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Abstract

Purpose: Complex and sudden change that healthcare organizations often have to respond to, such as during the recent pandemic, can create major disruptions and a prolonged state of alert. Although the impact of such crises can be predominantly negative, rapid adjustments during this time also yielded positive change that could support organizational responses to crisis, if managed well. Using insights from organizational learning and organizational change theory, the aim of this study was to chart Lewin's freezing/refreezing stage for one large UK healthcare organization. We aimed to understand the experienced and types of gains and losses in processes of complex and sudden change.

Method: Data from 23 focus group discussions with 575 participants representing all functions and departments in one UK Healthcare Trust revealed the gains, losses, and lessons experienced in response to sudden change that can promote organizational learning.

Findings: Given that perceived losses are more likely to drive a desire to refreeze 'back to normal' and perceived gains more likely to lead to an emphasis on embedding gains and changing to better, on balance, the substantial, in number and variety, gains and learnings point to a learning organization. This is an essential attribute for responding to disruptive change successfully and facilitating organizational recovery in a post-pandemic world.

Originality: By extending these insights on workers' adaptation to sudden change, the findings can help to advance the science and practice of organizational learning and support organizational recovery, especially as they describe the new status in UK healthcare organizations.

Practical implications: The findings highlight the importance of timely harnessing of the organizational learning emerging from crises in and how this can inform a more resilient organization, as well as supporting sustainable organizational cross-learning.

Keywords: organizational learning, organizational change, disruptive change, healthcare sector

Understanding Organizational Learning in a Healthcare Organization during Sudden and Disruptive Change

Unexpected major change can create sudden disruption and a prolonged state of alert on healthcare services. The changes initiated in response to the recent pandemic created changes that might not otherwise have taken place for several years, if at all. During the pandemic, this included a suspension of routine and non-urgent services, redeployment of staff into different roles (Cumberland *et al.*, 2022; Miotto *et al.*, 2020; Wanigasooriya *et al.*, 2021), and reallocation of resources by healthcare leaders to respond to the crisis effectively. For healthcare workers, these changes were often coupled with inadequate levels of training or equipment (Baskin and Bartlett, 2021). The immediate response from the research community has been to focus on understanding the short and longer-term psychological consequences of the pandemic for mental health outcomes in order to protect the population and more vulnerable groups within it (e.g., Cotel *et al.*, 2021; Chatzittofis *et al.*, 2021). However, positive changes at the workplace level have also been observed. Identifying positive outcomes and understanding the role of organizational learning in enabling healthcare organizations to bounce back stronger from sudden change is essential for building resilient organizations.

Unsurprisingly, healthcare professionals were the occupational groups most negatively affected by the pandemic (O'Connor *et al.*, 2020) – an effect that was both direct and augmentative on the already low mental health within this group (House of Commons, 2021). Pre-pandemic, the healthcare workforce experienced substantially high levels of demands and distinct lack of resources (McFadden *et al.*, 2021), with increasing patient numbers, severity of cases, and workload (Alharthy *et al.*, 2016), a higher impact on their mental health than for the general public (Mark and Smith, 2012), including emotional exhaustion (Johnson *et al.* 2012) and burnout (Alharthy *et al.*, 2016; Mark and Smith, 2012; Maunder *et al.*, 2006), and worrying impact on patient care and safety (Manger *et al.*, 2021; Kakemam *et al.*, 2021). During the

pandemic, for a prolonged period of time never before experienced, workload, work demands and, as a result, mental ill-health worsened among healthcare workers to concerning levels (Manger *et al.*, 2021; Cotel *et al.*, 2021; Pham et al, 2022), whilst some educational opportunities within the sector were paused (Spetz, 2021). This study is not about the pandemic, but rather puts healthcare workers' experiences in perspective to understand recovery from crisis. Next, we outline the relevant literature and present the research aims.

Organizational Learning and Organizational Change in Healthcare Organizations

Despite the toll of this constant state of alert on individuals, teams, and organizations, the abrupt change in working practices and priorities also brought invaluable learnings as leaders, teams, and individual staff responded to the crisis (Penwill *et al.*, 2021; Salvador-Carulla *et al.*, 2020). Possible protective factors against traumatic stress among healthcare professionals have been identified in psychological resources such as resilience and hardiness (Di Trani *et al.*, 2021; Denning *et al.*, 2021; Hooper *et al.*, 2021; Vagni *et al.*, 2021). At the organizational level, preparedness, and flexibility (Arutu *et al.*, 2021; Austhof *et al.*, 2021), well-functioning social support from colleagues and managers (Usman *et al.*, 2021; O'Connor *et al.*, 2020), rapid policy changes (Penwill *et al.*, 2021), broader systemic changes in mental health provision (Søvold *et al.*, 2021), and organizational support (Jo *et al.*, 2021) can protect healthcare workers and the sector. However, responses to change have yielded varying degrees of effectiveness.

Focus has now firmly shifted to recovery as an opportunity for much needed post-traumatic growth (Manger *et al.*, 2021). To protect healthcare workers against negative mental health outcomes it is important to build resilience (Baskin and Bartlett, 2021), which is the strength and energy that help staff to take on challenges to overcome the pandemic. Resilience is essential for protecting performance and well-being, and for shielding from the impact of uncertainty and stress in the workforce (Vanhove *et al.*, 2016).

However, support and resilience also depend on the existence of organizational factors such as functional social relationships, supportive leadership, an adequate physical environment (Ungar, 2021), organizational support and participation in decisions (Jo *et al.*, 2021), team social climate (Fleuren *et al.*, 2021), and psychological safety (Hunt *et al.*, 2021). Successful response of healthcare organizations to chronic adversity can be sustained under the right conditions to reconfigure working practices and support workers in the long-term. As San Huan *et al.* (2020, p.1) note, when considering support for the mental health, healthcare workers themselves place "greater emphasis on structural conditions at work, responsibilities outside the hospital and the invaluable support of the community".

It is an imperative to harness the positive changes and learnings from the pandemic and build organizational learning, which is essential for improving healthcare systems and patient outcomes (e.g. Lyman, Hammond, and Cox, 2018; Lyman, Shaw, and Moore, 2017) and has been linked to a range of positive outcomes including improved financial and clinical outcomes (e.g. Wang *et al.*, 2014; Syed and Samreen, 2015; Richter *et al.*, 2016). It is now critical that we engage in double-loop learning (Argyris and Schön, 1996), going beyond resolving the immediate issue(s) to connecting observed effects with the organizational strategies and values served by those strategies, connecting "…the detection of error not only to strategies and assumptions of effective performance but [also] to the values and norms that define effective performance" (Argyris and Schön, 1996, p.23). This is vital in relation to managing change that is prompted by crises such as the Covid-19 pandemic, which, given its scale, urgency and intensity, prompted an instantaneous form of Lewinian 'unfreezing' (Lewin, 1947).

In Lewin's (1947) 'Unfreeze-Change-Refreeze' model of change, unfreezing is typically brought about by a growing sense of dissatisfaction with the status quo, eventually giving rise to the realisation that in order to survive and prosper, change is required. However, the changes initiated in response to the pandemic immediately shifted many deeply embedded workplace

norms, bringing forth changes that might not otherwise have taken place for several years, if at all. Typically, the forces pushing for change typically co-exist with opposing forces resisting change (Cummings and Worley, 1997). However, significant events and crises such as the Covid-19 pandemic constitute 'jolts', necessitating urgent organizational changes in the moment simply to respond and survive. As a result, such changes highlight the importance of seizing the period of re-freezing as a critical learning and change opportunity. To resist a mindless resumption of old ways or drift back to old habits, conscious attention, reflection, and deliberate re-shaping of organizational norms should take place. In addition, many existing models organisational change (e.g., Kotter's 8 steps, 1995, 1996) are criticised for being overly linear, over emphasising isolated, episodic events (Beer & Walton, 1987; Graetz & Smith, 2010), and not taking sufficient account of the complexity of the change process from the viewpoint of the change recipient (Balogun & Jenkins, 2003), failing to take into account the psychology of change (Winum *et al.*, 1997).

In a recent review of change models, Errida and Lotfi (2021) highlighted that if change is to be successful, efforts must be made to sustain the gains and benefits of those changes over the longer term. Indeed, a widely used model that centres on the psychological change process itself is the stage of change approach, or Transtheoretical Model of Change (Prochaska & DiClemente, 1982). This model emphasises the importance of decisional balance in successful change, which involves an individual's weighing up of what they perceive to be the relative pros and cons of changing. Furthermore, research examining its use in the workplace also emphasises the importance of maintaining changes following initial action (Whysall, Haslam & Haslam, 2006, 2007). Sustaining change is accomplished by embedding new work processes and methods, integrating lessons learned, reinforcing the new behaviors.

To achieve this, we must unearth learnings, identifying what was lost that must be regained, and what has been gained that must be retained to ensure a more conscious and deliberate 'refreezing'. In addition, since perceived benefit or harm has been identified as an important determinant of change reactions and consequences (Oreg *et al.*, 2011; Prochaska & DiClemente, 1982), it is important to understand the extent to which change recipients perceived gains and losses during the change. For instance, if the perceived losses outweigh the gains, the post-pandemic 'refreezing' may be driven more by a desire to 'return to normal', rather than of leveraging the gains identified, letting go of the 'old normal' and embracing a 'new normal'.

Study Aims

The aims of this study, therefore, were to understand the formal and informal changes that emerged in one healthcare organization during the pandemic and the extent to which employees perceived these changes as gains and losses. Understanding the impact of this crisis on staff working experiences is an invaluable opportunity as it allows to consider how important lessons can be embedded in normal working practices, what resistance there may be to embedding changes, and what the implications are for managing transformational change events in future. This type of research is essential and can complement research on the transition to a post-pandemic and how organizations can benefit from learnings from the pandemic era (O'Connor *et al.*, 2020; Peters, Dennerlein, Wagner & Sorensen, 2022). For example, O'Connor *et al.* (2020) have identified some of the research priorities to be in the field of healthcare management and infrastructure – this means strong and resilient organisations that have the capacity to learn in order to adapt. An understanding of change in terms of both operations and people can help with this transition.

We do not prescribe to a specific theoretical model, for their shortcomings that we have outlined earlier. Rather, to understand change we use insights from a number of perspectives and take a more practice-informed approach, with Lewin's refreezing at centre stage. In this sense,

the research is problem-driven and therefore more akin to good workplace health management practice than theory-driven research. Such a pragmatic approach requires the researchers and organisations to be selective in how they apply theoretical insights to inform practice. Consequently, we do not use an explicity theoretical perspective to interpret the findings – we allow the findings to emerge from the organisation's reality, which is consistent with the practice-informed approach.

Method

Based on an in-depth qualitative approach and using extensive focus groups with staff across all grades and functions of Sherwood Forest Hospitals NHS Foundation Trust, we applied an interpretative qualitative approach to understand gains, losses, and changes in their work experiences as a result of the Trust's response to the pandemic. We aimed to capture the organizational learning from the perspective of the leaders and teams in order to inform how these achievements can be applied in other healthcare organizations.

Participants and Procedure

A total of 575 staff representing all levels and functions or organizational units of the Trust were involved in a total of 23 focus groups. 'Units' here refers to a department or a larger team within the Trust. To encourage open communication, the groups included peers at the same seniority level or job function. These discussions were part of the Trust's internal annual survey ran by its Service Improvement Team. Table 1 presents the oprganizational units in detail.

[insert Table 1 about here]

Focus group discussion by job function was employed as it allows for purposive sampling and offers psychological safety within the peer groups for participants to express their views (Rabiee, 2004). Focus group interviews have been used increasingly in healthcare research to examine the topics from individuals' perspectives (Rabiee, 2004). Participants were informed that results would be anonymised to generic groups or Units and not attributed to an individual.

Participants were informed at the start of each discussion that results, by theme and potentially quotes, would be shared within and outside of the organization to inform wider learning. Consent was provided by participation in the sessions.

Participants were asked to discuss the losses, gains, and organizational changes they had experienced in their day-to-day work as a result of the pandemic. To start the discussion and stimulate further sharing, rather than lead or even bias discussions, the interviews were unstructured, with the opening questions: "*During Covid, what losses did you notice?*", "*During Covid, what gains did you notice?*", and "*During Covid, what changes did you observe at organizational level?*". Participants were encouraged to reflect on their personal and professional experiences. The focus groups were run by the Trust's Service Improvement Team in September and October 2020. They were held either face-to-face or online, depending on staff availability to allow for maximum participation. Timing was important, and therefore data were collected 7 to 8 months after the start of the pandemic in the UK, at the time when substantial changes in work organization had taken place. Focus groups were not audio-recorded but the facilitators took detailed notes of the discussions.

The study was approved by the [blinded for review] institutional research ethics committee and performed in line with the British Psychological Society's code of ethics and conduct. Fully informed consent was obtained from all participants for the data collection and publication of the data.

Analysis

Deductive Thematic Analysis (Braun and Clarke, 2006) was carried out to extract points of agreement among each focus group and across groups. We first identified broader sub-themes within each question (gains, losses, changes) by considering the 'keyness' of the responses. 'Keyness' here refers to "whether it captures something important in relation to the overall research question" (Braun and Clarke 2006, p.82). We developed the list of sub-themes and

categories and cross-checked these for consistency, accuracy, and parsimony. Then, we agreed the labels of the sub-themes and categories among the researchers. The final list of sub-themes and categories is presented below, with illustrative quotes (Groenland and Dana, 2019). The code used for the quotation indicates individual statement and the number is the date and month of the focus group they took part in.

Results

Figure 1 presents the outlet of the themes and sub-themes that emerged from the analysis. Where there was overlap in the themes and sub-themes that emerged for *Gains* and for *Changes*, these were merged. These overlaps amplified the significance of the identified themes for the participants. Theme *Losses* had three unique sub-themes (loss of contact, work practices, and emotional impact), whilst theme *Gains* had two unique themes (development opportunities, and other gains) and theme *Embedding Changes* had two unique themes (priorities for sustained learning, and lessons to be learned). The latter two themes (*Gains and Changes*) had three overlapping sub-themes (work-related gains and challenges, technology, and resilience). Detailed explanations are provided in the sections below.

[Insert Figure 1 about here]

1. Losses

1.1. Loss of Contact

Human contact. Loss of contact was the most substantial loss caused by the pandemic. Participants described having missed the interactions with colleagues, teams, and patients. They missed the informal social groups formed to support each other, the ad-hoc 'corridor' conversations, sharing ideas and updates with colleagues.

> *'Shielding and working from home has meant that that a lot of communication is via email or third parties, which is strange as you cannot just pop down the corridor ask a question or favour or opinion or just say hi.' (W&C0107)*

Team members working from home (WFH), not being able to meet face-to-face, or being split into smaller teams impacted on their sense of community.

'Colleagues not in the office, miss sense of community and as a team has an impact' (S0806)

They missed face-to-face contact with patients, and with patients' families, particularly in acute phases or the end-of-life care.

'*Relatives, communication with them is vital, especially in acute phases, you get better outcomes and fewer complaints' (MM1906)*

The loss of social interaction, personal contact, and face-to-face interaction were particularly evident in relation to gestures, such as hand-on-shoulder or hugging.

'*I usually go towards people, now I feel that I'm retreating from them' (RTL1106)*

'Miss personal touching and holding… I'm not normally a hugger but I miss it' (AHP0306)

Families and friends. The loss of contact and not seeing friends and relatives face-to-face was a major personal loss. Due to self-isolation from immediate family members (to avoid the risk of infecting family) or long working days, some participants could not see their partners, children, or parents, particularly parents who lived in care homes. Self-isolation led to feeling lonely and detached during this difficult time, especially for those WFH, living alone, or shielding.

'Contact with own family members. I'm isolating from my partner. I can't hug my children' (MSL0906)

'*I am shielding but managing to do clinical work remotely. I have had no personal contact though, the closest thing is the postman waving at the end of the driveway, I've never felt less part of a team, it's been the most difficult time' (MM1906)*

1.2. Work Practices

Efficiency and patient care. A majority of participants described negative changes in the way that their work was carried out, such as the losses of elective activities, clinical work, and day-to-day practices (e.g. safety checks, audits, screening, visiting wards or patients in the community, voluntary services). They raised concerns that patient care was affected because of the lack of face-to-face meetings which impacted on collecting evidence for clinical decisions and diagnoses.

'Professionally loss of control over our practice, loss of elective activity sense of losing direction' (SDLE2406)

'Unable to follow up patients fully after discharge. No main person to speak to in discharge hub and we have to let go of the patient's care when we are not ready to' (CNS0906)

'Loss of grip on quality and safety checks, ward audits, sepsis screens and the potential for missed diagnoses - covid is the only focus' (MSL0906)

Related to decision-making, some found the volume of information to process overwhelming, whilst others noted the lack of reliable data and research evidence, potentially impacting on errors and performance.

'Fast-paced environment, pressure to make decisions and have answers, loss of confidence, no true research to find the answers but want decision now' (W3007)

Professional development was also limited by the reduction in in-person learning experiences.

'Loss of new job role opportunities' (JD2107).

With many forced to WFH, increased staff turnover (especially staff being afraid to be in the hospital), stalled recruitment, and curtailed development opportunities, achieving performance expectations became very challenging.

'Difficult time as a business… bound by KPIs and struggling to achieve because of the situation. Eventually guidance from NHSI to relax them' (M2206)

Autonomy. One of the most substantial losses mentioned was loss of freedom, specifically related to movement, social and family activities, and a loss of professional autonomy and choice in terms of being able to make decisions, follow-up patients, and work independently.

'Loss of freedom at work and at home, curtailed movement and choice' (W3006)

'I am a staff grade doctor, having worked very independently, but found that I was told what to do rather than make my own decisions' (W&C0107)

Work routine. The loss of work routine, including the work structure and the physical workplace was identified as a major loss. Staff missed the routine, process, structure and environment, which supported work planning, communication with colleagues, and work efficiency.

'Missing structure to the day and tea break times have gone out of the window' (AHP0306)

Communication. Communication was described as hampered by shifting face-to-face meetings to predominantly virtual communication, often with unreliable online connectivity. Technology and personal protective equipment (PPE) created additional communication barriers for colleagues and patients, also hindering rapport with patients. Echoing concerns about the loss of contact at work, staff felt that the technology could not replicate face-to-face communication, due to the lack of non-verbal clues, emotional intelligence, and social support brought by face-to-face communication.

'I miss the support that face-to-face team meetings bring - the ability to have a more relaxed atmosphere that supports everyone being involved. MT [Multidisciplinary Team meetings] is much more formal and often dominated by a few voices with the lack of ability to check out the 'feeling' in the room as to what's been said' (W&C0107)

'Wearing PPE disguises my personality and who I am, it's a barrier' (AHP0306)

Some staff felt that WFH made it more difficult to complete work effectively or resolve issues efficiently due to not working face-to-face:

'Difficult to move things on when you're not physically in work, relying on phone calls and emails' (NHIS2506)

1.3. Emotional Impact

Morale. Staff experienced guilt for not being able to contribute, not being front-line, being physically unavailable, or having to rely on colleagues (for those isolating or WFH). Some felt apprehensive about returning to work and found the re-adjustment difficult, sketching a difficult emotional journey or losing confidence in their work.

'Despite working full time from home I feel tremendously guilty that I'm not there and having to shield. The guilt is the worst I think' (Medicine Senior Leadership 0906)

'I was keen to get back to work but felt anxious when coming back into the hospital' (E0807)

Emotional strain. The pandemic put a strain on staff's mental health while witnessing colleagues being severely ill, shielding, or dealing with overwhelming and unprecedented demands. They worried about transmitting the Covid-19 virus and endangering their families' or patients' lives. They felt mentally drained, exhausted, and anxious, with a lack of 'headspace' and time to reflect.

'When is it going to end and how bad is it going to get? I've lost my wellbeing a bit' (CNS0906)

'I know I am putting my own family at risk by coming to work' (MSL0906)

'*Worry everywhere, constant, always thinking about it all the time' (RTL1106)*

Work-life imbalance. Many mentioned blurred boundaries between professional and personal lives with WFH and a lack of workspace at home. They felt hard to switch off, unwind, or recover from work or between cases.

'Boundaries of professional and personal life when WFH - start work when would normally start the commute, don't break for lunch, keep working when should have finished' (F0907)

'Redeployment to a different area was tough and difficult to fit new working pattern around home commitments. Hard to switch off from that and go back to usual job' (E0807)

2. Gains

In the face of significant challenges and losses, many employees recognised gains made, and positive organizational changes also emerged. Participants identified these gains as relating to themselves, their teams, and departments. Their personal gains also represented positive changes at the organizational level.

2.1. Development Opportunities

The advantages of inter-departmental collaboration and going beyond one's current role allowed staff to develop in different areas, for example, better understanding of policies and procedure, increasing awareness of colleagues' work and services, building new skills, and utilising opportunities for continuing professional development. This enabled them to better understand the complexity of the Trust, appreciate how different teams contributed to the services, and learn from one another. The organization in turn benefited from staff learning and was better equipped for future crises.

'*Greater appreciation and understanding of colleagues, their services and the operational complexity involved' (MWL2805)*

'Gaining lots of experience professionally and opportunity to step out of current roles into different roles' (NWL2105)

2.2. Other Gains

Time for non-work activities. Many found that they had more time to see friends, bond with their children, or spend time with their partners. They were able to maintain better work-life balance, childcare, and appreciation of their families. Not commuting enabled some to have more time for themselves, exercise more, or take time to recover from work. This benefited flexible working, time management, and productivity.

'More time at home and a better work life balance as a result of changed shifts' (MWL2805)

'Getting up to date with back logs of work due to WFH being more effective' (WFH0107)

'Been out walking and biking. Feeling that everything is going in the right direction' (AHP0306)

Environmental impact. Positive impacts on the environment were a gain. Staff who could WFH or use the eco-friendly bus provided for them reported that they travelled less, which reduced fuel and parking costs. Finding parking at work was easier. Using technology also reduced the need and cost of printing. These changes reduced the Trust's carbon footprint.

'Continue to run the bus service as it's decreasing the carbon footprint we cause getting to work and back' (WFH 1606)

'MS teams meant connecting with Newark was much easier, reduced unwanted journeys and more productive' (S0806)

'Haven't printed anything out on paper for weeks' (F0907)

2.3. Work-related Gains and Changes (overlapping sub-theme: Gains and Changes)

Flexible ways of working. Many employees welcomed the new and flexible ways of working, particularly WFH, implemented in response to the challenges. Enabled by technology, the pandemic prompted the establishment of remote assessments, consultations, and virtual clinics (telephone or video consultations), especially with vulnerable groups. Although prompted

by necessity, it was noted that virtual clinics were easy to set up, reduced missed appointment rates, and increased efficiency, which were viewed positively by patients.

'Brilliant opportunity for Outpatients and wouldn't have been able to do this without a pandemic happening. Video consultations are working. Changing consultant mindsets' (NWL2105)

'Able to review from afar and make valid escalation decisions, reflected in outcome data; outputs of people at home probably higher in lots of instances' (MM1906)

Staff noted that the urgency to provide alternative working arrangements helped to expedite the acceptance of new ways of working including remote working with the support of the senior management.

'Trusting people to WFH, and realising that it makes some people more energised, productive and connected to their family' (SLT2906)

'Changes we've been pushing for over a long time have happened overnight – virtual clinics, people who wouldn't consider it before are now engaging with them' (MM1906)

Responsiveness. The highly proactive response was specifically noted by all staff to have benefited the organization, which led to greater flexibility to adjust to uncertain and unprecedented situations, facilitating faster decision-making and task completion, speedy changes to clinic set-up, and more effective planning. Examples included rapidly establishing a 24-hour service support and Covid-ward, delivering virtual training, and speedy delivery of IT equipment to enable staff to WFH and perform virtual clinics.

'Setting up 24hr working for X [on site coffee shop franchise] in a week, everyone pulled together to make it happen, working nights etc' (M2206)

'Turning 4th floor into a Covid ward very quickly at a rapid pace was a great achievement' (NWL2105)

Proactivity was invaluable. Many took the initiative to perform new roles and relieve the team from pressures, especially while some colleagues were shielding. Such flexibility was inevitable with changing job plans, rolling rotas, longer shifts and weekend shifts, as well as WFH. Reduced hierarchy in decision-making, planning, and work processes was also essential for building responsiveness, better adjustment and efficiency of the organization.

'Really noticeable agile response to the challenges presented, with rapid change cycles becoming the norm and teams or wider groups quickly settling into the pace of governance' (NWL2105)

'Red tape gone instantly, there's a togetherness and we have come out of the dark age of the typewriter' (AHP0306)

Inter-departmental collaboration. Improved collaboration among teams, divisions and departments was both a major gain and an organizational change. Different teams worked in a unified way to respond to the rapid changes. By removing silos among clinical and non-clinical teams and building inclusivity, departments were united in their shared purpose. Inter-departmental collaboration was especially welcomed by non-clinical teams, and interactions and communication with other teams improved substantially as a result.

'All teams have worked together with the trust to keep the hospital flowing' (M2206)

'All playing different instruments at work, you might be playing out of tune but people can help you get back into tune and people are starting to play together' (AHP0306)

Consequently, some staff became better aware of the different services in the Trust and their roles. In turn, better understanding of different teams was perceived as higher appreciation and recognition for the work they delivered.

'Learned more about how a hospital works in last 8 weeks than last 8 years!' (SLT2906)

'Some staff in the hospital have worked in silos and not wanted to share resources however relationships have formed from this also' (AHP0306)

'Services has risen in visibility and feel we have been listened to' (W&C0107)

Intra-departmental teamwork. Enhanced teamwork provided the unity that was needed to deal with the unprecedented challenges. A positive team spirit was recognised as essential for bringing everyone together, supporting each other, resolving problems, and overcoming complex demands. Staff faced challenges and responded rapidly by sharing the workload and taking initiative as a team. More cohesive teams formed with every team member demonstrating high work ethic. Regular updates supported team communication, whilst managers and senior management demonstrated encouragement and inclusivity. Staff felt better connected, included and engaged.

'Increased sense of teamwork - care and consideration for each other' (MSL0906)

'Amount of engagement, everyone has risen to the challenge, picked up shifts, supported one another' (RTL1106)

Patient care. Other gains were identified in the gestures that staff offered in patient care. Some assisted by relaying messages from patients to their families and vice versa, comforting patients, expressing support through kindness, while others focused on getting patients home as early as possible to keep them safe.

"Able to support patients especially those who couldn't see relatives" (C0907)

'LOS and discharge - none of the funding arguments, hospitals are bad for you if you're not ill, everyone was suddenly focus on getting people home - hospital, patient, family, GP etc' (MM1906)

2.4. Technology (overlapping sub-theme: Gains and Changes)

Technological solutions, such as Microsoft Teams (MS Teams), made it possible for staff to connect with colleagues, hold virtual meetings, work remotely, deliver and receive training and professional development. It was seen as important for enhancing communication. This reduced the effect of physical boundaries by bringing together staff from different sites and

reducing the need for physical presence on site. Virtual working and online communication are now a norm fully embraced by staff who feel better connected at work and enable them to provide better patient care.

'IT had a positive impact on patients, can keep in contact with patients whilst shielding' (AN2406)

'Reacted quickly to support staff to deliver virtual training packages and it's resulted in a reduction in time for the nurse induction' (NHISSM1407)

'Opportunity now to be part of the Team brief through MS Teams is good and enabled a better understanding of the trust and who people are' (CNS0906)

2.5. Resilience (overlapping sub-theme: Gains and Changes)

Shared Purpose. Staff talked about 'pulling together', 'can-do', 'get it done', and 'come together' while coping with demanding situations. They were proud to see working together towards a unified purpose as the new norm.

'*Unified purpose - all pointing in the same direction, common agenda, making rapid change even when uncomfortable' (MSL0906)*

'Really noticeable agile response to the challenges presented, with rapid change cycles becoming the norm and teams or wider groups quickly settling into the pace of governance' (NWL2105)

Adaptability. The ability to adapt to change and respond to challenges also manifested clearly. With a different mindset, staff needed to be flexible, embrace new ideas, find new ways of working, and develop plans and strategies quickly. Having neither time nor resources to waste, they needed to prioritise tasks and be better organized, mentally stronger, more resilient, and more decisive.

'*We have shown the community that we can adapt to the needs of covid' (CNS0906)*

'I feel that I am able to draw better boundaries between clinical work and the large amount of governance work as part of my job and I feel I can translate these lessons when I start on site again' (W&C0107)

Perspective. Perspective-taking also emerged as important when staff were dealing with challenging situations related to the pandemic. This included an enhanced sense of appreciation, gratefulness for what one has in life, higher compassion towards others, and recognizing what is important in life.

'*On a positive - more time with family, new ways of working, realisation that one doesn't need a lot in life to survive and be happy as life has been going at a different pace to pre covid times' (SDLE2406)*

'Gained perspective on what's important and it's good to stop and think about what's important' (AHP0306)

Staff morale. A sense of pride and achievement were expressed regarding what staff did to overcome challenges. They continued to work tirelessly with colleagues on-site or WFH with everyone playing a key part in response to the pandemic. Positivity, adaptability, creativity, and innovation were observed, while staff took on new responsibilities, worked overtime, shared ideas and solved problems together.

"Sense of how people have pulled through a difficult time" (CI0907)

'The way we have worked in Covid is what we will take forward into winter' (C0907)

'I think we have realised how much we can do and change quickly when it's really needed' (W&C0107)

3. Embedding Changes

3.1. Priorities for sustaining perceived gains

Flexible ways of working. Participants expressed the need for flexible working arrangements to be continued in the future, including WFH or hybrid working. WFH supported

productivity, reduced commuting time and carbon footprint, and improved work-life balance. Virtual clinics reduced pressure on teams by enabling remote diagnosis and patient care. The number of patients visiting hospital, non-attendance rates, and the risk of virus transmission also decreased.

'People appreciated WFH but many said that they didn't want to do this full time that a mix between home and work would be good' (WFH 0107)

'Fear of loss of control over my patient management was definitely an issue for me at the start!! But I have worked out how to make the process of clinics from home and admin etc. to be safe and successful. It has turned round to actually showing how things can work efficiently with good communication, plans and collaboration with colleagues even from afar' (W&C0107)

Agile leadership and adaptable strategy. Participants raised the need for strategic leadership and stressed the need for openness and 'out-of-the-box' thinking in decision-making. They highlighted the need to use the experience from the first wave of the pandemic to better prepare for subsequent waves by: building capacity and developing the services (e.g. planning training and maintaining productivity), integrating the health and social care systems, retaining social distancing and related measures, and effectively sharing updates and information across departments. They noted that preparedness, consistency, and clarity in communication from the Trust and senior management were important for minimizing confusion or anxiety.

'A second wave is expected in the winter months, unless it dies out like the SARS virus. It's, therefore, even more important to get much work done now' (Surgery DLE 2406)

'At times we have been given good directives from the Trust but some have been really confusing and some have contradicted each other' (AHP0306)

Investment in technology. Staff mentioned the need to invest in technology and related training to optimize its use in their work. Specifically, access to the digital imaging system and

electronic medical records were needed for effective decision-making, diagnosis, and treatment. They noted the importance of reconsidering the delivery of IT support so as not to overburden the service.

'Wards need access to more computers and laptops so that clinical staff have more access to IT for training and virtual sessions' (WFH1606)

'Sometimes staff in the organization don't understand NHIS pressures when wanting problems fixed or kit providing' (NHIS2506)

Support for staff. The need for increasing support for staff, both as standard and during critical periods, emerged as a key lesson, including for staff who worked from home, long hours, out of hours and weekends, as well as support for those redeployed into different roles. Participants identified that to achieve this, it was crucial to give managers time and resources to identify and support staff who were struggling. Many hoped that the support they were receiving from the Trust during this time could be continued.

'WFH can be really tough, can underestimate the toll it takes, make sure we give colleagues the support they need' (MM1906)

'Keep different ways of working for matrons (longer days, weekends) had good feedback from wards, support for them at weekends and out of hours' (MSL0906)

'Need to ensure that staff who are redeployed into a different role are prepped properly and offered support' (E0807)

3.2 Lessons to be Learned

Patient access and support. Participants were concerned about the risks of people not accessing other services in the hospital, resulting in excess deaths, readmissions, missing vital screening and care, and ineffective pain management by patients themselves. The restriction on visitors had negative impacts on patient care and patient support. In-patients lost emotional

support from family and friends. Outpatients lost valuable face-to-face support from staff. Vulnerable outpatients who had to attend appointments alone missed critical treatment and care.

'Readmission rate is 30%, discharge processes might not be as efficient as we think, need to be sure we aren't putting people at risk' (MM1906)

'Patients are not accessing healthcare when they should particularly via ED. People are scared to come in. They aren't getting key therapy and they are suffering' (MWL2805)

'No visitors policy may mean that vulnerable patients are attending hospital appts without an escort which can be frightening for them and may mean they miss vital info' (E0807)

Maintaining quality of communication. Due to the wide use of MS Teams, staff feared losing the value of face-to-face communication and experiencing online meeting fatigue. They explained that virtual meetings could not capture the social dynamics, room atmosphere, and people's reactions and involvement. Virtual communication could not replace spontaneous ad-hoc corridor conversations. They urged the Trust to re-evaluate the most effective use of communication channels to avoid exhaustion, confusion, repetition and resource waste.

'MS Teams makes it difficult to read the room and gauge people's reactions' (W3006)

'Staff could feel excluded on Microsoft Teams chats or meetings as you do not get the same involvement as you do in person' (NWL2105)

Fear of reverting back. Staff expressed concerns about the future, including the long-term impact of the pandemic, the pace of the de-escalation with high infection rates, rolling out the flu jab before winter, planning for subsequent pandemic waves. They emphasised that they ought not to forget the learnings from the first wave. They feared losing the positive revolutionary changes that they had experienced and that goodwill alone would not be enough to sustain the gains achieved after pressures on the hospital had been de-compressed.

'Fear that the 'old ways' will prevail' (SLT2906)

'Goodwill takes a while to grow but can erode very quickly. Need to work at continuing to grow it' (M2206)

'Not having concrete plans allows some flexibility which is good but we need to have some winter plans in place' (W&C0107)

Need for clear guidance. Some stressed that there was a lack of clear messages and guidance regarding the external procedure from national bodies. Sometimes, messages and information came fragmented from multiple teams, whereas safety measures were not followed consistently in the hospital. This indicated a need for a designated team for decision-making and communication. Some senior managers were concerned about not being able to provide reassurance and answers to staff as they also experienced this unprecedented situation themselves.

'It's hard to say to a team that it's not perfect but it's the best we can do at this time. Very challenging to deliver info and messages that are not clear or keep changing' (W&C0107)

'There were changes to external procedures which we weren't made aware of, felt more guidance should have come through from NHS England to ensure everyone knew of changes' (E0807)

A new normal. The uncertainty due to the unprecedented situation, not seeing an end to the pandemic, and unclear plans for moving forward, was a source of major concern for many employees. Participants voiced their loss of control, sense of normality, and direction.

'Doesn't feel real. I don't want this for the rest of my career' (WFH 1606)

'Sense of loss of the normal, I was re-deployed to [X] and it was a big ask with fear of the unknown. There was a lot to take on board with the new normal' (CNS0906)

'Where is the end goal, don't know what we're aiming for – uncertainty' (RTL1106)

Discussion

This in-depth exploratory study is the first to apply an organizational learning and organizational change perspective to understand the changes brought by the current pandemic. We focused explicitly on the perceived gains and losses in the change process, given the important impact of perceived benefit or harm on change reactions and consequences (Oreg *et al.*, 2011), to identify changes that can be solidified for long-term learning and sustainable organizational change post-pandemic. We achieved this using qualitative data from representatives of a Healthcare Trust's workforce across all departments, seniority levels, and job functions. The complex findings elucidate not only the negative changes and impacts of the pandemic on employees in a large healthcare organization, but also some of the positive changes and opportunities arising for organizational change.

The *losses* articulated by the participants included the loss of contact with colleagues and patients and also family and friends; impact on work practices, specifically efficiency and patient care, and changes in work routines; negative emotional impact; and the loss of normality in daily work and life. Research on the impact of the pandemic concurs with these losses both in the general workforce and in the healthcare sector, which has received the strongest hit. Working life and performance have been disturbed expansively and the workforce was called *en masse* to adjust to extreme demands whilst being required to deliver quality patient care.

The discussions on *gains* and *changes* highlighted both unique and overlapping themes. The *gains* identified in this large UK study were similar to but also build upon those identified in a national study of pediatric care across the United States (Penwill *et al.*, 2021), including work-related gains (e.g. more flexible ways of working, greater responsiveness, increased inter-departmental collaboration, stronger intra-departmental teamwork, and better patient care), more efficient use of technology, and resilience (new norms, adaptability, perspective, and staff morale), development opportunities, and other gains (more time for non-work and environmental

impact). All these gaisn described steep and accelerated change that would have taken much longer to realize in pre-pandemic times. They also correspond well to the factors that Herttuala *et al.*'s (2020) review identified as supporting the well-being of managers in healthcare (although these were grouped differently, into individual, social, line manager, work, and organizational factors).

The first three *gains* were also viewed by the respondents as unique opportunities to re-build the organization post-pandemic, on the implicit understanding that these gains should be sustained in the long-term. Importantly, participants felt that the gains they experienced were important to their teams and departments. Their personal gains represented positive changes at the team and organizational levels, highlighting the value of collegiality in high intensity sectors such as healthcare and emphasizing the *shared* nature of these experiences (Morgeson and Hofmann, 1999), which can act as essential foundations for ongoing organizational learning and sustained change. Indeed, shared experiences can be stronger predictors of work outcomes than individual or personal experiences (Karanika-Murray *et al.*, 2017). In this case, these shared experiences can be enlisted to solidify targeted organizational change.

In terms of *changes*, two forces were identified that can be critical to sustaining and embedding the gains made. First, investing time and effort to further understand key priorities for sustained positive change and adaptation within health service organizations post-pandemic. For example, through retaining the new flexible ways of working, promoting agile leadership and adaptable strategy, further investing in technology, and providing needed and tailored support to staff experiencing changes in their work. Second, ensuring that the key lessons learned are truly embedded in working life and methods in the future. For example, providing patient access to services, maintaining good communication during the return to face-to-face work, tackling uncertainty and solidifying learnings, and maintaining clear guidance.

The power of these findings is that they derived from a large representative group of participants who themselves identified the need for sustained learning, for integrating organizational change back into their post-pandemic working life, and for opportunities to build better working conditions and a better workplace out of the pandemic. As the 'experts' in their work, they were best placed to pinpoint the priorities for addressing their needs and improving their working lives (Cumberland *et al.*, 2022).

Implications for theory and research

Identifying what was lost that must be regained, and what has been gained that must be retained and embedded, is essential if organizations are to engage successfully in a conscious 'refreezing' required to optimise working practices for our post-pandemic reality. This involves deliberate change management efforts to retain gains and resist the tendency to simply revert 'back to normal'.

Yet, these change management efforts, by way of being problem-orientated rather than theory-orientated, are best informed rather than driven by theoretical models, which can in turn be enriched with practice insights. A case in point, although Lewin's concept of 'refreezing' has been criticised by some as overly static (Kanter, 1992) and inappropriate in today's complex world that requires continuous change and adaptation (Child, 2005), Lewin argued for the importance of dynamism and referred to periods of relative stability or 'quasi-stationary equilibria' (Lewin, 1951), hinting at a more realist approach. Indeed, the findings from this study emphasise the value of refreezing in the sense of achieving 'quasi-stationary equilibria', to address participants' strong sense of 'loss of the normal' and craving for a 'new normal' to provide clarity, stability and direction. Perceived gains and losses inform the important construct of decisional balance, which has been identified as essential in supporting individuals to transition successfully through a change process (Prochaska & DiClemente, 1982; Whysall, Haslam & Haslam, 2006, 2007). However, whilst 'refreezing' provides stability and establishes

a 'new normal' for employees by embedding new norms and ways of working, organizations must manage the inevitable tensions to ensure that this is not at the expense of future change agility and adaptation.

Thus, one of the major conceptual implications of the study is an understanding of how refreezing can be achieved to an equilibrium that is informed by the learnings of the organisation and its members, thus enriching conceptual insights through organisational reality. In practice, new norms can be established by focusing on members' attitudes and expectations, senior leaders' practices, accountability, appropriate supportive policies and practices, and a reworked organisational structure if necessary. As such, Lewin's model can form strategic resources in healthcare management (Shirley, 2013). An essential part of managing change is facilitating change in individuals' attitudes that form the foundations of expected behaviours, with support from manager (Fransson & Lydell, 2022) and through training of organisational members. In our study organization, the practice of refreezing change, through awareness-raising, training, review of practices, and senior management commitment, has permeated all its actions post-pandemic.

Furthermore, the experienced and proposed changes that emerged from the focus group discussions can help to externalize new tacit knowledge into explicit knowledge and planned change (Nonaka & Konno, 1998) and in this way further solidify and sustain planned organizational learning and change. Importantly, since opportunities can arise from disasters, it can often take a 'jolting' event such as global pandemic to prompt double-loop learning (Argyris & Schön, 1996). Perhaps not unexpectedly, a number of the themes identified are linked to healthcare NHS norms and values, which have been challenged as a result of the pandemic. The important question for healthcare organizations now is how to change these in order to refreeze to an enhanced desired state.

As a starting point to any successful change, understanding the extent to which change recipients perceive changes as gains or losses is essential for optimising organizational learning

and change as a response to sudden disruptive change, allowing us to develop efficient, effective, and resilient organizations *by design*. As such, the learnings from this study can be used purposefully to build more resilient and sustainable organizations. To this effect, Guglielmi *et al.* (2019) talk about the value of gain cycles in healthcare workers. Using longitudinal qualitative data, they observed reciprocal causal relationships between personal and job resources, which impacted work engagement, and which in turn impacted resources. It is possible to design such a gain cycle to bolster organizational learning, by investing in personal and job resources.

Organizational resilience was emphasised as an essential goal for healthcare organizations moving forward. Altough resilience is a building block of sustainable change, it has not been adequately considered in the broader field of organizational change theory. Yet, addressing the dysfunction imposed by the pandemic requires a focus on resilience. In Bonanno's (2004) words, "dysfunction cannot be fully understood without a deeper understanding of health and resilience" (p.26). At the organizational level, organizational resilience can help to explain "how and why organizations survive, adapt, and thrive in dynamic environments which are uncertain and complex" (Fasey *et al.*, 2021, p.1; Duchek, 2020). However, the practicalities of organizational resilience can often be elusive in highly idiosyncratic organizational contexts. Drawing on their lived organizational experiences, our study participants clearly elucidated the factors that support organizational resilience and can infrom the next stage of organisational change theory.

Finally, this study not only supplements prior studies by focusing on healthcare staff perceptions in terms of perceived losses and gains, which are key determinants of change reactions and consequences (Oreg *et al.*, 2011) but can also allow for international comparisons, which would prove invaluable for further boosting context-informed knowledge in the theory and practice of change mangement. The essential and starting question would be 'what how do

these findings and learnings on change apply to different healthcare systems?' and 'how do the broader learnings on change apply to differen occupational sectors?'. Interestingly, it emerged that in some instances, the same theme described both losses and gains, but with different manifestations for different individuals. For example, for some, the changes reduced new role opportunities, whereas for others, developmental opportunities were enhanced by the need to take on new responsibilities or work with other teams. Equally, the shift to widespread remote working triggered losses in terms of human contact and the resulting sense of isolation but was also associated with gains in terms of greater flexibility, focus and for some greater inclusion for others. For practice, this emphasizes the importance of sensemaking to help individuals make sense of change (Weick, 1995), which has been found to be effective in healthcare settings (e.g., Patrício *et al.*, 2019). Further research should examine the extent to which differences in experiences are underpinned by individual differences and preferences, compared to how the changes are introduced and managed, or indeed, an interaction between the two. Ultimately, this insight can guide individuals, managers, and organizations to maximize gains and minimize losses most effectively.

Limitations

It is important that the interpretation of this work are made in light of its limitations. First, the focus groups were recorded through note-taking rather than as audio, which may have limited the richness of the discussions captured and also possibly introduced a degree of recall bias. However, the facilitators took detailed notes that they then compared with each other for ambiguities and completeness. Second, this work was carried out in one large healthcare organization, potentially limiting the generalizability of the findings due to possible differences in resources and management between healthcare organizations. However, the published and grey literatures document the impact on the pandemic on healthcare staff and concur with our

findings, which further provided in-depth analysis of these experiences with a view on organizational learning.

Implications for Practice

The findings from this study can be used in a number of ways. First, they can enable us to synthesize evidence from existing research to support healthcare system preparedness (Rathnayake *et al.*, 2021). Second, they can support healthcare organizations to address some of the multiple challenges faced to maintain the quality and efficiency of care provided. Specifically, they can be used to inform management approaches, strategies, and interventions designed to improve organizational resilience (Petersen *et al.*, 2021). Third, they offer potential to support organizational learning and change capability, or "the conditions that facilitate learning, namely, experimentation, proactive behaviour, interaction with the external environment, dialogue and participative decision-making" (Chiva *et al.*, 2007, p.3; Salas-Vallina *et al.*, 2021). Finally, they can add to the efforts of healthcare organizations towards their sustainability in response to the United Nations' Sustainable Development Goals (Punnakitikashem and Hallinger, 2020), specifically goals 3: Good health and well-being, 8: Decent work and economic growth, and 11: Sustainable cities and communities.

The immediate practical implications for the Trust have been to inform and support plans to promote continuous improvement. For example, the Trust has initiated several changes to its infrastructure, is actively encouraging adherence and promotion of its agreed values, has a clear and demonstrable focus on people, and actively invests in capacity-building, with greater inclusivity in training and development. Recently, it is exploring how to further support organizational development, with the aim to embed these learnings into work practices and support continuous improvement, specifically "managing change, colleague engagement, a people-centered approach, CARE values, establishing a psychologically safe and inclusive environment" (SFHCT, personal communication). Other practical implications include

maintaining and enhancing the CPD offer for groups of staff who have shown initiative and capacity, and in this way retaining initiative as part of the way things work in this organization; all work-related gains, which should continue to sustain the new ways of working and gains that these have offered. Lastly, the gift of resilience should be protected. Resilience, one of the most important gains, is also a strength that can be difficult to engineer and design into an organization. But it would be an imperative to preserve the 'mechanisms' through which resilience can be embedded in the organization: shared purpose, adaptability, perspective, and staff morale.

During the pandemic, it was remarked that whilst we were all facing the same storm, we were not all in the same boat. Whilst the metaphorical boat in which each country, organization and, even household, had to weather the storm was, and will continue to be, determined to partly by objective factors such as economic resources, this study highlights differences in subjective perceptions of change. The same themes were perceived by some as losses and others as gains. Given the known impact of perceived losses and gains on change reactions and consequences (Oreg *et al.*, 2011), this highlights the role of processes such as sensemaking (Weick, 1995) in supporting individuals to minimize perceived losses, or explore how those same perceived losses could be reframed as, or also entail, potential gains.

Future research can expand on this work to provide the evidence, through independent evaluation studies, on how ongoing organizational change can be implemented, starting with employee (and patient) feedback, and working across all levels of the organization to build sustainable resilience. A second qualitative study should explore how these experiences can be embedded into normal working practices to leverage learnings from the pandemic, and how strategy and practices can be adapted according to the priorities for sustained learning identified. Finally, further understanding of how the elements of organizational culture that can support or inhibit change (e.g. factors in the broader social and organizational context such as values, or

elements of leadership such as senior management attitudes and priorities) will enhance understanding of *how* what we have learned can be embedded, sustained, and maintained in the long term.

Conclusions

In a world that is still involved with the transition to a post-pandemic status quo, our findings highlight how organisational learning can be articulated and boost its potential to inform sutained change. Our findings are relevant to healthcare organisations who had to adjust to the impact of the sudden change on their services. The impact of the pandemic on healthcare services remains a threat to an already high standard of organizational development aimed for and achieved by the Trust. By being practice-informed and guided by the organisation's reality, our findings can also help us to make sense of current knowledge of organizational change into practice in other contexts. Resilience and attitude change as the building blocks of refreezing change can be integrated into organizational learning with the aim to support sustained change. Thus, this study highlights the reciprocal links between organizational learning from sudden disruptive change and change management to benefit from the opportunity to encourage change in the derired direction and establish sustained change. We hope that these findings will provide impetus for additional research on organizational learning and change.

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Table 1. Number of focus group participants in each of the work units. Where the group is smaller than 10 individuals, the number of participants is not disclosed.

Work units/groups	**N focus group participants**
Admin Network (AN)	17
AHP Business (AHP)	17
Chaplaincy (C)	<10
Clinical Illustration (CI)	<10
Clinical Nurse Specialists (CNS)	27
Estates (E)	<10
Finance (F)	38
Junior Doctors (JD)	<10
Matrons/Ward leaders (MWL)	65
Medical Managers (MM)	30
Medicine Senior Leadership (MSL)	27
Medirest (M)	<10
NHIS (NHIS)	<10
NHIS Senior Managers (NIHSSM)	13
Nurse/Ward leaders (NWL)	98
Radiology Team Leaders (RTL)	12
Safeguarding (S)	12
Senior Leadership Team (SLT)	34
Staff Working from Home (WFH)	23
Surgery DLE (SDLE)	43
Women and Children (W&C)	17
Workforce (W)	12

Figure 1. The themes and subthemes yielded by the data