and practices that are working well in supporting innovation and modify those that are not.

Clarifying constructs to study climate for innovation

Above we demonstrate the importance of climate in leading innovation in organisations, but how do we define it? Ekvall (1987; 1991) offers one of the main attempts to conceptualise climate for innovation, which developed into The Situational Outlook Questionnaire® (SOQ®) (Isaksen et al., 1995).

The SOQ® assesses climate on nine dimensions, outlined in Table 3.1, which are found to predict higher levels of organisational support for creativity and innovation and effectively discern climates that either encourage or discourage innovation (Isaksen et al 2001).

[INSERT TABLE 3.1 HERE]

The SOQ® comprises 53 quantitative rating items, related to the nine dimensions and includes three open-ended questions. These qualitative questions surface information about positive and negative tensions in the organisational climate, and encourage respondents' ownership by asking them to come up with actions to improve the climate.

Climates conducive to innovation have been investigated at the organisational level (Abbey & Dickson, 1983; Amabile & Gryskiewicz, 1987). However, team climate has received less attention, and this forms our focus. In

an era in which ‘everyone will have a part to play as the creator and implementer of new ideas’ (West & Rickards, 1999: 55), the need to source novel ideas has spread to all areas of the workforce. This democratisation of innovation calls for a shift in focus to and to understand how leaders can improve their team climates since teams are increasingly becoming hotbeds for innovation (Lipman-Blumen & Leavitt, 1999).

However, the reality of producing innovations in teams is not straightforward. Teamwork involves social and psychological processes that can influence innovation processes. For example, team members are unlikely to generate and communicate novel ideas if they expect these to be dismissed or criticised (West & Anderson, 1996). They require a psychological atmosphere that allows novel ideas to be openly communicated, fairly evaluated, and properly implemented (Amabile & Grysiewicz, 1987).

The value of team-based organising is particularly visible in healthcare organisations. Teams have long been used to maximise effectiveness and efficiency in healthcare (Poole & Real, 2003) and are advocated as the optimal work design for delivery of high-quality patient care (Baker et al., 2006), resulting, for example, in lower error rates and lower mortality rates (Hughes et al., 2016) and higher patient satisfaction (West et al., 2001). The imperative for effective teamwork is also consistently emphasised by policymakers (Department of Health, 2012).

The demand for improved effectiveness and system efficiencies fuelled by increasing demand on health services, increasing cost of medical technology and medication, more informed, sophisticated and demanding patients, and shrinking or static budgets, creates a pressing need for healthcare organisations to improve their teams’ capacity for innovation in the UK (Carruthers, 2011) and the USA (Weberg, 2012). These can be in the form of product innovation or structural innovation to the way organisations’ business model operates in healthcare delivery (Varkey et al., 2008). However, the uncertainty inherent in innovation can increase anxiety and stress, discouraging risk-taking and creativity and encouraging habitual behaviours (Goleman & Boyatis, 2008). This can increase further under pressure of time (Amabile et al., 2002), further increasing the significance of instilling a high perceived level of support for creativity and innovation. Beyond the healthcare context, this will have resonance in any high-stakes, high-pressure environment, where the imperative for an innovation to demonstrate maturity before supplanting existing processes or products can discourage innovative behaviour (Varkey et al., 2008). This is amplified in healthcare organisations where decisions and actions resulting from risk-taking, playfulness or freedom – important dimensions of an innovative climate – can be, quite literally, a matter of life and death, making the study of, and interventions in, climate for innovation crucial.

This literature on team climate for innovation provides a theoretical foundation for our analysis, as we address the following research question: How can leaders influence innovation outcomes of their teams and organisations through their deliberate efforts to foster a climate for innovation? In addressing this question, we go beyond mainstream studies, typically quantitative ‘snapshots’ in time explaining the relationship between team/organisational climate and team/organisational innovation performance (e.g. Bain et al., 2001; Isaksen, 2007). Instead we take a qualitative and longitudinal approach measuring team climate pre-study; looking into what leaders did with these new insights on their teams’ climate; and re-measuring the same teams’ climate post-study to establish the impact of leaders’ interventions. Joining Isaksen (2017), we believe that the field would benefit from an improved understanding of leadership behaviours that help and hinder innovation in their teams. Our research approach has allowed us to identify specific and durable ways in which leaders can change their team climates, and to encourage more reflective leadership practices for innovation. It is the details of this research we turn our attention to next.

Our Research Approach

Our exploration of the climate for innovation focuses on the everyday practices of healthcare leaders in England, as they try to make innovation happen. The research was undertaken with participants on two cohorts of a leadership development programme, tailored for the healthcare sector and run between November 2011 – September 2012, and February 2013 – January 2014. All programme participants were leading on an innovation project of regional or national significance designed to improve patient care, a criterion for selection onto the programme. However, none of the participants were dedicated innovation managers; their leadership of innovation

was taking place alongside their busy day jobs. A competitive, over-subscribed application and selection process may also suggest participants were deemed ‘successful’ in their leadership of innovation.

Longitudinal data were collected from participants through a mixed methods approach. This included administering the SOQ[®] with participants and up to five team members from a team they were leading (conducted both pre-and-post-programme by 18 teams) and 21 depth interviews with participants 6-8 months after programme completion.

In this chapter we focus on stories from six participants, all of whom completed the SOQ[®] pre-and post-programme and were interviewed. Three of these participants saw significant improvement to their team climate on at least one SOQ[®] dimension¹, and three experienced climate deterioration as revealed by the analysis of the quantitative SOQ[®] data by paired t-test to compare changes in dimension means over time. For each story, significant changes, at 95% confidence levels, are shown in bold. In Table 3.2, highlighted changes show significant climate improvement, whilst in Table 3.3, they show significant climate deterioration. The tables also include team climate benchmarks generated from earlier research from Isaksen & Lauer (2002).

[INSERT TABLE 3.2 HERE]

[INSERT TABLE 3.3 HERE]

As their innovations evolved to extend their reach and influence, follow-up interviews were completed with the team leaders in Stories 1 and 2 in January 2020 and in Story 3 in April 2017. We did not undertake follow-up interviews with participants in Stories 4, 5 and 6 because their ideas had not evolved.

We selected these stories because they illustrate how team climate can change, for better or worse, and in a short time. They are drawn from different parts of the health sector, including primary and acute care, and from different – rural and urban – environments, illustrating a range of organisational contexts. Also, some leaders have clinical professional backgrounds, whilst others are non-clinical leaders. For ease of introduction, we provide a short summary of each story in Table 3.4. Throughout this chapter we use pseudonyms to protect participants’ confidentiality.

[INSERT TABLE 3.4 HERE]

Findings

Below for each story, we describe the nature of the innovation, its main challenges and achievements. We then review how our participants sought to influence team climate through their leadership practices, and how the presence, or lack, of wider leadership support also affected climate. We also unpack how these leadership practices and changes in team climate influenced innovation outcomes.

Story 1 – General Practices as a Community Hub

In 2013, Hilary, a general practitioner (GP), was also federation chair across her region, supported by the local Clinical Commissioning Group (CCG).

From April 2013 onwards, in her role as federation chair, Hilary collaborated with a group of other practices to create a community support hub, which evolved over time to provide holistic, human-centred care to more than 43,000 people. This story is an example of collaborative and transformational clinical service redesign across

¹ The SOQ[®] provides a score between 0-300 on each of nine dimensions and shows the team’s mean scores and range against benchmarks for innovative and ‘stagnant’ organisations. In addition, each respondent receives a report showing their scores in relation to the range for their team.

multiple organisations in a geographical region. Its uniqueness comes from the integration of personal, GP and community services into a single hub model.

In 2013 the hub received £110,000 of funding from the CCG to initiate the innovation. They employed a community development worker, who catalogued the support schemes existing in the area, and created a website to share them. Later, they created a team of 'health connectors', to help people manage multiple and complex medical conditions and trained 'community-connectors' (now numbering some 1,400), to spread awareness of the approach.

Positive results from the pilot, led to the CCG awarding a further £300,000, to develop and extend the hub model across a region of 115,000 people. Despite positive results emerging, there remained uncertainty around the sustainability of the innovation, since funding was short-term, and as the scale was extended, more resources were needed.

However, in 2018 a national newspaper published an article on the innovation, bringing worldwide interest and raising its profile. Coupled with close alignment to the policy agenda and the growing importance of Health Integration Teams, the project's prospects received a boost.

As the hub model developed, fewer people reported themselves to hospitals. Unplanned admissions dropped in the area by 14%, from April 2013 to December 2017, while the adjacent regions experienced an increase of 29%. This led to cost savings of nearly £1.2 million – a reduction of 21%.

Considering how the innovation developed, Hilary reports a personal motivation for wanting to improve care:

"My career has been in smaller practices. Then here, with 30,000 patients and a whole team, you can run the risk of de-personalising what's going on...I'm used to knowing the person... you could see that life and medicine are not distinct. I felt it more keenly, moving from a smaller to bigger practice." (Hilary, January 2020)

Hilary's GP team members completed the SOQ® in April 2013 and again in January 2014 with statistically significant improvements in risk-taking and freedom. In January 2014 team members described how freedom to move forwards with and test out new ideas had improved:

"I believe that the current leadership has fostered a more open culture that enables freer discussion, addresses issues in the group at an early stage and therefore allows people to bring forward ideas that can be discussed openly."

Through interview, Hilary reported a shift in their attitude towards risk:

"The fact that you can trial something, and move lightly, and implement something if it seems to be working, with it not being a black mark if it's not quite so good...Not everything you test has to work...The effort involved in being absolutely sure things are going to work, before you test them, saps your energy to test anything else." (Hilary, May 2014)

Hilary also made it a priority to gain idea support and agreement. Aware that *"if you don't have that engagement it bites you back later"* (Hilary, January 2020), she purposefully set time aside to plan how to engage people and gain a platform of support for her innovation:

"There is progress, but it's a lot of softer progress...– it's that chipping away and moving people's opinions forward so that you can start something and show that it works...If it's embedded in the whole [the region],

it's there for ever and safe. If you do your own little bit of change...the danger is someone else does something completely different, and you find you're undermined and the direction's changed." (Hilary, May 2014)

As a result of her emerging thinking about relations and networks, she focussed on telling her story in a way different audiences could hear and appreciate it and she worked hard to get appropriate opportunities and venues to tell it.

A supportive wider context played an important role too. Key figures in the CCG were interested in distributed leadership and encouraged initiatives from ground-level. And the town itself has a reputation for 'independence' and encouraging local action, rather than waiting for top-down permission.

Hilary's story shows a clear sense of purpose: providing holistic, human-centred care across a region. It also foregrounds a highly relational approach, working closely with others, and agreeing means and ends to embed and sustain innovation. Her team benefitted from her commitment to making the uncertainty of doing something radical 'safe enough'; accepting that there would be setbacks and communicating this to her team, giving them permission to experiment and take risks without expecting perfection.

Story 2 – Revisiting delivery of pharmacy services

In May 2015, a leading retailer opened a pharmacy at this UK trust, the outcome of a procurement dialogue with potential suppliers which started in June 2013. Whilst not new to the sector, for this organisation it is a radical service redesign through partnership, affecting an outpatient population of more than 450,000 and many services within the Trust and some external organisations.

The innovation resulted from a series of structural and cultural changes initiated by the Trust to promote local, autonomous decision-making and clarify accountability for local performance. This context influenced the thinking of Chief Pharmacist David seeking to ensure the performance and longer-term sustainability of the Pharmacy service. Outsourcing promised benefits as David reported in 2014:

"This is about us consolidating our resources in doing what we do best: clinical service provision and frontline patient care. And bringing in people who are much better at dispensing outpatient prescriptions all day...I want to release my staff to be patient facing."

The results are impressive: 90% of patients are now waiting less than 20 minutes for their prescription, when previously on a bad day, wait times were 90 minutes, which has increased patient satisfaction and reduced complaints.

Whilst the Trust achieved cost savings of almost £47,000 per month, no jobs were lost, and time was saved to train and develop staff.

The same retailer has won contracts with three other Trusts in the region, with David diffusing the innovation and encouraging its adoption through the network of Chief Pharmacists across the region that meets regularly to share experiences and practices.

Reviewing the origin of the innovation, David describes a process of reflection with the team and of personal learning. When the first climate results were shared in April 2013, he asked the team what they needed from him as a leader. They replied:

"You're not telling us enough...you need to share more with us...rather than trying to be involved in every meeting we might have...commission that from us, and we'll deliver to you in a set timescale" (David, May 2014).

Recognising the limit of his control over change and wanting to build real accountability with his staff, David and his team initiated a sustained process of reflection on their ways of working:

“We thought about what things could change...I got the pharmacy team to think about...where we are now and we need to be in 5 years’ time...they had to tell me things they’d start doing and stop doing.” (David, May 2014)

This reflective process had an effect. The second climate results in January 2014 showed statistically significant improvements in playfulness/humour, idea support, and risk-taking, with team member comments describing what aids innovation:

“Having time away from the day job. Listening and encouraging team to voice their ideas even if unusual. Discussing in non-judgmental way.”

“Our team leader leads by example. He is innovative and supportive of changes suggested by the team.”

In analysing David’s story, we are struck by the change in his approach as a leader. Realising his efforts alone would be insufficient to drive and sustain innovation, David delegated and devolved more power to the team, instead of trying to be operationally involved in everything. This reflection drove him to tap into the energy and ideas of the team and instil long-term, purposeful, patient-centred innovation. Combined with a commitment to providing support and encouragement to the team as they took risks, this change in leadership practices was crucial in nurturing ideas that later evolved into genuine innovation.

Story 3 – Improving diabetes long-term care

In 2013, Ben assumed leadership of a Musculo-Skeletal Services team, which managed a wide range of services, including diabetes. Later, Anne took on responsibility for managing the team to implement their diabetic improvement plans. In their large, regional city, diabetes was a growing problem with higher lower-limb amputation rates compared to most of the country.

Between 2013 – 2018, the team introduced a series of city-wide clinical service innovations, coordinated across multiple healthcare organisations, and including local doctors. In 2014 they secured £330,000 funding to develop a prioritised service for most-at-risk diabetes patients. A risk-line was introduced that allowed patients to ring a clinician for signposting to appropriate care. Local doctors were encouraged to refer diabetic patients for assessment, and community wound clinics with dedicated specialist resource combined to ensure a more standardised approach. Internally, staff were trained in clinical competencies, with risk cards introduced to stratify and prioritise cases. Taken together, this series of incremental service innovations made a substantive difference, cutting waiting times for most-at risk-patients from around 18 weeks to 4 weeks allowing more and better treatment options for patients.

However, the popularity of the services produced capacity challenges – referrals increased and waiting times started to rise. In 2017, the team won a further £220,000 funding, to refine and extend their services. They reviewed their criteria for ‘high-risk’ and agreed an integrated approach with GPs and hospitals, supported by an electronic referral process, with a single point of access for acute treatment. These innovations secured regular, timelier, quicker diabetic foot checks for 4,500 patients with positive impact on earlier diagnosis.

These innovations emerged from structure and role refinements Ben initiated in 2013 to create a highly engaged team involved in developing ideas to support strategic aims. He ensured the senior team made time for idea development, and that these ideas were shared more widely. This emphasised the importance of creativity, sending out clear messages about involvement, time for creativity and follow-through to implementation. For example, in one exercise the wider team generated more than 300 ideas and developed these into 10 broad

challenges. By mid-2014, seven of these were already being implemented and contributed to the rise in the reputation of the team in the organisation.

The second climate results in January 2014, revealed statistically significant improvements in challenge/involvement, playfulness/ humour and risk-taking. Team members' comments from the second SOQ® suggest the inclusive approach to innovation, led by the senior leadership team and guided by Ben, contributed to trust and relationship building:

"I think the idea support in this team is great. [Our]team is excellent at working together in creating innovative solutions to solving problems."

"The level of trust in the team is very high. Creative problem-solving techniques are used early to predict future opportunities and solve existing issues."

"The members all support one another and are never critical of new ideas/suggestions."

Team members also commented on the improvement in challenge/involvement by highlighting the importance of team leadership to focus the team's ideas and prioritise areas that needed attention.

Inevitably there were many challenges through this time, as Ben reports:

"The hardest thing was risk-taking. The level of bureaucracy in a clinical organisation is difficult to overcome. So, we took risks in a measured way. We developed small wins with the team, and this has been of critical importance in demonstrating a measured approach to risk taking." (Ben, August 2017)

As Anne took on project implementation, she framed her role as maintaining a now-healthy team climate, in particular, providing idea-time and idea support:

"I was thinking: 'we don't have the luxury of time, so how can we manage it effectively?' We made sure we were protected from the hustle and bustle of everyday work. We'd use clinical rooms, so people didn't know where we were. We engaged the team constantly, and used ideas from them, to get their buy in, from the ground-up. I did a lot of coaching through 1:1s with my team." (Anne, August 2017)

Ben and Anne's achievement highlights the importance of approaching innovation in a way that fits with the broader organisational culture. This requires an awareness of the wider context – not only of the overarching agenda and strategic priorities but of preferred approach to addressing these. With this awareness, Anne and Ben emphasise taking 'measured risks' and securing small, incremental innovations. They exercise leadership in more localised, diffused and modest ways than traditional forms of innovation leadership. However, they still effect significant changes with a substantial impact. As in David's story they show commitment to developing their team, providing opportunities for team members to grow their awareness of the wider context and to exercise their agency in crafting innovative responses.

Stories 4, 5 and 6 - What can we learn from stories of partial change?

We now explore three stories of interrupted change, where some progress was reported, often at a slower pace than the leaders would have liked. The leaders were focusing on different types of innovation: a radical service innovation across a city, involving multiple organisations (Story 4); an incremental service redesign for healthcare commissioners, affecting their own unit (Story 5); and an executive team with the intent to model incremental cultural change that would affect other organisational units (Story 6). On the second measurement of team climate,

each of them saw statistically significant deterioration in a dimension: risk-taking in Story 4, freedom in Story 5, and idea-time in Story 6.

Because these teams introduced less innovation, we focus on the climate conditions that frustrated the leaders and hindered innovation. There were notable common themes across the stories ².

Lack of, or inconsistent, senior support, or the undermining of efforts by more senior people appears to be a major factor, highlighting once more the importance of awareness of the wider context and of securing a 'champion':

"It does feel quite risky. The risk is above me in the organisation...We pretend to make decisions in an inclusive manner, in reality the decisions are made by two or three senior people...It feels an arms-length organisation...[senior leaders] feel they must be 'in charge' and make the decisions..." (Story 5, Interview with leader, May 2014)

"...could we have done more in managing the organisational stakeholders who were putting constraints in the way? That includes very much dealing with senior players...we probably could have done more to get them on board." (Story 4, Interview with leader, February 2013)

As illustrated in the more successful stories above, leaders soon work out who they need to talk to and whose support is essential to drive forward their innovation. Where this support is lacking or insufficient, they may seek to introduce change 'below the radar':

"From a personal perspective, it's about getting a grip and doing it. But the culture is when you do that, you either get chopped off at the knees, or it's too late for it. If you can get to the point where you can share how great it's been, before anyone gets to stop if, it's fine. So, it's about trying to be canny...and getting past those original hurdles." (Story 6, interview with leader, February 2014)

Being unable to escape a short-term focus, and constrained by limited, or changing, resources, priorities and audiences was another theme:

"Doesn't feel like there is room to be innovative...due to lack of funds. Longer term we'll need to be innovative for that exact reason, but short term it still feels that we are being stifled." (Story 5)

"We spend more time on minutiae and crisis management. Priorities change daily." (Story 6)

"It's been a very new team coming together, and the team itself has evolved so much during the year...The impact has been less evident, than it would have been with a more stable team...stakeholders have changed and evolved." (Story 4, interview with leader, February 2013)

Finally, poor intra-group relations sometimes hindered work and innovation outcomes:

"Competitiveness between members. People look to criticise other team members. Power struggles. Lack of support towards others." (Story 5)

In stories 4, 5 and 6, lack of senior support, was compounded by a focus on the short-term. In this context, and with scarce, changing resources, the perception of risk from introducing innovation was sometimes deemed too high. This is not a case of outright opposition to change, more one of insufficient, meaningful support. As a

² Note that the quotes below are all from team members, from their second experience of the SOQ[®] survey, unless indicated otherwise.

consequence, leaders and teams made slow progress. Reflecting on the whole experience, one leader summed up succinctly how ‘success’ in innovation can sometimes prove elusive:

“Our interventions have helped avoid things completely failing, but we would be hard pressed to identify real benefits.”

While it is not part of this study, we had ongoing contact with these leaders from stories 4, 5 and 6 who noted they applied their leadership learning in other contexts and teams, over the same time period, with greater success. Our analysis suggests when wider contexts are adverse, even effective and motivated leaders will likely struggle to improve climate for innovation, and to deliver innovation. In the next section we look at the practical implications of these findings for leadership in introducing sustainable innovation.

Practical Implications

Our analysis shows how innovation outcomes can be improved when an agenda for purposeful (in this case patient-centred) innovation is established, and team members are involved in meaningful work challenges. We illustrate different ways in which leaders and team members acted in ways that mitigated risk, bounded their experimentation, used available resources, evidenced change, reported to more senior influencers, and protected ideas in early, fragile stages.

A number of key themes emerge. First, in Stories 1, 2 and 3, while the impetus for innovation was crafted at local level, their broader contexts were change-receptive, with leaders and their teams receiving explicit support from more senior people and being able to access them when hurdles were encountered. In Stories 4, 5 and 6, there was variable agreement on the innovation agenda, and insufficient senior support.

The more radical the innovation and the broader its scope, the greater the unpredictability and the higher the perceived risk. As risk and unpredictability increase, so does the importance of senior leadership support for the innovation to be seen as credible, valuable and feasible (Côté-Boileau et al., 2019).

The more leaders build wider goodwill and networks of relationships, from senior leaders and peers across and between organisations, the more likely they can call upon it at moments of challenge and crisis. And the more likely the innovation will survive. This resonates with Ballard’s (2005) work on the importance of Agency (the power to take action), Association (the need to build networks and connections to amplify voices), and Awareness (of the strategic agenda and limits of human agency). Ballard (2005) stresses a need for all three to be present. In this case, for example, without Association, the result is the isolated activist who is ignored, and possibly stressed.

Second, the three ‘success’ stories show an awareness of the local context (Ballard, 2005) which shapes their approach. Stories 1 and 2 brought highly novel change within a receptive and supportive context. Without this supportive context, radical innovations are likely to meet stiffer resistance, especially when their scope is pervasive and their consequences disruptive (Totterdell et al., 2002). Aware of this, in Story 3, Ben and Anne took the approach of the ‘tempered radical’ (Meyerson, 2001) implementing far-reaching change through a series of incremental innovations appropriate to their local clinical context that was more amenable to a more linear approach. They emphasised taking measured risks and securing small wins yet their moderate, quiet and ‘tempered ways’ achieved revolutionary impact.

Third, in Stories 1, 2 and 3, leaders focused on Agency (Ballard, 2005), devolving power to act to team members. This required them to improve the climate for risk-taking to ensure team members felt they would be

supported if their actions did not achieve the desired results. They built confidence, providing team members with development opportunities and distributed leadership responsibilities.

Fourth, innovations had varying adoption rates beyond their unit/ service/ organisation. Story 1 has been the most widely spread; Story 2 has led to some wider adoption; and Story 3 introduced the least. Why was this?

- The leader in Story 1 saw spread as key to sustainability from the outset. She deliberately slowed the pace of task activity, concentrating on relationship building and joint working. The quality of these relationships benefitted the innovation eventually, bringing publicity, agreement on how to proceed, and energy in sharing the story with wider populations.
- In Story 2, the leader was part of a network of Chief Pharmacists that met regularly to share experiences. This acted as a mechanism for spreading the innovation, as well as learning and support, and for mitigating any risks associated with adoption in other areas.
- In Story 3, the leaders targeted energy at the local stakeholders, rather than wider stakeholders. What seems to be missing is a deliberate attempt, throughout the process, to consider and plan for wider spread that would secure the longer-term sustainability.

In summary, there is evidence that longer-term sustainability and spread should be part of the early-stage innovation process. Leaders should envision sustainable innovation in their contexts, build stakeholder relationships and think about communication and sharing of good practice from the outset.

Finally, cultivating stakeholder relationships helped the leaders in our stories avoid change fatigue (McMillan & Perron, 2013) in a context where change fatigue is often endemic (Lubitsh et al., 2005). In our stories, where innovation was congruent with wider strategies, and was agreed and sought by a powerful group of senior stakeholders, the energy and enthusiasm generated provided a powerful antidote to change fatigue, helping team members avoid losing trust (Reineck, 2007) or from feeling disorientated or dysfunctional as a result of too much stimulation (Stensaker et al., 2002). Where this was lacking as in Story 4, where the innovation team met with active resistance and struggled to gain a common agreement from powerful interest groups, the chances of successful implementation are greatly reduced.

As this discussion suggests, in a supportive context, improvements in team climate are amplified, and emerging ideas are more likely to be encouraged. Purposeful innovations, aligned to strategy, aided by senior support, with freedom devolved to local teams has proved a powerful combination.

Conclusion

This chapter provided insights into the hurdles leaders faced in managing innovation in their teams and their interventions to climate for overcoming these. Table 3.5 summarises some of the practical steps leaders across our broader study took to shift their climate for innovation.

[INSERT TABLE 3.5 HERE]

Whilst our research has taken place in the NHS in England, our findings have relevance for innovation leaders in other sectors. We highlight the importance of understanding the wider context and demonstrate climate for innovation is amenable to leadership interventions and practices. These practices can be adapted and adopted in many organisational contexts and will have particular resonance for innovation leaders in high-stakes and/ or highly regulated environments.

There are, however, limitations of using team climate to understand support for innovation. The scope of the innovation may outgrow its source team, requiring leaders to switch their efforts to stakeholders beyond their team to influence innovation success. Hence, over time, the impact of initial team climate improvement can get

diluted. This makes attribution of cause and effect more difficult and highlights the need to consider the impact of climate on innovation within the wider context of time and space, encompassing a multitude of conversations and actions taking place within and beyond the team and the organisation, only a proportion of which leaders could ever attend to and influence (Aasen, 2009). More fundamentally, as the latter three stories point out, no one, leaders included, can control the responses of the wider context to their interventions in the never-ending swirl of activity surrounding the innovation agenda. As such, the climate and the resulting innovation outcomes do not capture everything about the learning of leaders and their teams regarding supporting and managing innovation.

Despite these limitations, the chapter shows climate can provide fertile soil for ideas to flourish. It can also be the barren land where lie the withered and forgotten ideas. In the fuzzy front end of innovation, it is instructive to look at team climate as long as we pay attention to the leadership practices within a broader organisational context, over a period of time.

The questions to guide further research and debate are: how can leaders aid innovation efforts with an increased awareness of the wider context (and the systemic opportunities and barriers it poses)? And how can leaders gain an enlightened acceptance of their agency (and its limits) to empower action in association with others?

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Table 3.1. SOQ dimensions (from: <https://www.soqonline.net/>)

Dimension	Description
Challenge/ Involvement	The degree to which people are involved in daily operations, long-term goals, & visions
Freedom	The independence in behaviour exerted by the people in the organisation
Trust/Openness	The emotional safety in relationships
Idea-Time	The amount of time people can (and do) use for elaborating new ideas
Playfulness/ Humour	The spontaneity and ease displayed within the workplace
Conflict	The presence of personal and emotional tensions in the organisation
Idea-Support	The ways in which new ideas are treated
Debate	The occurrence of encounters and disagreements between viewpoints, ideas, differing experiences and knowledge
Risk-Taking	The tolerance of uncertainty and ambiguity exposed in the workplace

Table 3.2. Pre- and post-programme scores on SOQ® climate dimensions (Stories 1-3)

SOQ Dimensions	Most creative team benchmark (n=154)	Least creative team benchmark (n=154)	Case 1 Time 1	Case 1 Time 2	Case 2 Time 1	Case 2 Time 2	Case 3 Time 1	Case 3 Time 2
Challenge	260	100	224	227	214	248	210	264
Freedom	202	110	152	202	177	192	169	200
Trust and Openness	253	88	183	177	168	187	193	233
Idea Time	227	65	145	140	153	164	108	156
Playfulness	235	77	124	143	160	194	200	256
Conflict	27	123	88	105	30	50	44	25
Idea-support	218	70	197	231	208	233	203	260
Debate	231	83	195	217	193	217	192	197
Risk-taking	210	65	177	234	164	197	150	200

Table 3.3. Pre- and post-programme scores on SOQ® climate dimensions (Stories 4-6)

SOQ Dimensions	Most creative team benchmark (n=170)	Least creative team benchmark (n=170)	Case 4 Time 1	Case 4 Time 2	Case 5 Time 1	Case 5 Time 2	Case 6 Time 1	Case 6 Time 2
Challenge	260	100	253	236	179	223	232	237
Freedom	202	110	142	158	192	142	204	183
Trust and Openness	253	88	196	160	123	165	180	164
Idea Time	227	65	150	142	83	90	113	97
Playfulness	235	77	165	158	100	160	142	133
Conflict	27	123	80	104	152	106	108	117
Idea-support	218	70	215	180	123	173	150	156
Debate	231	83	205	167	154	183	163	143
Risk-taking	210	65	189	170	115	140	120	152

Table 3.4. Overview of selected stories

Story	Setting and innovation description	Type of Innovation <i>Service:</i> an innovation focus on healthcare services to patients. <i>Organisational:</i> an innovation focus on infrastructure that delivers services. For example, changes in roles, structures, human capabilities, buildings.	Degree of Innovation (Incremental / Radical / Transformational)
1	The creation of a community support hub to improve community care across multiple organisations in a geographical region.	Service	Transformational
2	The creation of an external partnership to supply pharmacy services, affecting services both within the trust and for some external organisations.	Service and Organisational	Radical
3	Introduction of a series of organisational and service improvements across multiple healthcare organisations to improve diabetes long-term care.	Service and Organisational	Incremental
4	Radical healthcare service innovation across a city, requiring consensus from senior healthcare institution leaders in a major regional city.	Service	Transformational
5	Service redesign for healthcare commissioners, aimed at their own unit.	Service	Incremental
6	A series of interventions aimed at culture change that would ‘ripple out’ to other organisational units.	Organisational	Incremental

Table 4.5. Leadership practices to promote climate health

Dimension	Leadership practices that encouraged ...
Challenge and involvement	<ul style="list-style-type: none"> • Increased collaboration/earlier involvement of others • Seeking perspectives beyond own team/ organisation • Greater, earlier patient involvement • Use of peer networks to test and challenge new ideas
Freedom	<ul style="list-style-type: none"> • Increased delegation of power and authority • Active discouragement of permission-seeking culture • Avoiding ‘over-planning’ • Expecting the unexpected
Trust/openness	<ul style="list-style-type: none"> • Appreciative Inquiry – taking energy from what we do well • Seeking and providing opportunities for constructive feedback • Promoting coaching and active listening
Idea-time	<ul style="list-style-type: none"> • Allocating and protecting time in team meetings, away days/off-sites • Making time and space to reflect on and in action
Playfulness/humour	<ul style="list-style-type: none"> • Taking time out as team for informal conversation • Use of creative methods; e.g. drawing, storytelling, Lego Serious Play™
Conflict (reduction)	<ul style="list-style-type: none"> • Valuing diversity and difference • Surfacing and dealing with issues in timely and transparent fashion
Idea-support	<ul style="list-style-type: none"> • Storytelling targeted to audience • Delegation - increases time to promote projects and seek support • Fostering “innovation champions”
Debate	<ul style="list-style-type: none"> • Valuing diversity of views and all the different expertise available to you • Allowing time to get beneath surface issues
Risk-taking	<ul style="list-style-type: none"> • Accepting failure as inevitable side effect of innovation – and learning from it • Awareness (of self, impact, organisational priorities, costs, etc) mitigates risk