Swedish Agency for Work Environment Expertise

The work environment for managers during the Covid-19 pandemic

Report 2023:4

The work environment for managers during the Covid-19 pandemic
Part of the Government assignment on the effects of the Covid-19 pandemic on work environments in Sweden (A2021/02355, A2021/02331 (partial))
Report 2023:4
ISBN 978-91-89747-37-1
Published in 2023

The Swedish Agency for Work Environment Expertise
Telephone: +46 026 14 84 00, Email: info@mynak.se
www. sawee.se

The work environment for managers during the Covid-19 pandemic

Report 2023:4

Preface

The appropriation directions presented to the Swedish Agency for Work Environment Expertise in 2022 tasked the Agency with analysing the short and long-term consequences of the Covid-19 pandemic on work environments in Sweden. In order to complete this major government assignment, the agency conducted five projects, each focusing on a professional group or groups particularly affected by the pandemic. These projects were also used to highlight general changes to the work environment, such as remote work and working in hybrid organisations. The results of these studies provide insight into how society can address similar crises and social disruptions in the future. The report, the Covid-19 pandemic on work environments in Sweden presents a summary of the results from all of the projects included in the assignment. (A2021/02355, A2021/02331 (partial)).

The following report describes how the Covid-19 pandemic affected the work environments of managers and those with leadership roles. The Covid-19 pandemic generated many changes in the approach to the workplace and organising tasks. Managers had no choice but to adapt their leadership to the new conditions that were generated at their organisations as a result of full or partial remote work, or employees continuing to work remotely. Adaptations included greater use of digital tools, developing and using new communication channels, and tackling the increased complexity of leadership tasks. The results of this report show how managers' conditions deteriorated during the pandemic, and more demands were placed on leadership. The results also show how managers had a more operational approach – at the expense of strategic work.

Docent Daniel Lundqvist, Dr Cathrine Reineholm and Associate Professor Andreas Wallo, all from Linköping University, conducted both qualitative and quantitative studies, the results of which are presented in this report. The authors selected the theoretical and methodological starting points and are responsible for the results and conclusions presented in this report.

Professor Emerita Annika Härenstam from the University of Gothenburg has reviewed the quality of the report on behalf of the Agency. Docent Robert Ljung was the process leader at the Swedish Agency for Work Environment Expertise. Communications Officer Sverre Lundqvist has overseen the communications efforts in the project.

I wish to extend my heartfelt thanks to the external subject experts, the quality reviewer and staff at the Agency who contributed to this report.

Gävle, March 2023

Nader Ahmadi, Director-General

The report was written by:

Daniel Lundqvist, Docent
Linköping University

Cathrine Reineholm, Dr
Linköping University

Andreas Wallo, Associate Professor
Linköping University

Summary

Introduction and purpose

This report presents the results of a project carried out within the framework of the government's commission to the Swedish Agency for Work Environment Expertise to map and analyze the short- and long-term consequences of the Covid-19 pandemic for the work environment in Sweden (A2021/02355, A2021/02331 (delvis)).

During the Covid-19 pandemic, Sweden's government introduced several restrictions and recommendations to prevent the spread of infection. Unlike many other countries, Sweden placed extensive responsibility on society and its inhabitants to maintain physical distance to prevent infection. It is the responsibility of managers to achieve the goals of the organization, but also to work for a good working environment. What this meant for the managers' own work situation during the Covid-19 pandemic is, however, relatively unexplored.

Against this background, the purpose of the project is to contribute knowledge about managers' work situation during the Covid-19 pandemic in Sweden. More specifically, the report focuses on describing how managers' work situation has changed during the pandemic within the following areas:

- work tasks
- work environment management
- conditions and their own work environment
- leadership and relationship with employees.

Methods

In this report, the work situation of managers during the pandemic is examined using both interviews and questionnaires. A total of 40 managers have been interviewed – in addition, questionnaires have been answered by 1002 managers in various businesses and industries in Sweden (private and public sector, in manufacturing, trade, care and social services, etc.). The selection criteria were: 1) the person must be a manager and 2) have personnel and budget responsibility. The interview guide and questionnaire have been constructed by the authors of the report based on previous research

on managers' work and conditions, managers' roles and leadership and work environment management. Data collection took place during July and August 2022 via a web panel.

The focus of the interviews has been on if and how the managers' work, conditions and leadership have changed during the Covid-19 pandemic. In the questionnaires, the focus has instead been on the occurrence of different work tasks, conditions, and leadership before, during and after the pandemic (today). The managers thus had to retrospectively rate their experience at three different time points. Taken together, the data provides mutually complementary situation depictions and can provide an expanded understanding of managers' work situation during the Covid-19 pandemic.

Results and conclusion

One conclusion that can be drawn from the results of report is that managers' overall work situation and work content have not radically changed during the Covid-19 pandemic, but have largely remained the same as before. However, the results show that the ways in which managerial work is practiced have changed. The work has been performed remotely to a greater extent than before. Operational work has often been emphasized during the pandemic and at the expense of longerterm strategic work. One reason for this seems to be that managers were forced to spend more time on making sure that ongoing organizational activities was maintained. Work environment management has been reprioritized during the pandemic depending on the type of business and where the work was carried out.

The conditions under which the managers work seem to be generally good and seem to have been only minimally worsened by the pandemic. Even their leadership does not seem to have changed, although they felt that the demands on their leadership increased. However, the results show that there are some differences depending on where the work has been carried out, in which industry, how long managerial experience the managers have, how many directly reporting employees they have, and whether the manager is male or female.

The differences that were found regarding forms of work mainly concerned managers' work tasks. Managers with more onsite business had prioritized maintaining ongoing activity, made more quick decisions and handled more conflicts compared to managers who worked remotely. Managers with more onsite business have also had more routines for work environment management and worked more with the physical work environment than remote managers. Managers who worked onsite also had better access to information, had more insight into employees' tasks and worked less to keep teams and workgroups together than remote managers. At the same time,

managers' conditions for acting as managers seem to have deteriorated during the pandemic and the demands on their leadership have increased – regardless of where the work was conducted.

Regarding industry, the results mainly showed that managers in the hotel industry, health care and education respectively estimated their conditions as worse than those reported in other industries. Managers in the hotel industry, health care, and education felt that higher demands were placed on their leadership, and also reported less focus on development issues during the pandemic than managers in other industries.

Managers with more than ten directly reporting employees worked more, worked longer than expected and experienced higher demands on their leadership than managers with a smaller number of employees. However, the conditions overall did not differ.

Further, the differences that existed between men and women mainly concerned work tasks, where women's tasks included more administration, communication, and work adaptation than men's tasks, while men worked more with organizational development than women did. Women had less balance between work and private life compared to men. Furthermore, women also experienced higher demands on their leadership, as well as less time to carry out their work in comparison to what men experienced. The results also showed that those with longer managerial experience felt they had better conditions and less demands on their leadership, but that they also worked longer hours. However, there were few differences in overall work tasks by length of experience.

A consistent pattern is that managers in certain industries such as health care, education, and the hotel industry – that is, industries that are often dominated by women, often have large groups of employees, and mainly conducted their activities onsite during the pandemic – have had a more strained work situation.

Challenges and prospects for the future

The report also highlights five challenges and future prospects for dealing with unforeseen events. The first is about the need to create common guidelines and policies in the workplace to meet the needs of both employees and the organization, for example regarding remote work. The second is about creating and maintaining a buffer of resources for unforeseen events, for example in the form of budgetary allocations and extra material. The third is about increasing crisis management preparedness in organizations and regularly reviewing crisis management plans, for example in terms of areas of responsibility and expectations for action. The fourth concerns the realization

that the employees are the organization's most important resource and that as a manager it is important to address both work performance and wellbeing. The fifth concerns the importance of the manager having good conditions and a good environment for continued development.

Future research

During the work on this report, several knowledge gaps and needs for continued research have been identified. There is a need for more research that investigates how the opportunities for competence development and learning are handled in remote work, as well as what mechanisms have caused development work and changeoriented initiatives to take a back seat during the pandemic, in favor of more performance- and operationoriented activities. Research is also needed on how the employees' work situation and employee relations, as well as managers' and employees' wellbeing and health, have been affected during the pandemic. Finally, more research is needed that addresses the longterm consequences of the pandemic and how the experiences gained during the pandemic affect future working life.

Contents

Preface 5

Summary 7

1. Introduction 15

Purpose 16

Outline of the report 16

2. Managers' tasks and work situations 17

Managers' tasks and conditions 17

Work environment management 18

Work environment management 18

Leadership in times of crisis 19

3. Method 21

4. Results 22

Managers' tasks during the pandemic 22

Tasks based on the interview study 22

Tasks based on the survey study 28

Work environment management 32

Work environment management based on the interview study 32

Work environment management based on the survey study 35

Conditions for performing their tasks 36

Leadership based on the interview study 36

Leadership based on the survey study 38

Leadership and relationship with employees 40

Leadership based on the interview study 40

Leadership based on the survey study 43

Challenges, opportunities and looking ahead 45

Summary of the results 46

Managers' tasks 46

Work environment management 48

Conditions for the managerial role 48

Leadership and relationship with employees 50

5. Concluding reflections **51**
Overarching patterns 51
Form of work 51
Industry 51
Span of control 52
Gender 52
Managerial experience 52
Challenges and looking ahead 53
Common guidelines and policies 53
Resource buffer 53
Need for contingency planning 54
Employees as an important organisational resource 54
A positive environment for development 54
Data evaluation 54
Conclusions 56
Proposals for future research 56
6. References **58**
Appendix 1 – Method and approach **61**
Interview study 61
Survey 62
Appendix 2 – Interview guide **67**
Appendix 3 – Survey **69**

1. Introduction

This report presents the results of a project conducted as part of the Government assignment to the Swedish Agency for Work Environment Expertise, instructing the Agency to map and analyse the short and long-term consequences of the Covid-19 pandemic on the work environment in Sweden (A2021/02355, 2021-12-16).

On 2 February 2020, Covid-19 was classed as a disease dangerous to public health and society. To limit the spread of infection during the pandemic, the Swedish Government introduced a number of restrictions and recommendations. Unlike in many other countries, more responsibility was placed on society and its citizens to maintain social distancing as an infection control measure. Preschools and compulsory schools were kept open, whereas upper secondary schools and universities were encouraged to teach on distance. Shops, shopping centres and restaurants also stayed open throughout the pandemic, even though opening hours restrictions were introduced in March 2020, and the maximum number of customers, visitors and restaurant guests was limited. The Government also strongly recommended that those who could work from home do so. This became compulsory for employees at public authorities unless their work required their physical presence in the workplace (1). Between 2020 and 2021, the proportion of public authority employees who worked from home varied between 52 and 73 per cent. As for other areas of the public sector, such as municipalities and health and social care, the proportion working remotely varied between 11 and 36 per cent. In the private sector, the figure varied between 29 and 42 per cent (2). Thus, in contrast to other countries who introduced lockdowns and prevented workplaces from opening, Sweden saw many people working 'on site' (3, 4). On 1 April 2022, Covid-19 was no longer considered as being dangerous to public health and society, and national restrictions were lifted. Nevertheless, general recommendations and advice remain in place, such as taking the vaccine and staying home if symptomatic.

Managers are responsible for attaining the organisational goals that have been set. At the same time, regulations also stipulate that employers must act to create a positive work environment, that their employees do not face unhealthy workloads and that managers have enough knowledge to oversee this work (5). The Covid-19 pandemic generated several new challenges for managers, in terms of following both national and internal recommendations and guidelines, while simultaneously keeping their workplace running, taking care of their employees and managing the fear and concern that existed. There is relatively little exploration into how these areas of responsibility converged and affected managers' own work situations during the pandemic. In this report, work situation refers to both the managers' tasks and the conditions they had to be able to perform them.

Purpose

With the report's background in mind, this project aims to contribute knowledge about managers' work situations during the Covid-19 pandemic in Sweden. More specifically, the report focuses on describing how managers' work situations changed during the pandemic in terms of tasks and work environment management, the conditions they faced and their own work environment, leadership, and relationship with employees.

The report describes the work situation during the pandemic, and the results can also be used as a basis for discussion about the 'new' working life, where flexibility and working from home are expected to become more common, compared to before the pandemic. The report also points to a number of questions for discussion in the work to prepare for future crises or radical social changes.

Outline of the report

The report comprises six chapters. Chapter 1 presents the background in terms of the task that gave rise to the report, the report's purpose and questions. Chapter 2 describes previous relevant research into managers' work and work situation. Chapter 3 summarises the methods and approaches used for data collection and analysis. A more comprehensive method description is presented in Appendix 1. Chapter 4 presents and summarises the results of the studies conducted. Chapter 5 includes comprehensive reflections on the result. Chapter 6 presents the report's conclusions.

2. Managers' tasks and work situations

In this chapter, we present a brief summary of managers' tasks and work situation. We begin by describing the characteristics of managers' work and their conditions. The second half addresses how managers approached work environment management. Work environment management makes up only a fraction of their duties, however, this report places greater focus on the area, as work environment management was at the fore during the pandemic. Finally, we present managers' roles and leadership, and leadership during crises.

Managers' tasks and conditions

Managerial work has been studied since the 1950s, which has resulted in a good overview of the general characteristics of managers' everyday work situations (6–10). There are recurring empirical patterns, regardless of organisation or managerial level – managers often work under great time pressure, with long work days and sometimes evenings and weekends (11, 12). Managers' tasks also include overseeing crises and disruptions, as well as improvising solutions to problems (13, 14). Furthermore, there is a tendency for managers to prioritise performance-oriented activities over development-oriented, as these tasks can be evaluated using short-term follow-up indicators. In addition to these short-term follow-ups, managers tend to have heavy administrative workloads (15).

Regarding managers' work situations, previous research shows that managers have heavy workload and their schedules and tasks are fragmented, varied, and often complex (7, 16–18). This can be explained based on the responsibility managers often have both for the operations and their staff. At the same time, managerial positions often include expectations and requirements from several groups, such as subordinate staff, senior management, customers, politicians or boards (so called cross-pressure). First-line managers are often exposed to stressful work situations compared to senior management. This can be explained by the fact that managers who are lower in the hierarchy are closer to the daily operations (19). Hence, it is crucial that the role is as clear as possible with as few contradictions as possible (20–23). This means that managers' work tasks, the expectations with the role, and their responsibilities need to be clear, and the expectations, requirements and responsibilities must not contradict each other (conflicting roles).

Managerial roles are highly dependent on other professional roles (22, 24–26). Managers are prevented from completing their tasks when others do not work as they should, or do not share information needed. Studies have also shown that managers with many subordinates, i.e. a large span of control (27), often experience tougher requirements and an increased risk of stress and burnout, compared to managers with fewer employees (28, 29)

However, a manager who has had prominent roles over a longer period often has more knowledge and skills, both professional and leadership (30, 31).

The responsibilities managers have towards both organisation and employees can also result in managers taking on more tasks and working more and longer work days. This can impact both the manager themselves and their organisation, as well as the managers' work-life balance (32–34). Managerial roles are often seen as being isolated, and social support, feedback and attention are central (22, 25, 35, 36). In order to balance these problematic elements of managerial work, it is essential that managers have an environment for development that encourages learning and enables career progression (37).

Work environment management

Not only must managers lead their organisation, but they are also responsible for systematic work environment management. First-line managers are often delegated this work from higher up in the organisation. The fundamental activities are presented in the systematic work environment management provisions from the Swedish Work Environment Authority (AFS 2001:1). Systematic work environment management comprises all aspects of the work environment where tasks are to be systematic and planned. It is also a natural element of everyday work at an organisation. Systematic work environment management is a continual process, often described in terms of an annual wheel involving four recurring, cohesive activities: 1) examination 2) assessment of revealed risks 3) addressing risks 4) follow-up.

Managers are also responsible for following various laws and provisions from other public authorities, in addition to those that regulate work environment management. During the pandemic, this involved following the infection control guidelines and recommendations issued by the Public Health Agency of Sweden.

Managers' roles and leadership

Previous studies on managerial work have mainly focused on managers' actions and behaviours as well as compiling or categorising them into different roles or leadership styles. Mintzberg (7) identifies ten roles, grouped into three families:

- interpersonal roles (figurehead, leader, liaison)
- informational roles (monitor, disseminator, spokesperson)
- decisional roles (entrepreneur, disturbance-handler, resource allocator and negotiator).
  Mintzberg believes that all roles are significant for managers, and each managerial activity can be explained using one or more roles. However, the significance of the roles can vary, depending on the manager and other contextual factors.

There are several theoretical models that address leadership. One early division that is still identifiable in research studies is that leadership styles differ depending on whether leadership is focused on the task, relationship with colleagues or change (38). The task-oriented leader focuses their work on ensuring that production targets are met efficiently, whereas relationship-oriented leaders focus on the requests and needs of their staff. The change-oriented style focuses on managers' responsibility to lead various forms of development processes for both individual employees and the organisation as a whole.

One recent research review shows how some leadership behaviours appear to be significant in conjunction with forms of distance work, especially the type that were introduced as a result of the Covid-19 pandemic (39). These leadership behaviours involve:

- communicating and promoting the use of technology;
- regular meetings to touch base, giving feedback and steering towards organisational goals;
- showing trust in staff and giving autonomy;
- showing empathy and support;
- encouraging and promoting good health;
- adapting work based on the conditions and needs of the employee.

The overview found a particular need of establishing clear guidelines and procedures for distance work (39)

Leadership in times of crisis

The focus of this report, the Covid-19 pandemic, generated a global crisis on a scale seldom seen before. A crisis is an unexpected event that risks significantly impacting and damaging an organisation. There are several crisis management models and theories (40–42), and many literature reviews have been conducted (43–46). Crisis management can be divided into different stages, that generally address the work before, during and after a crisis. Before a crisis, leadership involves situational analyses and crisis planning in terms of formulating areas of responsibility and creating action plans. During a crisis, much time is spent implementing contingency plans, creating internal and external communication channels, communicating what is being done and why, and evaluating the

ongoing work. Maintaining a dialogue with employees and keeping them motivated is also important. Following a crisis, leadership involves continuing situational analyses and communication, as well as evaluating an organisation's actions and the crisis' impact, in order to revise previous contingency plans (47, 48). Research also shows that during crises, it is important that managers and leaders do not enter a state where their organisation is consolidated and geared down – ongoing development work needs to continue, as it is needed once the crisis is over (49, 50).

3. Method

This report has been formulated following the Government assignment to the Swedish Agency for Work Environment Expertise, who were instructed to map and analyse the short and long-term consequences of the Covid-19 pandemic on work environments in Sweden (A2021/02355, 2021-12-16). Thus, in this report, we explore managers' work situations during the pandemic, using both surveys and interviews. We interviewed 40 managers and received survey responses from 1 002 participants with managerial roles at various organisations and industries in Sweden (private and public sector, manufacturing, trade, health and social care, etc.). The selection criteria were: 1) the person must be a manager 2) the manager must have employee and budget responsibilities. The interview guide and survey were created by the report's authors and were based on previous research on managers' tasks and conditions, managerial roles and leadership and work environment management activities. Data was collected during July and August 2022 from an online panel.

The interviews have focused on if and how managers' tasks, conditions and leadership changed during the Covid-19 pandemic. In contrast, the surveys have focused on the frequency of various duties, conditions and leadership before, during and after the pandemic (today). Managers were therefore asked to retroactively estimate their experiences at three points. When combined, they present complementary pictures and can provide better understanding of managers' work situations during the pandemic.

We began the analysis process by conducting a content analysis of the interviews. The results showed that managers descriptions varied depending on whether their organisation remained on site as normal during the pandemic, transitioned to remote work or implemented hybrid solutions. Differences were also identified between industries. Once we had analysed the interviews, we analysed the survey results. The findings from the qualitative analyses were used to investigate whether there were differences for managers depending on industry, managerial experience, span of control, gender, and whether the organisation had remained on site or worked remotely in various ways. Anova were conducted for the quantitative analyses.

The method and approach are described in more detail in Appendix 1.

4. Results

This chapter presents the results of the interviews and surveys conducted with managers. The chapter is divided into five themes:

- managers' tasks during the pandemic
- work environment management
- conditions for performing managerial tasks
- leadership and relationship with employees
- challenges, opportunities and looking ahead

Each theme is introduced with the results of the interviews, followed by the survey results. The chapter concludes with a summary of the most central results.

Managers' work tasks during the pandemic

The first theme addresses managers' work tasks, and how they changed during the pandemic. The results from the interview study are presented first, followed by the results from the survey study.

Tasks based on the interview study

The pandemic generated many changes to managers' tasks and organisations. The results demonstrate differences in tasks depending on whether the managers and their employees were working on site, remotely or used hybrid solutions. Thus, this theme has been structured accordingly.

The changes faced by managers who were forced to transition their organisation to remote work were often major and comprehensive. There was more nuance for managers whose organisation and staff remained on site, where the impact on the organisation and tasks varied depending on the industry or type of organisation. For example, pandemic restrictions meant that activities in the hotel, restaurant, tourism and culture industries were either limited or stopped. Managers working in these areas were therefore made to furlough some or all of their workforce, which had a major impact on all staff, even those who were not furloughed.

Many managers were concerned about what would happen at work, regardless of whether work was on site or conducted remotely, especially in the beginning of the pandemic. There was uncertainty whether organisations could remain running if staff needed to be furloughed or made redundant, and if the organisation would be able to recover. Many managers also report having worked more during the pandemic, with increased overtime. This was

in part due to rapid changes regarding prioritisation but also the work to keep their organisation running, despite periods of high absence due to illness.

One manager within health and social care describes the situation as follows:

> Yes, I mean, I can say I worked an awful lot. I worked overtime. I'm also in charge, so I can't leave if nobody comes in to relieve us. I don't know, but I feel that maybe the people took the chance to take more sick leave. I don't doubt some were honest, but since I'm a supervisor and that, and I couldn't get people in, I had to stay behind. At one point I was working so much. I've almost repressed it, or forgotten. What I do remember, is that I worked so much at the start of the pandemic and it was difficult getting people in, but it worked. (Manager 16)

Managers whose organisations were on site

Many managers within industry and manufacturing found that their tasks were relatively unchanged. Their operations carried on almost as usual, and the majority of staff were on site. One manager from the manufacturing industry explained how they were assigned with 'Covid-proofing' their organisation, in addition to their regular leadership tasks. Premises needed adapting to enable social distancing, and protective equipment had to be available and used. In order to limit the spread of infection, staff only worked in their individual teams, breaks were timetabled, and the number of people allowed in the buildings and other spaces was restricted. This is described in the following quote:

> But I think we were good at social distancing, and if there were certain tasks that meant we needed to be closer than two metres to each other, then we used face shields, there was a strict policy (...). We've basically had to Covid-proof the organisation, so to speak. This includes everything from making sure the cafeteria isn't too full, even if workshop staff tend to bring their own lunches and have a shorter lunch break either in a break room or lunchroom. And sorting out a timetable. Previously, everyone ate lunch together and that created a sense of belonging. But now we need a timetable to enable social distancing. (Manager 31)

Some managers at other organisations that stayed on site during the pandemic described how their tasks became more complicated and took longer. This applied to getting hold of materials, equipment or goods. It may also have involved access to specific people, with whom previous contact may have been closer or natural. Tasks may also have needed to be reprioritised, based on what was possible. Some managers found that their tasks became more strategic, whereas others believed their tasks were more operative. For example, one school principal had to put strategic work to one side, in order to be able to work more with their organisation: 'And I've done completely different things this year than I'd imagined. Because I've had to work with them, that's just how it is.' (Manager 38). A preschool principal describes a similar situation. The emergency services also had to prioritise their operative activities such as call outs and emergencies, whereas other tasks, such as training, community information and regulatory work were left on a back burner, and at times, cancelled. The work and tasks within retail remained the same, although there was a special focus on safety and infection control.

In the retail sector, managers had to ensure that staff and goods were available, and that sales were maintained. However, during the pandemic, they were also responsible for ensuring that both staff and customers followed the restrictions and rules in place.

Many managers within social care industry faced drastic changes to their work and tasks as early as the initial stages of the pandemic. Infection spread rapidly, and many managers described the challenge of keeping care activities going as normal, despite many residents, clients and staff being ill. At times, levels of sickness absence were high, which generated an even greater strain on the staff who were still at work. An additional challenge mentioned was the difficulty in explaining to people with dementia or intellectual disabilities why life was not the same as usual, for example why staff were wearing masks, face shields and protective clothing, why their next of kin were no longer visiting, why activities were cancelled, and why residents were not allowed to interact with each other as they usually did:

> We couldn't have the joint activities, which really affected the residents. It's also hard when you work in a place where people with disabilites, and you have to explain why different equipment is being used and such. It's really hard to explain why they can't see each other when they don't understand diseases and so on. (Manager 16)

However, one manager mentioned how educational tools were available, and they tested them for explaining to residents how they should wash their hands thoroughly, how to put on the face shield and so on. This made work easier. Feelings of isolation increased among residents due to the fact their next of kin were not allowed to visit. This, in turn, had a negative effect on staff morale. One manager working in social services explained how they tried to create their own, smaller-scale activities:

> Yes, it was tough for the staff too. But then it was a case of trying to come up with our own activities at the home (...) So instead of having big activities for everyone, we had smaller shared activities at each home. (Manager 18)

The tasks performed within industries such as property management and similar technical services did not change. Nevertheless, routines for how these tasks could be carried out did. Many organisations banned visitors, meaning only one person could visit at a time, even though repairs or service was necessary. One manager at a municipal property service described how previously, it was as easy as just 'popping in' and finding out a quick answer to the problem or what was needed. During the pandemic, all discussions and questions had to be raised online, meaning that everything took even longer:

> Care homes for elderly people have been on total lockdown. They still need servicing, but we're not allowed to go in together, only one at a time. So I need to arrange Skype meetings for their managers and they have been completely overburdened. When

> previously I would've just had to have popped in and said, "How does this work? How does that work? What do we need to do with this?" and so on. Something as easy as visor barrels could take two and a half weeks to sort out. Things went extremely slowly during the pandemic. (Manager 14)

Managers in schools and preschools experienced similar changes to their tasks as those who worked in health and social care. Not only did school managers need to ensure that teaching and activities kept going, but they also had to direct the flow of information. This applied to both internal information for staff and external information to parents and guardians. They also had to take in or process information from other sources, such as news media and social media. A large portion of their working hours were spent being on site, accessible, addressing concerned calls, deciding how infection should be managed, conducting risk assessments and staying updated on rules and restrictions. As principals, they were also responsible for maintaining teaching, even during periods when many teachers and pupils were absent due to illness. One principal solved this issue by re-shaping staff groups and adapting them to the ongoing situation. Similarly, teaching was organised so it could be conducted both on site and remotely, as at one point over half of the pupils were absent. To be able to do this, school development matters were postponed, so teachers would be able to manage their work situation.

Managers whose organisations worked remotely

Opinions differed between managers regarding the success of remote work. Some believed it worked well. One felt that work was more efficient, more tasks completed, they did not have to commute, and it was possible to address private matters at the same time. Other managers were of the opposite opinion and were not happy with remote work, finding it solitary and tedious. These managers found it was easy to lose focus and motivation, and that they got more done when in the office.

The decision to close offices and re-locate activities to the employees' homes came suddenly for many managers whose organisations transitioned to remote work during the pandemic. Some managers were already somewhat familiar with online meetings and remote work, however, the majority had no or very little experience. Many also encountered several problems with technology and equipment at the start. Some organisations introduced compulsory remote work, whereas others allowed their staff to decide where they would work. The number of people working remotely increased significantly during the pandemic, and when it became clear that it was successful, working from home gained more credibility.

One theme among the managers was how the pandemic was detrimental to natural workplace interactions and collaborations, with the 'we-feeling' and sense of solidarity being negatively affected. One manager at a public authority described the situation as follows: 'We ended up somewhat solitary, different units doing their own thing' (Manager 2). To counteract this, many managers introduced new procedures for regular meetings. Previously, it was easy to see who was in the office, but this overview was lost when activities

transitioned to remote work. Some managers introduced short, compulsory meetings each morning to establish the order of the day and find out where everyone was located or was working. Those who were unable to participate sent a message with information about when they would be available again.

This was seen as something positive that facilitated work, especially for workplaces with flexitime. One manager explained that they had also started to use digital platforms with their customers to a greater extent. Despite physical meetings being 'unbeatable', attitudes towards customer meetings on Teams were positive, and often improved discussions. Before the pandemic, quotations were often sent by email and then followed up via telephone. Now, they tried to meet the customer on Teams and review the quotation together. This made the process easier and conversations more personal.

Many managers felt that remote working was more efficient, saving both time and money. This applied for both the managers themselves and their staff. Jumping between meetings was quick, and they did not need to move around or travel. Furthermore, online meetings enabled more customer participation and schedules were adhered to. According to one manager who worked in marketing and communication, there was a difference in meeting discipline between planned online meetings and meetings in person. The majority of people were at their computers and ready to attend at the start of the meeting, compared to physical meetings:

> Now, when we have meetings at the office... one o'clock isn't one o'clock. It may as well be ten past because "I just need to..." It's interesting, because I think we're so nonchalant towards each other at work. When it comes to meeting respect and such. Now, in hindsight. Do you know what I mean? One o'clock doesn't mean one o'clock if you're meeting in person. (Manager 4)

Some managers described remote work as positive as they found it easier to concentrate at home; the environment was calmer and they could work undisturbed. Work was also described as being more flexible, as they could choose when to work and when to take a break. At the same time, working hours became washed out, making it easier to continue working even though the working day had ended. One manager explained how it was very easy to turn on the computer in the evening and at weekends. Another stated how meetings were occasionally booked during lunch breaks, because there was time to 'see each other', meaning lunch would easily be forgotten or skipped. It was easier to work the eight hours and then go home and be off duty when working at the office. One IT manager mentioned that there was the expectation that they would be expected to work, even if they were ill, since they were at home anyway:

> ...and then there was the major unspoken requirement that "ok, you've got Covid, but you can still communicate and you're working at home now, so you can work." (Manager 19)

In other industries, working remotely was less successful. This was the case for marketing and other industries where focus is on being creative and innovative, as new ideas are usually generated with spontaneity: 'And you don't get an idea in a Teams meeting with two or three people, rather an idea can be born when we're joking about, drinking coffee.' (Manager 4). Managers named other disadvantages of remote work, including an increase in meetings – not all of them necessary. One manager in the technology sector complained of another disadvantage or challenge of online working – the loss of non-verbal communication, making it more difficult to understand each other.

They described how things risked being lost, and the risk of misunderstandings and incorrect interpretations increased, as did conflicts:

> My understanding is that the majority of conflicts with the people working [remotely] were down to misunderstandings, they read too much into something. It's harder to get a grip on, discuss and investigate these things, as meeting in person was harder (...). So you had to try and investigate anyway. There has been a notable difference, I think, because nothing beats a personal meeting, it doesn't matter what all these computer salespeople say – that this is the way we'll be working in the future. Because I think that computers are a complement, and we noticed this here – you can't build relationships digitally. (Manager 20)

Managers with hybrid solutions

A number of organisations had some workers on site while others worked remotely. We refer to this as the 'hybrid' solution. This was managed in different ways depending on the type of organisation and how flexible tasks were. Some managers described how staff were able to choose where they wanted to work. There were employees who chose to work primarily from the office and others who chose to work from home. However, the majority chose a combination of working from the office and home. By following rotating schedules, they were able to prevent too many employees being at the office at the same time. Another way of managing hybrid work was through discussions with staff; those who were deemed to have the greatest need were given alternative tasks that could be conducted remotely. One manager responsible for IT matters at their organisation explained how they took up the fight for their employees and made it possible for everyone to work from home.

> I think everything should be the same for everyone. I think it's really important, I think it's unfair if, as a manager, you're given certain advantages that other colleagues or employees don't get, especially if there's no reason for it. So I've always worked hard to make sure that what applies for me also applies for my colleagues. (Manager 19)

One manager at a public authority describes how they had recruited several new employees during the pandemic, and they took the decision to hold their introduction on site to facilitate the learning process. Some managers had split groups, as the tasks of some staff prevented them from working from home. This would occasionally be seen as unfair. These managers recalled

how a sense of injustice would easily arise, and they may have heard: 'Is it not just a bit unfair that one group are working from home or aren't in the workplace, and one group are working "as normal"?' (Manager 3). One workplace introduced compulsory daily Covid-19 testing. Those who mainly worked from home would only need to take a test on the days they visited the workplace. A principal at a compulsory school referred to the latest rules and recommendations from the authorities

> Because in the spring, I noticed that the teachers were afraid, now we're exposing ourselves to this, while the education board can sit at home and work. But you're not working at the education board, you're working here. (Manager 38)

Tasks based on the survey

The survey explored three areas linked to managerial tasks and included questions about their working hours, operative work and strategic work. Managers were asked to estimate the situation before and during the pandemic, as well as how things are today (when the survey was conducted). Please note that any differences stated in the text are statistically significant..

Working hours

The results from the survey found that managers tended to work more hours than those on their contract, before, during and after the pandemic. Hence, there was no change due to the pandemic. Nor were there any differences between managers in different industries or between men and women. However, managers with extensive managerial experience (more than ten years) worked more hours than those with less experience. The survey also found that managers with more than ten employees worked more than those with fewer. Managers who continue to work most of their hours remotely also work less today than compared to before the pandemic.

Managers estimated that they do not work evenings and weekends very often, although they may on occasion. This was something else that did not change during the pandemic, except for the managers that worked remotely and did so before the pandemic. Evening and weekend work has reduced somewhat for this group. There was also a difference between managers in different industries; managers within the education sector worked more evenings and weekends than those in public administration. There was no difference between managers with varying levels of experience or span of control. Nor were there any differences between women and men.

The work-life balance was rated as neither good nor bad. This balance deteriorated during the pandemic, regardless of whether work was being carried out remotely or in the regular workplace, however work-life balance have since returned to how they were before the pandemic. Managers with split groups (i.e. some staff on site, others working remotely) reported having a poorer balance than other managers, and this balance did not change during the pandemic (see Figure 1). There was also a difference between industries, with managers in the property industry reporting a better balance compared

to those in the hotel industry and health and social care, who reported a poorer balance compared to managers in many other industries. Women reported a poorer work-life balance than men. Managers with more than ten years' experience reported a better balance than those with less experience. There were no differences between managers with different numbers of employees.

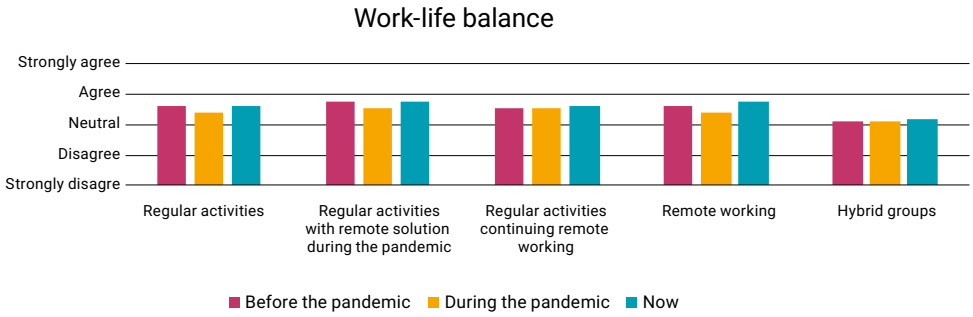

Figure 1. Diagram with responses to the statement 'Overall, I felt/feel I have a good work-life balance' distributed by form of work.

Operative work

Managers spent a lot of time getting their organisations running as expected. The organisations that remained on site during the pandemic spent slightly more time working with this than those that implemented remote solutions. Levels of this work also decreased for organisations that introduced distance solutions, but returned to previous levels once they returned to the regular workplace. There were no differences between industries. Nor were there any differences between women and men. Managers with over ten years' experience and those with several employees spent more time working to keep their organisation running as expected during the pandemic, compared to managers with less experience.

Managers also spent a lot of time adapting work and tasks based on the circumstances and needs of each employee. Admittedly, this work decreased during the pandemic, but it has since returned to previous levels. There were no differences between industries or managers with varying levels of experience. However, managers with more direct reports spent more time adapting work and tasks than those with fewer staff. Women estimated spending more time working with adaptations compared to men.

Managers rated that their role involved communication and distributing high volumes of information. This has not changed during the pandemic – except for managers with hybrid work groups. These managers spend more time on communication now than they did before the pandemic. No differences were found between industries and level of managerial experience. However, managers with more direct reports worked more with communication than those with fewer staff. Women estimated spending more time working with communication and information compared to men.

Occasionally, managerial roles involve addressing work-related conflicts and victimisation. However, conflict management decreased during the pandemic. Nevertheless, managers who remained on site during the pandemic addressed more conflicts than those who worked remotely (see Figure 2). No differences were identified between industries or managers with varying levels of experience. Nor were any differences identified between women and men. However, managers with more direct reports spent more time on conflict management than those with fewer staff.

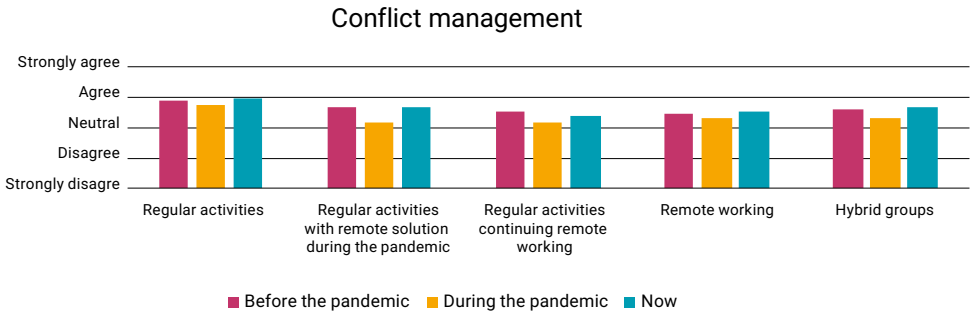

Figure 2. Diagram with responses to the statement 'A great deal of my work is/was spent managing conflicts and victimisation' distributed by form of work.

Managerial work also involved high levels of administration, with on site managers working the most with administration tasks. However, there was a reduction in the total amount of administration during the pandemic. Other groups do not appear to have been affected. No differences were identified between industries. Managers with less experience (one to three years) spent less time on administration compared to those with more experience (over ten years). Women estimated spending more time working with administration compared to men. Managers with more direct reports spent more time on administration than those with fewer staff.

The survey also found that managers spent a great deal of their work making quick decisions and 'putting out fires'. Managers who worked on site spent more time making quick decisions than those with other forms of work, and the pandemic has not led to any changes. Managers who worked on site before the pandemic, but then transitioned to remote work, spent less time making quick decisions at work than others. However, managers who continue to work remotely now make the same level of quick decisions as previously. No differences were identified between industries or between women and men. More experienced managers and those with a large span of control spent more time making quick decisions during the pandemic than those with less experience.

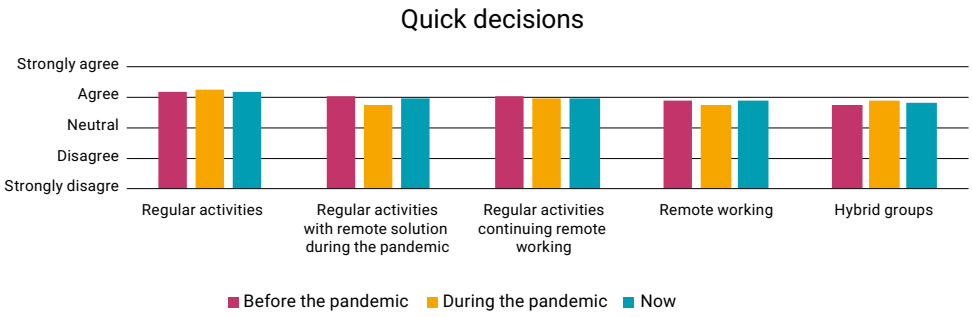

Figure 3. Diagram with responses to the statement 'A great deal of my work is/was spent making quick decisions, "putting out fires", etc.' (reactive work) distributed by form of work.

Strategic work

The survey found that managers estimated that a large portion of their work was focused on developing the organisation. However, during the pandemic, less time was allocated to development matters. This work has now returned to the same levels as before the pandemic (see Figure 4). During the pandemic, managers in the health and social care sector spent less time on organisational development than managers in other sectors. There were no differences between managers with different levels of experience or span of control. However, men estimated spending more time working on organisational development than women.

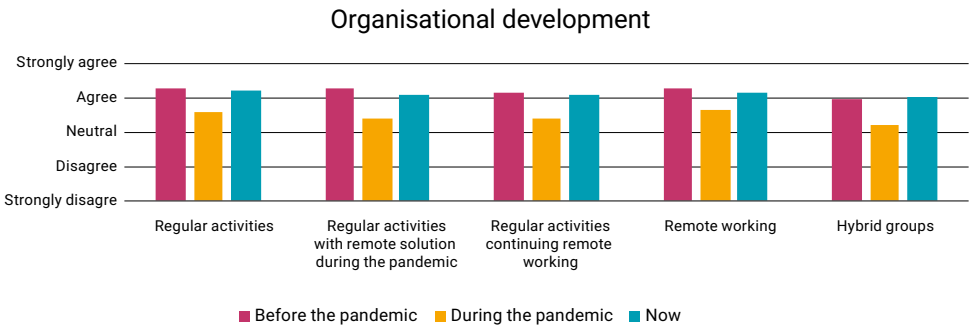

Figure 4. Diagram with responses to the statement 'A great deal of my work is/was spent developing the organisation' distributed by form of work.

A similar pattern exists for strategic decisions. The managers surveyed estimated that a large portion of their work was spent making strategic decisions. However, the pandemic led to a clear decrease in such decisions for all managers, regardless of how they worked. The time allocated to making strategic decisions has since returned to the same level as before the pandemic. During the pandemic, managers in the health and social care sector spent less time making strategic decisions than managers in other sectors. There were no differences between managers with different levels of experience or span of control. Nor were there any differences between women and men.

Work environment management

The second theme focuses on how managers addressed systematic work environment management at their organisation, and how this changed during the pandemic. The results from the interview study are presented first, followed by the results from the survey study.

Work environment management based on the interview study

Work environment management during the pandemic differed, depending on whether an organisation remained on site or had employees working from home. We begin by describing the situation for managers whose organisation remained on site, followed by the situation for managers working remotely.

Managers with organisations on site

The pandemic impacted organisations in different ways; some were completely unaffected, whereas others were forced to make considerable changes. This was clear from the descriptions from managers whose organisations remained on site during the pandemic. Some managers explained that the pandemic did not require significant changes to be made to their existing work environment management procedures.

They described having already worked hard with safety and hygiene in ways that continued to work well during the pandemic. The following quote illustrates this:

> ...so we haven't needed to change a thing. And that's nice, because we reviewed all of our hygiene procedures before, but we realised that actually, we already worked to such high hygiene standards we didn't need to change anything, despite the pandemic. And that felt good, you know. (Manager 9)

Others describe having introduced additional protective measures to their work environment management procedures to ensure they followed the latest restrictions and recommendations. These included compulsory face masks in healthcare settings, encouraging social distancing between employees, reducing the size of work groups, and conducting meetings online instead of in person. Some organisations did not allow visitors, or required visits to take place outdoors. However, access to protective equipment proved to be a problem, and employees found wearing it to be uncomfortable. Some state their staff were able to try out the equipment, although this was not the case for everyone. The following quote from a manager within the health and social care sector describes their experience:

> From a work environment perspective, the lack of protective equipment at the start was a disaster. So, just like other places, we now have a stockpile to tide us over for a while should it happen again – which we hope it doesn't. (Manager 16)

The retail industry saw changes being made in stores to protect both customers and staff from infection. These included social distancing markings, screens and plexiglass barriers at checkouts. One manager explained how the rules and guidelines from the Public Health Agency of Sweden made it easier to tell customers and staff to remember to keep social distance. Managers in preschools and compulsory schools stated using various reorganisation measures and making changes to work groups as a way of reducing stress so teachers were able to feel that they were in control of a group of pupils during the pandemic:

> I'm trying to create structures for systematic quality assurance work, to reduce stress among my preschool teachers, and create networks so they can meet with each other so they feel less isolated. Work groups often just have one preschool teacher, so I'm working with creating structures at the organisation so they can be part of a network and get together to reflect and support each other. To reduce the stress around the task. (Manager 28)

One manager also mentioned how information clarity was a part of work environment management, i.e. it was important that the information issued was easy to understand, so everybody knew what applied – especially as restrictions and recommendations could change rapidly. Thus, a trustworthy information distribution system was crucial..

Managers whose organisations worked remotely

It was clear from the descriptions given by managers who worked remotely that the pandemic was highly significant to the way they addressed work environment management. An area that received particular attention was the physical and ergonomic work environment. Many managers returned to the fact that the pandemic meant that they moved out of fully furnished offices and into employees' homes. Consequently, they had to ensure that staff had enough equipment at home. When employees lacked the necessary equipment, organisations could help by moving items from the office or providing financial support, if, for example, an employee needed to order a desk. This is described in the following quote:

> We've had to adapt by making sure those working from home have everything they need for the job, really. IT, computers and such, as well as desks, chairs and so on. This needed a lot of planning and coordinating. They need to be happy, regardless of whether they are at the office or at home, it shouldn't affect having a good work environment. (Manager 17)

Many managers also reiterated the organisational and social aspects of remote work. They described how remote work placed high demands on motivation and discipline, which did not suit all employees. Thus, managers attempted to emulate the regular work situation – such as meeting structures and coffee breaks – as much as possible, even if this took place online:

> We had the meetings, just as before, same structure, internal meetings on certain days, external meetings on other days, so we've still got that (...) So the only real difference is that we're online instead of in a room. It works really well. And, we always have our afternoon coffee break, so we've also established an online version we can log on to instead. And it's optional, just like at the office, so we're trying to publish the same rules or structures at home as we have in the office. (Manager 39)

Working from home involved more isolation and loneliness, particularly for staff who did not have families. As a result, managers introduced several online social activities as a way to spend time together. They also had more meetings to touch base with staff:

> But maybe we could have an extra Teams follow-up meeting each week, and maybe not really talk about work, more like "so, how's everything going?" – that type of conversation. (Manager 2)

Other managers describe how there were high levels of concern among staff, and they had to reassure them and take on board any proposals they may have for measures that could be taken. One manager describes how they learned how to be more open and available to their staff:

> My door is open if you're having any problems. (Manager 7)

Some managers raised how being responsible for the work environment was problematic when they did not have control over their employees' work environment, as this was their home. One municipal manager describes the problem as follows:

> So, we're suddenly supposed to find a chance to go into their living room and ascertain whether we can take responsibility for their work environment – without leaving the person or their integrity feeling violated. Which was, well, on me, and the board. So it has been tricky. We weren't allowed to make home visits because of the risk of infection, so we had to conduct these interviews online, with our staff showing us around on camera. "This is where I sit, this is what I do. Is that ok?" (Manager 26)

Some managers described how it was relatively easy for them to promote and check that their staff had a good ergonomic work environment and internet connection. However, the major challenge was the employees' home environments that managers could not influence in any way. They explained how preventive measures to ensure a good work environment became reactive, and they could only refer staff to other support functions such as occupational health services and psychologists. The quote below is one example:

> And you've heard some staff say they feel useless, so you respond saying that the insurance will cover help from a psychologist. Because some have really suffered as a result of the pandemic, and haven't known what to do, especially those where work is a part of their social interaction. Some might not have a wife, kids, husband or whatever,

> for them, work is their time for social interaction. You noticed this when someone turned up for lunch at work, even though they were on leave, because they haven't got anyone else to eat lunch with. Then suddenly this disappears, and what do we do then? It's like I'm responsible for their wellbeing. So you need to make sure that professional help is available for the people that need it. We've got this through the occupational health service and insurance. (Manager 20

> It becomes a reactive reaction if an injury or problem has already happened. Preventive work environment management is really hard when working remotely. (Manager 22)

One manager at a public authority summarised work environment management during the pandemic as follows:

> So, talking has been really important, touching base, especially at the start, when everything was new. More often than normal, so we have an idea of how things are working out and so on. A lot of focus on equipment; what about office chairs, what about, well, everything special-equipment-related, there's been, well, so many practical matters to struggle with. As we've gone along. So the physical component has been noticeable. But then, like I said, the line to take towards the team when there's this explicit teamwork, but we can't see each other and we have this digital filter that's applied to everything; and how I feel as part of the team when I, well, at the start, we were in a place where we weren't allowed to use the video function on Skype because we had to save bandwidth, since it wasn't designed for so many people working from home at the same time, so there were these small black blobs on Skype, and you'd have to sort of try to keep things going but it was obviously really difficult. But everyone was on board and tried their best to make the most of the situation, but it absolutely brought work environment matters to a head. (Manager 27)

Work environment management based on the survey study

The managers who responded rated that their workplace had established work environment management procedures, and that they spent a great deal of time working with the physical, organisational and social work environments. However, there was a decrease in this work during the pandemic. Organisations that remained on site during the pandemic rated higher on the occurrence of established procedures and the level of work spent on physical work environment management compared to organisations that worked remotely (see Figure 5).

There were no differences regarding organisational and social work environment management. Nor were there any differences between different industries or between men and women. Those with more managerial experience (over ten years) were more likely to rate having established procedures and working more regularly with the physical work environment. However, no differences were identified regarding the organisational and social work environment. Managers with many direct reports rated higher on there being established procedures and that they worked more with the physical, organisational and social work environment.

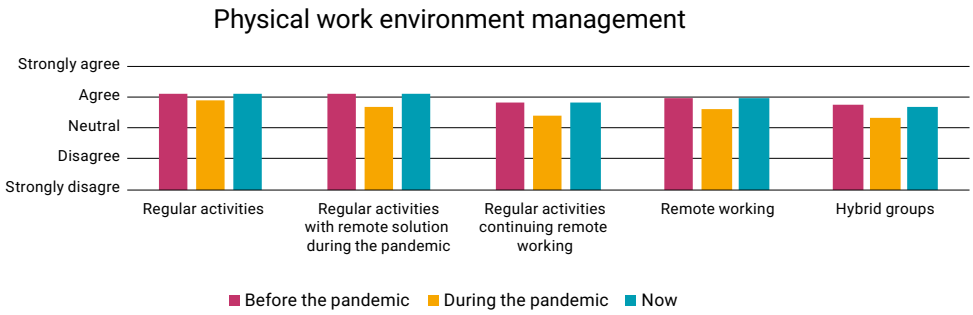

Figure 5. Diagram with responses to the statement: 'We regularly worked/work with the physical work environment' distributed by form of work.

Conditions for performing their work tasks

The third theme investigated the managers' conditions to perform their work tasks – and how these changed during the pandemic. The results from the interview study are presented first, followed by the results from the survey..

Conditions based on the interview study

The majority of managers considered they had the necessary conditions to perform their work tasks. They believed the following facilitated their work:

- having sufficient resources
- receiving understanding regarding the issues they raised
- having a clear role
- receiving support from senior management and other functions at the organisation
- having a positive culture and a present manager who facilitated quick meetings or assisted with prioritisation

The latter is evident from the following quote:

> Our workplace has a culture of regular meetings to touch base with our line manager, so (name), so if there's anything, regardless of whether it's work environment or something else, we consult with each other and that makes it possible to implement the changes needed. I'd say it's pretty easy, yes, having a present manager like that. (Manager 38)

At the same time, some managers felt they lacked the right conditions. This primarily related to factors such as:

- lacking the time or authority to use resources or invest in the organisation;
- lacking information and feedback on their efforts;
- having large staff groups that worked different hours. The quote below from a manager from the manufacturing industry exemplifies this:

> Yes, it's time that's our, how to put it, biggest challenge then; there's some really big groups in the workshops, and being able to get through all these employee appraisals, making sure that every employee is heard, etc., and you work around the clock as they say, with five shifts, so at times you seldom see an employee, only a few times a month

> or something like that, always working nights and so on, so that's probably the biggest challenge. (Manager 31)

Some of the managers interviewed did not believe the pandemic had a particularly significant impact on their conditions and possibilities to perform their tasks. They described how there was a major consensus at the organisation right from the start of the pandemic. They felt that everyone agreed that the chosen strategy was the best for the situation, regardless of whether remote work was introduced, or the organisation continued from the regular workplace. One manager in retail stated how continuing professional development was already web-based before the pandemic, meaning nothing changed:

> I mean (company) are really good at online training, I've always been able to take courses through (company). They've got a lot of online training courses, they were early adopters, we're talking ten years ago, back then they started with a (company) school, mostly online. This has been perfect during the pandemic, when you want to do further training or update your work-related knowledge. (Manager 11)

Nevertheless, the majority of managers agreed that their professional conditions changed during the pandemic. Some of these changes were more positive. For example, in order to reduce 'bottlenecks', organisations reviewed their decision-making structures, giving managers more authority on certain issues that they previously were unable to take decisions on. The managers felt that their work was more efficient, as they no longer needed to contact others and could take the decisions themselves:

> Before, prior to the pandemic, my manager had to approve some of the things I didn't have the authority to decide upon. For example, we have a new employee but their computer hasn't been ordered. Now I've been delegated the authority to order a computer. I don't need to check with my manager, I can just decide myself and when it needs to be delivered and so on. So if my manager is on holiday, I don't need to disturb him, I've been given the authority to take the decisions on everything I need to, so as my employees can do their job and feel well. (Manager 17)

Similarly, support from senior management and line managers was also mentioned. Some felt they had good support and close contact with senior management, and they believed they had the authority to reprioritise. One manager describes the following:

> ...but my manager has also been really clear that your main task is to support your staff. If faced with say, performing in a certain way, then supporting staff comes first in this situation. So I would say I have what I need to be able to do what's necessary, as much as I can, at least. (Manager 39)

At the same time, other managers stated they wished they had received more support from senior management. One manager in health and social care explained how, during the pandemic, they needed to take many difficult decisions, such as moving staff between work groups, despite increasing the risk of infection. This led to a lot of talk among the employees, and

the manager wished that senior management had been more supportive and present, more clearly endorsing the decision. As a result, the manager felt unappreciated despite all the work they had invested in keeping the organisation running, they state:

> It was really tough, because I heard people talking about me because I'd taken that decision, which I had to do and I actually have the authority for, and it's clear there was insecurity there. So I've learnt to let it wash over me, but back then, I needed more support from the managers above, absolutely. She should have said it (...). It just felt ungrateful. I always stepped up, worked a lot of overtime and such, but the fact the others were really sick and such. It felt ungrateful. (Manager 16)

Remote work itself was a recurring theme among managers who worked remotely or had staff who worked from home. They talked of how the pandemic forced an increase in workplace digitalisation and purchases of technical aids they did not previously have access to. This enabled employees to work outside of the office, which facilitated working and reduced the risk of spreading infection. The negative impacts involved less access to continuing professional development, fewer opportunities for receiving or providing fast and spontaneous support, less communication and more isolated work. Even though several managers mentioned less access to continuing professional development, more stated that the levels of learning had not decreased. The pandemic and how it was approached provided these managers with major learning opportunities.

Conditions based on the survey

The results of the survey showed that managers believed they had good conditions for performing their work tasks. During the pandemic, these conditions were seen as worsened, regardless of how the organisation was run (see Figure 6). There were differences between industries, with the hotel industry and health and social care sector rated poorer conditions than others. Experienced managers (over ten years) rated having better conditions than those with less managerial experience. There were no differences between managers with different span of control, or between men and women.

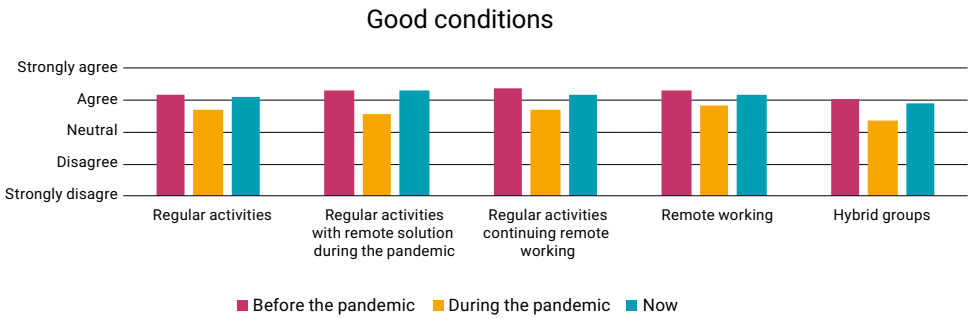

Figure 6. Diagram with responses to the statement: 'Conditions for performing my tasks were/are good' distributed by form of work.

Managers estimated that the time they had for their tasks was neither insufficient nor sufficient, regardless of how their organisations were run during the pandemic. Managers in the rental industry were more likely to rate having enough time than managers in the hotel industry and health and social care. Men rated higher on having enough time, compared to women. Experienced managers rated higher on having enough time than less experienced managers, although there were no differences between managers with different span of control.

Managers estimated they had enough authority, and that their roles were sufficiently clear. Estimates were lower during the pandemic, however both authority and role clarity are now estimated as being at the same levels as before the pandemic. There were no differences in estimates between industries regarding authority or role clarity. Experienced managers (over ten years) estimated higher on conditions than those with less managerial experience. There were no differences between managers with different span of control. Nor were there any differences between women and men.

Both formal and informal support were estimated as being sufficient. However, both the formal and informal support were estimated to be lower during the pandemic. This has since returned to the same levels as before the pandemic. No differences were identified based on form of work, between different industries, or between managers with different span of control. Nor were there any differences between women and men. More experienced managers rated they had more formalised support than those with less managerial experience. No differences were identified relating to informal support.

Similar responses were seen in the survey results relating to appreciation. Regardless of the work form assessed, the appreciation managers received for their work was rated as being lower during the pandemic. However, levels have now returned to how they were before the pandemic. No differences were identified between managers from different industries, with varying experience or span of control. Nor were any differences identified between women and men.

The survey responses showed there was less access to continuing professional development during the pandemic for all groups, compared to both before and after the pandemic. Those who worked in the information industry believed they had more access to continuing professional development than managers within the hotel industry and health and social care. Managers with less experience (1–2 years) felt they had better access to continuing professional development than others.

There were no differences between managers with different span of control. Nor were any differences identified between women and men.

The survey results found that managers rated they had good access to information, although this decreased during the pandemic – regardless of form of work. However, those who worked on site during the pandemic estimated having better access to information than those who worked remotely (see Figure 7). No differences were identified between managers in different industries or with different span of control. Nor were there any differences between women and men. Experienced managers (over ten years) rated having access to more information than those with less managerial experience..

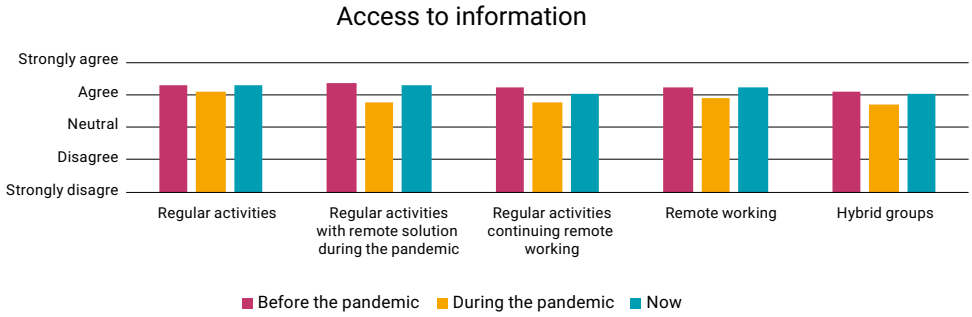

Figure 7. Diagram with responses to the statement: 'My access to relevant information when needed was/is good' distributed by form of work.

Leadership and relationship with employees

The fourth theme focuses on how managers addressed leadership and their relationship with their employees, and how this changed during the pandemic. The results from the interview study are presented first, followed by the results from the survey study..

Leadership based on the interview study

Many of the managers believed their leadership did not change during the pandemic. This was primarily the case for managers whose organisation continued as normal throughout the pandemic. However, they explained how they had to plan more and be more cautious when making decisions in the event that something unexpected should happen. One manager spoke of how they needed to be present at the organisation to ensure that their staff were actually working, not just during the pandemic. It also emerged that first-line managers in health and social care always worked close to their organisation. This is described in the two quotes below::

> As a manager, I always need to know what's going on. I can't just leave them. They have to work full time. And then on one day, I leave and don't come back, then it doesn't work, because they won't work. So you have to be on site all the time. (Manager 8)

> Despite having needed to come up with new activities for the residents, the actual management work was no different during the pandemic. As a first-line manager in social care, you're always in the workplace. (Manager 18)

Some of the managers who worked remotely believed that their leadership did not change much, as they had always been solution-oriented and not so controlling. However, the majority of managers who worked remotely – and even some who spent most of their time in their regular workplace – felt that their leadership had changed during the pandemic. Many mentioned the fear and concern among their employees, and how they were forced to take care of staff whose wellbeing was affected in different ways and for different reasons. One stated how the pandemic meant they had to be both a psychologist and manager in order to capture staff fears and concerns. There was a fear of becoming infected by colleagues or customers among staff at organisations whose activities continued as normal during the pandemic. The organisation had been thorough with social distancing and employees often demonstrated consideration towards each other. One manager within retail described how the situation was difficult at the start of the pandemic, when they did not know how contagious and dangerous the virus was. Back then, there were high levels of concern and that could create divides in certain work groups. Social distancing may have been difficult if the premises were crowded, and tolerance among the employees varied:

> Because we work in such a small place, we've all been quite close to each other. This isn't appreciated with Covid, because you don't know how someone else ...the steps you have to take, or hygiene and such. You don't know what goes on outside of working hours, what a person does. You don't want to risk getting sick, or being infected. (Manager 8)

Several managers described how they were forced to be clearer in their role as leader, to ensure that everybody understood and followed the rules in place. They believed that before the pandemic, they may have been hesitant when making decisions, but the pandemic and the fear among their employees led them to dare to be decisive and stand by their decisions. This often resulted in the managers developing greater confidence in their leadership abilities; they knew what authority they had, and felt confident making decisions.

> I'm a lot more confident with what I'm doing, because I've really talked with my manager a lot. I know what mandate I have and that sort of thing. (Manager 19)

Other managers stated their leadership became more relationship-oriented, they showed more compassion towards their staff and their safety. They described how they became closer with their employees. There was more time, or they prioritised individual meetings to be able to find out how the staff were feeling and coping:

> I think this might sound a bit strange, but it may have made me and my staff a bit tighter (...). It's in the discussions with my colleagues, I think that's where I see the biggest difference. Previously I tended to ask "how's your work going?" but now I start by asking "how are you doing?" (Manager 21)

Managers who worked remotely described having to timetable one-on-one meetings to see how their staff were managing, as they were unable to meet them in the workplace as they could before the pandemic.

One manager explained how they began holding more one-on-one meetings than before the pandemic, to compensate for the fact they could not meet in person. Another stated how they would go around the work group to find out how everybody was coping, if everything was fine or if something had happened, in addition to allocating work and following up, respectively. Introducing scheduled coffee breaks was one way of maintaining social relationship.

> Then we had this sort of relay thing, we added 15-minute chit chat sessions, where two people would phone each other and just chat. Not about work, just coffee room conversation, you know? (Manager 4)

The managers who worked remotely were more likely to highlight the need for increased trust that their staff were actually completing their work tasks. One manager commented how remote work during the pandemic had increased trust in their employees, and they had also noted that employees were happier with having more freedom and flexibility at work. The employees had more control over their day and did not need to feel guilty for working from home occasionally: 'There's more focus on results, rather than time.' (Manager 5). Some managers explained how they learnt to let go of control and dare to trust that their staff were doing what they were supposed to. One manager described themselves as having a need for control, wanting to know whether work was progressing. However, with staff working remotely, they learnt to take a step back:

> I can't function as a manager by being some form of communist espionage unit and placing a CCTV camera in the office to see if they're sitting at their desks at home or doing something else, I mean, that's just not possible. So I had to battle with myself to be able to deal with this lack of immediate need-based satisfaction from seeing progress. (Manager 22)

Managers who worked remotely also mentioned how the conditions generated by the pandemic led them to adapt their leadership. They described how it was difficult to lead with the help of technical aids, and they were forced to listen to staff in a different way than before. They needed to apply a different way of communicating and listening, as they could not see their staff in any other way than on screen, and the chance of spontaneous contact was not the same. The staff themselves also had to raise issues, something that managers needed to explain to them in order to generate a dialogue. Other managers described how several days may pass without contact with their staff, which led to some managers having less of an idea of what was going on. They therefore contacted their employees, not to check up on them, but to find out if they were coping.

Others believed they lost contact, especially the feeling of picking up on how their staff were doing, for example if their day had been difficult or they were not coping well. One manager was grateful that their staff did not hesitate to

reach out if something was difficult, tough, or boring. Working remotely as a manager was harder, as managers felt they performed worse as a manager when they could not spend time as close to their staff as they would like.

Another difficulty that came to light during the interviews was the difficulty in conducting staff development reviews, salary appraisals and so on. There was a completely different atmosphere when sitting face to face in the same room, making it easier to talk and discuss matters. This atmosphere vanished when people worked remotely, and the meetings were seldom as positive as the managers had hoped. Online meetings were suitable for work-related topics, but managers also had other types of meeting as they were responsible for staff. Even if these meetings met the set criteria, things were not quite the same online. Some managers state how their leadership became more task-oriented, as the various technical aids limited their chance to be relationship-oriented and considerate, as the managers would have liked. The following quote describes this:

> ...it's different in a way. And it's more clinical or static or whatever you want to call it. Less room for genuine spontaneity. That's just the way it is. Yet at the same time, it might turn out to have been more efficient, more focused on the task in hand. (Manager 2)

Another summarises leadership during the pandemic as requiring them to be more of a leader, as they needed to remain informed about the latest restrictions, motivate their staff who were working from home, and make sure that online platforms worked:

> I think I've had to do more leading during the pandemic. What with having to stay updated on the restrictions, as well as motivate staff. Work from home, try to encourage them... Try to find solutions to keep the organisation going. And getting staff to cooperate, what with not being able to meet in person. Making sure that the online platforms worked. There was more responsibility during the pandemic. (Manager 6)

Leadership based on the survey

The results from the survey show that managers believed that generally, there were high demands on their leadership. These demands were higher during the pandemic and continue to be so, compared to before the pandemic. No differences were found between organisations that continued to work on site and those that worked remotely. Managers within the manufacturing and construction industries rated having lower leadership demands during the pandemic, compared to other industries. Women rated the demands as higher compared to men. Managers with less experience (one to three years) estimated higher demands compared to those with more experience (over ten years). Managers with more than ten direct reports rated the demands on their leadership as higher than those with fewer staff..

Leadership styles

Three leadership styles were examined. Managers were asked to rate their task-oriented leadership, where focus lies on the task and creating structure and orderliness. This leadership style received high ratings from the managers, regardless of where work was conducted. The pandemic did not change the ratings. However, managers in the education sector rated higher on task-oriented leadership, compared to those in manufacturing. Managers with over ten direct reports also rated higher in comparison to those with fewer employees.

Women rated higher than men regarding task-oriented leadership. There were no differences relating to managerial experience.

The second leadership style was relationship-oriented leadership. This leadership style focuses on employees, work groups and relationships in the workplace. It was rated high, regardless of how form of work. The pandemic led to a reduction in relationship-oriented leadership among managers who now work on site, however, no differences were found between the groups. No differences were found between managers in different industries. However, women estimated their leadership as more relationship-oriented compared to the men. Managers with over ten years' experience rated their relationship-oriented leadership as higher compared to those with less experience. The same results were found for managers with over ten employees compared to those with fewer.

The third leadership style was change-oriented leadership that focuses on change, innovation and novel thinking. This leadership style was also rated as high by managers, regardless of how their organisation was run during the pandemic. However, change-oriented leadership was rated lower during the pandemic, although it has since returned to pre-pandemic levels. No differences were found between managers in different industries or with different managerial experience. Nor were any differences identified between women and men. Managers with more than ten employees rated change-oriented leadership as higher than those with fewer than ten employees.

Leadership tasks

In addition to the general leadership styles, managers were asked to rate individual leadership tasks. Managers estimated they had good insight into their employees' tasks. Those who remained in their regular workplace during the pandemic had better insight than other managers. Insight deteriorated during the pandemic, although it has now returned to pre-pandemic levels, except for managers who worked on site before the pandemic, then transitioned to remote work and continue to work remotely today (see Figure 8). No differences were identified between managers in different industries or with different span of control. Nor were there any differences between women and men. Managers with over ten years of experience had better insight into their employees' work tasks than those with less managerial experience..

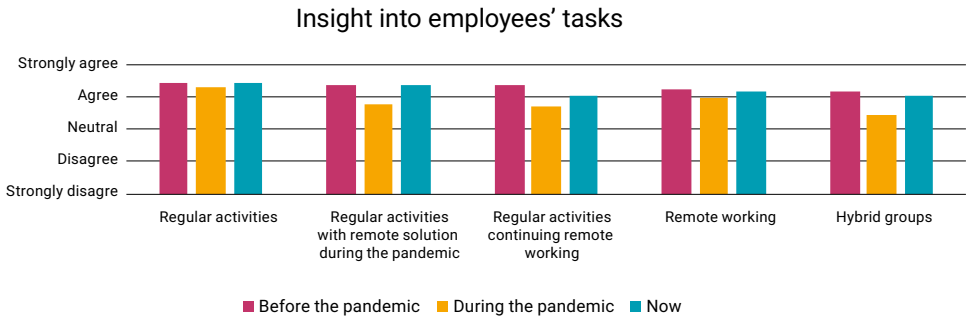

Figure 8. Diagram with responses to the statement: 'My insight into my employees' tasks was/is good' distributed by form of work.

Managers spent a lot of time following up on their employees' work performance, regardless of how their organisation was run during the pandemic. Less time was spent on follow-ups during the pandemic, except for the managers who worked with hybrid groups. Follow-up work has since returned to pre-pandemic levels. There were no differences between managers in different industries, with different levels of experience or span of control. Nor were there any differences between women and men.

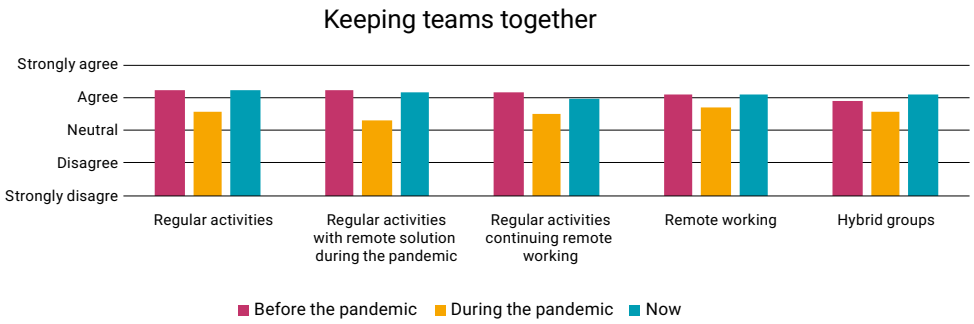

Figure 9. Diagram with responses to the statement: 'A large portion of my work is/was spent keeping teams and work groups together (maintaining a group feeling, being present at social gatherings and work meetings)' distributed by form of work.

The survey found that managers also estimated that a great portion of their work was spent keeping teams and work groups together. This work decreased during the pandemic, regardless of how the organisations were run. Following the pandemic, levels have returned to how they were before – except in organisations that worked on site before the pandemic, but introduced remote work during the pandemic and continue to work remotely. Managers in these organisations estimate working less with keeping teams together today than the other managers (Figure 9). No differences were identified between managers in different industries, with different levels of experience or span of control. Nor were there any differences between women and men.

Challenges, opportunities and looking ahead

Looking ahead, managers could see a number of challenges but also several opportunities. One manager thought that motivating all employees to come back to the workplace would be a challenge. On the other hand, they added

that the chance to work from home would likely remain, to a certain extent at least. Another manager had similar thoughts and highlighted that many workplaces became more flexible during the pandemic and were able to better understand their employees' needs. The following quote provides examples of how two managers are looking ahead::

> Some want to work in the office and others want to work from home, and a mix is good. It's about a combination of understanding and trust. Establishing trust, and trust is something you benefit from. Once you've established trust, you see that things are still being delivered. There are challenges, but it works. (Manager 3)

One challenge faced by some managers was that people cope with working remotely to a varying extent. Hybrid solutions might be a good idea for employees who can manage remote work, and for them the opportunities may be good. For those who can not cope with remote work, there is a risk of exclusion.

> And that exclusion is a catastrophe in itself. (Manager 22)

Looking forward, one manager described that companies need a larger contingency fund in order to avoid ending up in situations where they have to choose between buying goods and materials, or paying out salaries. Therefore, having financial assets are vital, in order to focus and run the organisation without continually needing to put out fires. The importance of competence was also mentioned, looking forward – skilled and competent employees are essential. In the future, the competition for employees will be tough, meaning companies must take care of and work with their employees in a completely different way. Another manager had similar thoughts, saying they believed the pandemic led to many people prioritising their own wellbeing. There has been less focus on jobs and careers, people think about themselves more and ask for help when they need it.

Summary of the results

Managers' work tasks

In summary, the results show that the pandemic changed both the organisations and work tasks for the majority of managers. Managers who started to work remotely experienced greater changes, while managers whose organisations and employees continued to work on site gave a more varied description, depending on industry or operations. In the interviews, some managers explained how their tasks now involve more long-term planning and have become more strategic, while the survey showed that many managers worked less with strategic decisions and development issues during the pandemic, becoming more operative instead. For example, the surveys demonstrated that managers often estimated they had to make quick decisions and 'put out fires'. This applied especially to managers who remained in their workplace, and the number of quick decisions did not decrease during the pandemic.

The interviews showed that the tasks of managers within manufacturing and industry who remained on site during the pandemic were roughly the same as before the pandemic. Additional tasks involved 'Covid-proofing' the workplace. At other organisations, where work continued on site, tasks were often more complicated and took longer, for example in terms of accessing materials, equipment or goods. Tasks often needed re-prioritising, depending on what could take place at that time. Managers who worked in care professions found that their duties changed early on in the pandemic, when infection spread rapidly throughout their organisations. Periods with high levels of sickness absence generated an even greater strain on the staff who were still at work. Similar challenges were identified among managers in schools and preschools.

The interviews found that the managers who remained in their regular workplace during the pandemic worked more to keep their organisations running as expected – more so than those who worked remotely. This is in line with the survey results. Not only did managers have to keep teaching and activities going, they were also responsible for both internal and external information flows, which was evident from both the interviews and surveys. The survey results found that managers spent a lot of time working with communication and distributing information, but this did not change during the pandemic – except for the managers with hybrid work groups.

Additionally, the interviews show that managers' opinions differed about the success of remote work. Some believed remote work was more efficient and more work was done. Other managers were not at all happy with remote work, finding it isolated; they lost focus, motivation and got more work done at the office than at home. Experience with electronic tools and remote work also differed between managers. Some were already somewhat familiar with digital tools, however, the majority had no or very little experience. There were also a number of problems with technology and equipment at the start of the pandemic. Some organisations made remote working compulsory, whereas others allowed their staff to decide where they would work. One challenge with remote work was that natural interactions and collaborations in the workplace were compromised. One way to counteract this was the introduction of new procedures for regular meetings (often online). Nevertheless, advantages with remote work were identified. For example, it was easy to jump between online meetings, there was no need to relocate or travel, and meetings tended to start and end on time.

The survey found that generally, managers worked more than the hours in their contract – before, during and after the pandemic, regardless of industry and gender. However, managers with more than ten employees worked more than those with fewer, as did those with more managerial experience. On the other hand, managers did not work regularly on weekends and evenings. The results showed that managers who mainly worked remotely during the pandemic worked less evenings and weekends compared to before the pandemic. In the interviews, the majority of remote-working managers

mentioned working longer hours, finding they easily ended up working more or skipping breaks. Nevertheless, remote work was seen as being freer and more flexible, leaving room for personal tasks throughout the day. The surveys showed that managers' work-life balance was neither good nor bad, rather somewhere in between. This balance deteriorated during the pandemic, regardless of whether the managers worked remotely or on site. Managers with hybrid work groups had a poorer work-life balance than others. The results indicate differences between gender, managerial experience and industry. Women had a poorer work-life balance than men, as did managers within health and social care compared to those in the other industries. Less experienced managers had poorer work-life balance than those with more experience.

At some organisations, managers and employees worked both on site and remotely. The way this was addressed varied, depending on the organisation and work tasks. Some organisations allowed their employees to choose where they wanted to work. Other organisations addressed the situation by providing employees in risk groups with tasks they could perform remotely. Some managers had split work groups, where some staff were unable to work from home as their tasks could only be performed on site, which may have been seen as unfair. The survey results found that managers spent a relatively greater amount of time working to adapt work and tasks for individual employees, although this reduced during the pandemic. The survey also show that there was a reduction in conflict management and addressing victimisation during the pandemic. However, managers whose organisations remained on site reported having worked more with these matters than those who worked remotely.

Work environment management

The interview results identified a slightly more varied picture relating to work environment management, as regards procedures for managers who remained in their regular workplace, especially during the pandemic. Some managers believed they had established procedures that were followed, whereas others described how they had to (re)prioritise and adapt in order to follow rules and recommendations. This was often the result of a lack of equipment, materials, or staff. A more cohesive picture was painted by managers who worked remotely during the pandemic, as they described the challenges with following set work environment management procedures in employees' homes. The results of the survey study showed that the established work environment management procedures were good. This applied in particular to managers with many direct reports and with long experience. However, the established procedures deteriorated somewhat during the pandemic across all groups.

The interviews found that almost all managers had worked with the physical work environment during the pandemic, although the focus was different. Organisations that remained on site during the pandemic had high levels of safety consciousness, especially regarding the physical work environment. Managers whose employees worked remotely during the pandemic also prioritised the work environment, although in terms of ergonomics. The survey responses identified similar patterns to the interviews, showing that physical

work environment management decreased during the pandemic, especially for groups who worked remotely.

Regarding the organisational and social work environment, the interviews found that managers whose employees worked remotely spent more time addressing these work environment aspects than before the pandemic, by maintaining closer contact with staff, supporting them and maintaining social relationships in the work group. However, according to the survey responses, the overall work with the organisational and social work environments decreased during the pandemic.

Conditions for performing the work task

Generally, the results from both the interviews and surveys show that managers conditions for performing their work worsened during the pandemic. For example, the surveys showed that managers estimated the conditions for performing their work deteriorated during the pandemic.

However, the results indicate that the conditions have returned to the (higher) levels of before the pandemic. Managers with more than ten years' experience reported better conditions than those with less experience. There were no differences between the time spent in the role and different work forms.

The ratings were more varied regarding whether the managers had enough authority and support. Some managers stated having been given more authority, whereas others lacked it. Some managers estimated they had good support from their managers, whereas others wished they had received more support during the pandemic. The survey demonstrated that all groups had less authority during the pandemic, however levels have since returned to how they were before the pandemic. The survey also showed how managers had more formal and informal support both before and after the pandemic, but this was lower during the pandemic. More experienced managers believed they had more authority and clearer roles than those with less experience.

The same pattern can be seen in the survey, regarding the extent to which managers felt appreciated during the pandemic. Here, all groups responded feeling less appreciated during the pandemic, however levels have since returned to how they were before the pandemic. This was also clear in the interviews, when several managers mentioned the lack of appreciation for their work and the time they had spent on keeping the operation running.

Many of those interviewed mentioned the lack of continuing professional development during the pandemic, and how it was pushed aside in favour of the regular operation. This was also shown in the survey, how competence development decreased in all groups. Nevertheless, the results suggest that there was still some access to continuing competence development during the pandemic, and it has since returned to pre-pandemic levels for the majority of groups. Managers with 1–2 years' experience had better access to competence development than those with many years' experience.

Many managers underlined the significance of well-functioning information flows, particularly that this information was up to date, clear and cohesive. The survey showed that many managers felt they had received information to a great extent, although this decreased slightly during the pandemic. Managers who remained in their regular workplace during the pandemic had better access to information than those who worked remotely. The same applies to experienced managers, who had better access to information than those with less managerial experience.

Leadership and relationship with employees

leadership, regardless of whether their organisation worked on site or remotely. These demands increased during the pandemic and remain higher today than previously. However, the results indicate differences between gender and industry, with women believing they face higher leadership demands than men. There were lower demands on managers within the manufacturing and construction industries during the pandemic, compared to the others. The survey also asked the managers to rate their leadership styles. Task-oriented leadership was rated as high by all managers, regardless of where they worked. The same results were evident in questions relating to relationship-oriented leadership that was also rated high by all managers. However, during the pandemic, the relationship-oriented leadership decreased for managers who have since returned to their workplace following the pandemic. Change-oriented leadership was also rated high, regardless of whether work took place on site or remotely. This leadership style also decreased during the pandemic, but has since returned to pre-pandemic levels. Women believed that their leadership was more task and relationship-oriented, compared to the men's responses.

The majority of the managers interviewed did not feel that their leadership had changed during the pandemic. Despite this, some managers who worked on site were forced to step up as leaders during the pandemic, be clearer and more decisive when making decisions, whereas others who worked remotely stated they became more relationship-oriented during the pandemic. Taking one example, several managers mentioned scheduled meetings and conversations with their staff to touch base and discuss both work and the employee's wellbeing. Some managers explained how they had developed more trust, and had more faith that their employees could work just as well from home as they did in the office. This was reflected in the survey results, with managers saying they had less insight into their employees' tasks compared to before the pandemic. In contrast, the managers on site had more insight into their employees' tasks, as did highly experienced managers, compared to those with less experience. Furthermore, the survey also show that managers spent a lot of time following up on their employees' performance and keeping their teams together. This work decreased during the pandemic, regardless of where the organisation was based. It has since returned to pre-pandemic levels.

5. Concluding reflections

In this chapter, we present the patterns have emerged from a more comprehensive overview of the results. Future managerial challenges and limitations of the study are also discussed. The chapter ends with a presentation of our conclusions and suggestions for future research..

Overarching patterns

The following section summarizes the results from both interviews and survey, based on work form, industry, span of control, gender and managerial experience..

Form of work

Some differences relating to managers' work tasks were identified in the analysis regarding form of work. These differences are mainly due to the fact that managers who remained on site spent more time working with performance-oriented activities compared to development-oriented activities. They prioritised keeping their organisation running, took more quick decisions and managed more conflicts than managers who worked remotely. Managers who worked on site also had more work environment management procedures and focused more on the physical work environment, compared to managers who worked remotely. Managers on site also had better access to information, better insight into employees' tasks and spent less time working to keep teams and work groups together, compared to managers who worked remotely. However, based on the survey results, it appears as though the pandemic reduced the intensity of tasks (e.g., there was less need to adapt tasks and fewer instances of conflict management), and reduced focus on development in the organisation. At the same time, the conditions required for managers to be able to do their jobs appear to have deteriorated during the pandemic, and demands on leadership has increased – regardless of the form of work. Although the differences are statistically significant, it is important to highlight that the differences are small..

Industry

Overall, there are few differences between managers in various industries. The differences that were identified are quite small, even though they are statistically significant. Managers in the hotel, health and social care and education sectors stood out, as they rated that the conditions for performing their tasks were worse, they faced higher demands on leadership, and had less focus on development issues during the pandemic, compared to managers in other industries. However, it is important to point out that the results suggest that often, it is managers from certain organisations within an industry that are

affected – not the industry as a whole. This is clear from the great variation in responses from managers within the same industry.

Span of control

Managers with over 10 direct reports spent more time working on different tasks, worked longer hours than expected, and rated they faced greater leadership demands, compared to those with fewer staff. However, the conditions appeared to be equal. Once more, the differences identified in the survey were statistically significant, but not very large. In the interviews, the managers did not see the span of control as a challenge itself, rather the challenge was with having staff who worked flexitime and shifts..

Gender

Some statistically significant differences were identified between women and men, and these differences were very small. The differences were mainly related to tasks, with women's tasks including more administration, communication and work adaptations compared to the men, while men worked more with organisational development compared to women. Women had a poorer work-life balance than men. In addition, women also rated higher leadership demands and having less time to perform their tasks, compared to the men's ratings.

Managerial experience

Some managers mentioned leader experience during their interviews, particularly in terms of having wished they had been more experienced before the outbreak of the pandemic, as they believed this would have made the situation easier for them. The survey identified several differences between managers with different degrees of experience. Those with more experience believed they had better conditions and faced lower leadership demands, however they worked more. There were few differences relating to tasks. More managerial experience may thus involve the same work tasks, although the conditions for performing them may be better the more experience is gained. Once more, the differences identified in the survey were statistically significant, but not very large.

Both similarities and differences can be seen when the results described above are set against previous studies on managerial work. Managers who remained on site had to prioritise operative work and more performance-oriented activities ahead of development-oriented activities (11). Not only did managers working on site have to keep day-to-day tasks running, they also had to address work environment issues to a greater extent than managers working remotely. Managers with large span of control worked more and faced greater leadership demands compared to those with smaller span of control (23). Longer managerial experience showed better conditions and lower demands, while these managers worked more than those with less experience. Both the span of control and managerial experience can also be linked to the manager's position in the professional hierarchy (19, 31). During the pandemic, leadership demands increased within health and social care,

education and hotel industries, at the same time as conditions deteriorated. This demonstrates a consistent pattern – the work situation was more strained for managers in industries with an over-representation of women in the workplace (such as health and social care and education), often with a large span of control and that remained on site during the pandemic.

Challenges and looking ahead

Below, we discuss some of the challenges identified that need to be considered to be able to manage major changes in the future, and unforeseen events similar to the Covid-19 pandemic.

Common guidelines and policies

The place where work is carried out is one area raised by the managers. During the pandemic, working from home was more common, as was a combination of remote work and being on site. Some managers raised the immediate challenge of motivating their employees to return to the workplace, whereas others mentioned the problems of being responsible for a workplace they have no control over (the employee's home). Work environment legislation is mainly based on work that takes place in the employer's premises, which they are able to supervise. Thus, legislation needs to be reviewed to be better suited to various work forms. It is also important that organisations either review or establish internal guidelines and recommendations for how employees are to work to ensure the needs of both the organisation and its employees (39). Such guidelines should be created as part of a dialogue within the organisation, to ensure that everyone understands their content and why they have been designed the way they have. It is also important to keep in mind that some people are unable to work remotely. This partly relates to technology management, as not everyone is able to use new technology. This may risk creating 'A' and 'B' teams and people being treated differently. Furthermore, it may not be possible to arrange a satisfactory work environment in the home. A manager's work environment responsibility applies to all areas – the physical, organisational and social work environments. Thus, it is essential that any policy on remote work also allows for variation within work groups, taking the different conditions of the employees into account.

Resource buffer

Managers also discuss the need for a buffer of resources. Today, many organisations are slimmed-down, with a continual flow of goods, products and services. In the event of major societal changes and unforeseen events, such as the pandemic, these flows become sensitive. Some managers mentioned the importance of organisations creating a resource buffer going forward, in terms of a budget and additional materials, to be able to keep their organisation running in the event of major hardship or challenges. Organisations need to analyse their own core activities, and perform an inventory of existing

resources in order to keep the organisation running, and maintain or increase these resource.

Need for contingency planning

A third area is learning from the experiences of the pandemic and using them to prepare ahead of other major challenges. Previously, Sweden has been spared from having to address major crises, and even if we do not encounter another pandemic, we may face other emergencies, such as an energy crisis. Organisations should therefore revise their crisis management plans and review them regularly, for example, look at the responsibilities of various functions and roles, expected actions and similar.

Employees – the most important resource

During the pandemic, many managers realised the significance of staff wellbeing and that employees who are happy also perform well. Many managers who worked remotely described how during the pandemic, they lost the ability to sense how their staff were feeling, but they successively learnt to actively ask about their wellbeing. Hence, it is essential that managers dare to ask questions about their employees' wellbeing, as well as how work is going, regardless of whether this conversation takes place on site or online. In order to retain employees, it is important to take care of them.

A positive environment for development

Given the areas we describe above, we must review the conditions for managers to be able to address future social challenges – a new pandemic or other events that requires adaptation and flexibility. Generally, managers' conditions are good, although the demands on their leadership increased during the pandemic. Therefore, creating a flexible organisation with sufficient conditions for managers to act appears to be one beneficial measure, preparing them for their managerial role. There is also a general lack of access to continuing competence development for both managers and their employees. Managers and employees need to be happy at work and their wellbeing is important if they want to stay with an employer – but they must also have access to an environment that promotes their development (37).

Furthermore, the results show that strategic organisational-based work was put aside during the pandemic, the consequences of which will be visible over time. Hence, based on the material in this report, there is no way of seeing how managers' work situations will develop over such a long period.

Data evaluation

Based on the data presented, it may seem that the interview study and survey provide contradictory results. One example is that several managers describe having introduced extra Teams-meetings to give employees more attention and support as they worked from home. In contrast, the survey

do not indicate any difference between the managers – regardless of whether they worked on site or remotely. There are several possible reasons why such differences arose between the studies, but perhaps the most significant is the way that the questions were asked. The interview questions investigated how managers' work had changed during the pandemic, whereas the survey questions asked about the presence of work tasks and conditions, and so on. They are simply different measurement units. The differences can likely be explained by managers working remotely providing their staff with support and attention using digital means, whereas managers on site provided equal levels of attention and support – but in the regular workplace.

Problems with the design and selection process need to be mentioned. It would have been desirable to collect data at various stages to enable clearer statements on how managers' work situations changed during the Covid-19 pandemic: first before the pandemic, then during, and finally, today in a prospective study design. As the Covid-19 pandemic was unexpected, such a design was not possible. Instead, respondents were asked to provide retrospective estimates on the situation before and during the pandemic. This means that the estimates on past events were given in light of the situation today. Hence, there is a risk that these estimates are either over or under-estimates. The estimates of the current situation were made shortly after the Covid restrictions were removed, therefore it is possible that any changes following the pandemic had not yet taken place when the data was collected. This limits the opportunity to comment on the long-term consequences.

Another significant element worth mentioning is the sample. The material was collected from an online panel of individuals who registered their interest in participating in studies. Therefore, it is difficult to draw conclusions of the studies' representativeness. There is a risk that the managers whose work situation changed greatly for the worse choose not to participate in online panels, meaning they are not represented in the material (so called selection bias).

Problems occurred with some of the questions relating to the number of direct-reporting managers and direct-reporting employees when the surveys were collected. Managers were unable to state the number of their direct reporting managers. This prevented an analysis of how the pandemic affected different managerial levels. Previous research has shown that managers' work tasks and conditions vary depending on their level. It is possible that the pandemic led to different consequences for different managerial levels, particularly as middle managers and senior managers conduct the majority of the strategic work – work which this report suggests has decreased. First-line managers tend to be on the ground and oversee the daily running of the organisation. In general, they also have a greater span of control. The possibility to state the span of control was also affected by this problem during the data collection. The report could only compare managers with more or fewer than ten employees, however a third group with a greater span of control would have been desirable.

Conclusions

The purpose of this study was to contribute knowledge on managers' work situations during the Covid-19 pandemic. More specifically, the report has focused on describing how managers' work situations changed during the Covid-19 pandemic in terms of work tasks and work environment management, conditions and the managers' own work environment, leadership and relationship with employees.

One conclusion we are able to draw is that managers' total work situation and work content did not change radically during the Covid-19 pandemic – in many respects it was the same as before.

Nevertheless, the results show that the way managers perform their work tasks has changed. More work is now conducted remotely. During the pandemic, operative work tended to prevail at the expense of strategic work. This is likely the result of managers having to spend more time keeping the organisation running. Work environment management had to be reprioritised during the pandemic, depending on the type of organisation and where work was conducted.

The conditions under which managers worked appear to be good and deteriorated only marginally as a result of the pandemic. Managers' leadership does not appear to have changed, even though they felt that the demands on their leadership had increased. However, the results show some differences that are the result of the way work was conducted, the industry, the manager's experience, the number of direct reports they have, and if the manager is a man or a woman. One pattern is consistent – managers in certain sectors such as health and social care and education, as well as the hotel industry had a more strained work situation. Women are often over-represented in these industries and work groups tend to be larger. Additionally, these organisations mainly remained on site during the pandemic.

In order to support managers and their work, organisations need to create common guidelines and policies, a resource buffer for addressing any unforeseen events, develop contingency plans and actively promote the development environment for both employees and managers.

Proposals for future research

We identified several knowledge gaps and areas in need of future research as we worked with this report. We see a need for continued research into how access to continuing professional development and learning are addressed in conjunction with remote work. The results show that these areas were put aside, and enabling spontaneous learning appeared more difficult. As

it appears that various forms of hybrid work will still be common in the future, there is a need for research to continue to study the consequences of these work forms. For example, creativity and growth are central to both the organisation and employees, however, we also need to study how learning conditions can be created when not all employees can be found in the same place, and what consequences this may have.

There is also a need for more research on the mechanisms that led to development work and change-oriented initiatives being placed aside during the pandemic, in favour of more performance and operations-oriented activities. Was this the result of changes to the way resources were prioritised and that the restrictions in place created unfavourable conditions for development? Or have other individual or structural factors been significant?

We can also conclude that this study could be repeated, but with a more pronounced employee perspective. As the results have indicated, manager's work rests on leading employees. However, this project has not included employees' experiences of the pandemic. Therefore, a future study could use and partially modify the instruments created in this project, to capture the other side of the coin, namely how employees' work situations and co-workership were affected. For example, it could be possible to examine how their view of leadership changed during and after the pandemic, as well as their need for guidance, support and feedback.

Matters relating to stress, wellbeing and health during the pandemic also need further investigation. We have not investigated these issues in this study, as they are sensitive topics that require ethical review. The time frame for this project did not enable such a review, hence, no ethically sensitive topics have been examined. These issues, however, could provide an additional dimension to how staff were affected during the pandemic.

Finally, more research is needed into the long-term effects of the pandemic. As this report has already mentioned, the study was conducted shortly after the final restrictions were lifted. Discussions have likely continued at organisations, focusing on the structure of 'new' working life and how work will take place going forward, meaning these perspectives have been omitted from this study. It is probable that the pandemic experiences, of both managers and employees, will be significant to these discussions. Similarly, the autonomy and self-determination that remote work provided staff during the pandemic will also be of importance, in terms of expectations on continued autonomy, renegotiation of power and influence in the organisation, or remote work being offered as a perk when recruiting. Future research needs to re-address whether – and how – an organisation's culture and cooperation has changed as a result of the experiences gained during the Covid-19 pandemic. The same applies for both managerial and other professional roles.

6. References

1. The Public Health Agency of Sweden. Accessed via: www.folkhälsomyndigheten.se

2. Statistics Sweden New statistics: So many have worked from home during the pandemic. 2021. Accessed via: https://www.scb.se/pressmeddelande/ny-statistik-sa- manga-har-jobbat-hemifran-under-pandemin

3. Appelgren E. Media Management During COVID-19: Behavior of Swedish media leaders in times of crisis. Journalism Studies. 2022 Apr 26;23(5–6):722–39.

4. Ipsen C, Kirchner K, Hansen JP. Experiences of working from home in times of

covid-19 International survey conducted the first months of the national lockdowns March-May, 2020. 2020. Accessed via: https://doi.org/10.11581/dtu:00000085

5. Swedish Work Environment Authority Organisational and social work environments. Provisions 2016. Accessed via https://www.av.se/globalassets/filer/publikationer/foreskrifter/organisatorisk-och- social-arbetsmiljo-foreskrifter-afs2015_4.pdf

6. Carlson S. Executive behaviour. Stockholm: Stockholm; 1951. 122 p.

7. Mintzberg H. The nature of managerial work. New York: Harper & Row; 1973. 298 p.

8. Stewart R. A model for understanding managerial jobs and behavior. Academy of Management Review. 1982;7(1):7–13.

9. Hales C. What do managers do? A critical review. Journal of Management Studies. 1986;23(1):88–115.

10. Tengblad S, editor. The work of managers: towards a practice theory of management. Oxford; New York: Oxford University Press; 2012. 365 p.

11. Efimov I, Harth V, Mache S. Health-oriented self- and employee leadership in virtual teams: A qualitative study with virtual leaders. IJERPH. 2020 Sep 7;17(18):6519.

12. Wallo A. Chefers arbete. I: Mot ett förändrat ledarskap? Om chefers arbete och ledarskap i ett organisationsperspektiv. Lund: Studentlitteratur; 2016.

13. Tyrstrup M. On the brink of failure: the art of impromptu action in everyday leadership. Lund: Studentlitteratur; 2006.

14. Wallo A. The leader as a facilitator of learning at work. A study of learning-oriented leadership in two industrial firms [Doctoral thesis]. Linköping: Linköping University; 2008.

15. Wallo A, Ellström P, Kock H. Leadership as a balancing act between performance and development orientation: A study of managers' and co workers' understanding of leadership in an industrial organisation. Leadership & Org Development J. 2013 May 3;34(3):222–37.

16. Hales C. Rooted in supervision, branching into management: Continuity and change in the role of first-line manager. Journal of Management Studies. 2005 May;42(3):471–506.

17. Styhre A, Josephson P. Revisiting site manager work: Stuck in the middle? Construction Management and Economics. 2006 May;24(5):521–8.

18. Tengblad S. Is there a 'New Managerial Work'? A comparison with Henry Mintzberg's classic study 30 years later. J Management Studies. 2006 Nov;43(7):1437–61.

19. Lundqvist D, Reineholm C, Gustavsson M, Ekberg K. Investigating work conditions and burnout at three hierarchical levels. Journal of Occupational and Environmental Medicine. 2013;55(10):1157–63.

20. Li EY, Shani AB Rami. Stress dynamics of information systems managers: A contingency model. Journal of Management Information Systems. 1991 Mar;7(4):107–30.

21. Parasuraman S, Cleek MA. Coping behaviors and managers' affective reactions to role stressors. Journal of Vocational Behavior. 1984 Apr;24(2):179–93.

22. Sundkvist Y, Zingmark K. Leading from intermediary positions: First-line administrators' experiences of their occupational role and situation. Scandinavian Journal of Occupational Therapy. 2003 Jan;10(1):40–6.

23. Van Bogaert P, Adriaenssens J, Dilles T, Martens D, Van Rompaey B, Timmermans O. Impact of role , job and organizational characteristics on Nursing Unit Managers' work related stress and well being. J Adv Nurs. 2014 Nov;70(11):2622–33.

24. Skagert K, Dellve L, Eklöf M, Pousette A, Ahlborg G. Leaders' strategies for dealing with own and their subordinates' stress in public human service organisations. Applied Ergonomics. 2008 Nov;39(6):803–11.

25. Udod SA, Care WD. 'Walking a tight rope': an investigation of nurse managers' work stressors and coping experiences. Journal of Research in Nursing. 2013 Feb;18(1):67–79.

26. Wong SS, DeSanctis G, Staudenmayer N. The relationship between task interdependency and role stress: A revisit of the job demands–control model. J Management Studies. 2007 Mar;44(2):284–303.

27. Ouchi WG, Dowling JB. Defining the span of control. Administrative Science Quarterly. 1974;19(3):357–65.

28. Lee H, Cummings GG. Factors influencing job satisfaction of front line nurse managers: A systematic review. Journal of Nursing Management. 2008 Oct;16(7):768–83.

29. Wallin L, Pousette A, Dellve L. Span of control and the significance for public sector managers' job demands: A multilevel study. Economic and Industrial Democracy. 2014 Aug;35(3):455–81.

30. Persson O, Thylefors I. Career with no return: Roles, demands, and challenges as perceived by Swedish ward managers. Nursing Administration Quarterly. 1999;23(3):63– 80.

31. Wastesson K, Fogelberg Eriksson A, Nilsson P, Gustavsson M. First-line managers' practices and learning in unpredictable work within elderly care. Studies in Continuing Education. 2022 Sep 2;44(3):376–91.

32. Broadbridge A. Retail managers: Their work stressors and coping strategies. Journal of Retailing and Consumer Services. 2002 May;9(3):173–83.

33. Brett JM, Stroh LK. Working 61 plus hours a week: Why do managers do it? Journal of Applied Psychology. 2003;88(1):67–78.

34. Thomas R, Linstead A. Losing the Plot? Middle managers and identity. Organization. 2002 Feb;9(1):71–93.

35. Lindholm M, Dejin-Karlsson E, Östergren PO, Udén G. Nurse managers' professional networks, psychosocial resources and self-rated health: Nurse managers' self-rated health. Journal of Advanced Nursing. 2003 Jun;42(5):506–15.

36. Lundqvist D, Fogelberg Eriksson A, Ekberg K. Managers' social support: Facilitators and hindrances for seeking support at work. Work. 2018 Apr 6;59(3):351–65.

37. Reineholm C, Lundqvist D, Wallo A. Chefers utvecklingsmiljöer: en kunskapsöversikt. Linköping: Linköping University; 2021. Helix Working Papers, Report No.: 21:005.

38. Ekvall G, Arvonen J. Change-centered leadership: An extension of the two-dimensional model. Scandinavian Journal of Management. 1991 Jan 1;7(1):17–26.

39. Lundqvist D, Wallo A. Ledarskap som främjar medarbetares välbefinnande och arbetsprestation vid distansarbete hemifrån: en systematisk kunskapsöversikt. Linköping: Linköping University; 2022. Helix Working Papers, Report No.: 22:001.

40. Jaques T. Issue management and crisis management: An integrated, non-linear, relational construct. Public Relations Review. 2007 Jun;33(2):147–57.

41. Burnett JJ. A strategic approach to managing crises. Public Relations Review. 1998 Dec;24(4):475–88.

42. González-Herrero A, Pratt CB. An integrated symmetrical model for crisis-communications management. Journal of Public Relations Research. 1996 Apr;8(2):79–105.

43. Bundy J, Pfarrer MD, Short CE, Coombs WT. Crises and crisis management: Integration, interpretation, and research development. Journal of Management. 2017 Jul;43(6):1661–92.

44. James EH, Wooten LP, Dushek K. Crisis management: Informing a new leadership research agenda. ANNALS. 2011 Jun;5(1):455–93.

45. Boin A, Hart P 't. Public leadership in times of crisis: Mission impossible? Public Administration Review. 2003 Sep;63(5):544–53.

46. Pearson CM, Clair JA. Reframing crisis management. The Academy of Management Review. 1998 Jan;23(1):59.

47. Thornton K. Learning through COVID-19: New Zealand secondary principals describe their reality. Educational Management Administration and Leadership. 2021;349–409.

48. Caringal-Go JF, Teng-Calleja M, Franco EP, Manaois JO, Zantua RMS. Crisis leadership from the perspective of employees during the COVID-19 pandemic. Leadership & Organization Development Journal. 2021 Jan 1;42(4):630–43.

49. Wallo A, Kock H, Nilsson P. Accelerating and braking in times of economic crisis: Organisational learning in a top management team. Euro J of Training and Dev. 2012 Nov 9;36(9):930–44.

50. Berglund M, Harlin U, Elg M, Wallo A. Scaling up and scaling down: Improvisational handling of critical work practices during the COVID-19 pandemic. Management Learning. 2022 Dec 8;135050762211379.

51. SNI 2007 Standard för svensk näringsgrensindelning 2007 = SNI 2007 Swedish Standard Industrial Classification 2007. Stockholm: Statistics Sweden; 2007

Appendix 1 – Method and approach

This appendix presents a detailed description of the approaches used in this report. There will be an emphasis on the processing and analysis that form the basis of the results in the report. The purpose and questions were formulated based on the assignment from the Swedish Agency for Work Environment Expertise to investigate managers' work situations during the Covid-19 pandemic (A2021/02355, 2021-12-16). Empirical data was collected from 1 002 surveys and 40 interviews with managers from various organisations and industries.

The interview study

The authors followed a semi-structured interview guide when designing the interviews in the study. These were based on previous research into managers' tasks and conditions, their roles and leadership and work environment management (see Appendix 2). The Swedish Agency for Work Environment Expertise commissioned Enkätfabriken to collect the data. Data collection took place during July and August 2022. All interviews were conducted remotely (using Teams, Zoom or by telephone), and lasted between 25 and 40 minutes. The semi-structured interview guide contained open questions about the interviewee's background (see Tables 1–5), and about how managers' work tasks, leadership, work environment management and personal circumstances changed during the Covid-19 pandemic. Questions also addressed the challenges they faced, the future possibilities they see, and their own satisfaction.

The selection criteria stated that the interviewee must have been a manager for at least two years and have both staff and budget responsibility. Efforts were made to ensure variation in both industry and organisation. Of the 40 interviewees, 28 were first-line managers, and 12 were middle managers (i.e. had both subordinate and superior managers).

The analysis began with a read-through of all the interview transcriptions to obtain an overall understanding. The transcripts were then imported into the QSR NVivo analysis tool, and descriptive codes (nodes) were created based on the questions. The material was subsequently re-coded and a content analysis conducted. This stage identified the following eight themes:

- changed work situation
- work environment management
- conditions
- leadership
- restrictions and rules
- injustice
- remote work in general
- looking ahead.

These themes were processed, resulting in the five themes presented in the description of the results. During the analysis, it became evident that descriptions varied depending on whether managers were responsible for organisations that had remained on site or worked remotely during the pandemic. Hence, the results section has been structured based on these two perspectives.

The survey

The authors created the questions in the electronic survey based on previous studies and theories about managers' tasks and conditions, their roles and leadership, and work environment management. The survey comprised 51 questions divided into five sections (Appendix 3). It began with background questions about gender, age, number of direct reports, work hours, and so on. The following section addressed the managers' tasks in relation to work hours, decision making, communication, conflict management and degree of operative or strategic focus at work. The next section looked at work environment management issues, for example if action was taken regularly with the physical work environment. The subsequent section looked at personal leadership in relation to general leadership styles. It also asked about leadership tasks such as insight and following up on employees' work processes. Finally, questions were asked about the conditions surrounding performing their duties, such as time, authority, budget and clarity of their role. All questions, except those relating to age, gender, industry and experience, looked at three periods. Each question asked the respondents to estimate the situation before the pandemic, during (between spring 2020 and spring 2022), and today (August 2022). The respondents answered a total of 139 survey questions.

The selection criteria required respondents to be managers with both employee and budget responsibilities. Hence, the survey included a control question. If the respondent was not a manager with both staff and budget responsibility, the survey was closed and they were unable to continue to the other questions.

The Swedish Agency for Work Environment Expertise commissioned Enkätfabriken to collect the surveys during July and August 2022. Data was collected from an online panel, a database of people who have registered to participate in surveys (read more (in Swedish) on Enkätfabriken.se/webbpanel).

Data collection was closed once 1 000 participants who met the selection criteria had responded. The collected data was delivered de-identified so it could be analysed by the authors. The material consisted of 1 002 surveys. 529 (53%) of respondents were women and 473 (47%) men. The mean age was 44 (SD: 11.60).

The qualitative material was analysed first. The findings from the qualitative analyses were used to investigate whether there were differences for managers depending on industry, managerial experience, span of control, gender, and whether the organisation had remained on site or worked remotely in various forms.

Mixed-design variance analyses were the primary analyses used. Mixed design involves simultaneously testing the in-group and inter-group differences, as well as the interaction between them. For example, in this report, a test was conducted to determine whether there were differences in the ratings before, during and after the pandemic (now), differences between work forms, and if there were interaction effects – i.e. if there were differences between the form of work before, during and after the pandemic (now).

Simple variance analyses and t-tests were also conducted. These only compared inter-group differences. These tests were used mostly to follow up and clarify the results of the mixed-design variance analyses in order to use other post-hoc tests that are less sensitive to different group sizes. One example is where differences between industries were explored based on work hours during the pandemic. Both the Bonferroni correction and Games-Howell post-hoc tests were used to investigate any differences between groups when statistically significant results were identified. We have also used a non-parametric equivalent to each parametric test (Kruskal-Wallis, Mann-Whitney U) where the questions can be viewed as ordinal. The parametric equivalents alone have been presented as these tests indicated the same conclusions. The differences between groups that are presented in this report refer to statistically significant data with a degree of probability above 95% ($p<.05$).

IBM SPSS 28 was used for all statistical analyses.

The groups compared were: work form, industry, managerial experience, gender, and span of control. Work form was based on information provided by the managers about how they and their employees worked before, during and after the pandemic. This generated five groups (see Table 1). Thirteen managers did not respond to the question and could not be grouped. Managers were able to select their industry based on Statistics Sweden's standard classification of occupations (51), resulting in 17 industries (see Table 2). Three managers did not answer the question. Managers were also asked to state their experience as years, which were then divided into three groups (see Table 3). Five managers did not answer the question. Managers were able to state their own gender identity (see Table 4). As regards span of control, the managers' responses were divided into two groups (see Table 5). Eleven managers did not answer the question.

Table 1. Five groups of forms of work

Form of work	Number in interview study	Number in survey study
In the regular workplace, before, during and now	20	441
In the regular workplace now and before, however the majority of work was conducted remotely during the pandemic	16	117
Work was conducted on site before the pandemic, however remote work was introduced during the pandemic and the majority of work continues to be performed remotely	1	257
Remote work, before, during and now	0	117
Hybrid work groups, with staff who mainly work on site and other staff who mainly work remotely	3	57
Total	40	989

Table 2. Distribution of data based on industry

Industry	**Number in interview study**	**Number in survey study**
Agriculture, forestry, fishing	1	17
Manufacturing	5	104
Electricity, gas, heating, cooling provision	0	18
Construction	1	67
Retail	6	116
Transport and warehousing	0	52
Hotel and restaurant	3	49
Information and communication	4	75
Finance and insurance	1	39
Property	0	29
Law, economics, science and technology	1	48
Rental	3	17
Public administration and defence	8	80
Education	3	61
Health and social care	3	116
Culture, entertainment, leisure	1	35
Other service profession	0	76
Totalt	40	999

Table 3. Distribution of data based on managerial experience

Managerial experience	Number in interview study	Number in survey study
One to three years	14	262
Four to nine years	11	314
Ten years or more	15	421
Total	40	997

Table 4. Distribution of data based on gender

Gender identity	Number in interview study	Number in survey study
Man	24	529
Woman	16	473
Total	40	1002

Table 5. Distribution of data based on number of direct reports (span of control)

Span of control	Number in interview study	Number in survey study
Fewer than ten direct reports	19	469
10 or more direct reports	21	522
Total	40	991

Appendix 2 –Interview guide

Any general questions?

What is your year of birth?

What is your gender identity?

Where do you work? (industry, sector, profession)

Did you work full-time during the pandemic? How much did you work before the pandemic? How much do you work now? If part-time, what percentage of full-time employment are you working/did you work?

Do you have both budget and staff responsibility?

Do you have subordinate managers, if yes, how many?

Do you have subordinate staff, if yes, how many?

How long have you been a manager? (total and at organisation respectively) Did you work from home during the pandemic? Roughly how much? Did you work from home before the pandemic? Roughly how much? Do you work from home now? Roughly how much?

Where did your direct reports (and any managers) work during the pandemic? (regular workplace, distance from home, hybrid?) Have you had groups that worked on site and others that worked from home?

What led to you/you and others working from where you worked?

If yes (personal), what do you think about working from home?

If yes (employees), what do you think about the employees having worked from home?

Work and work situation

What were the greatest differences in your work, if you compare the time before and during the pandemic? (e.g., work tasks, relationship with colleagues). What is it like now?

Has the way you lead changed during the pandemic? How?

How did systematic work environment management fare during the pandemic? Did you need to change or adapt anything in particular?

What are the greatest challenges/opportunities that lie ahead (with your work)?

Conditions

If you compare the time during the pandemic with how things were before, do you think that the conditions for you to perform your work have changed? In what way? (Conditions may include time, authority, clarity with your role, support, individual learning, etc.). Are there any conditions you think will be particularly important going forward?

Conclusion

On the whole, are you satisfied with your work? Has the pandemic changed this in any way? Anything else you would like to add?

Appendix 3 –Survey

Any general questions

1. Year of birth ? _____ (Drop-down list with years)

2. What is your gender:

☐ Man

☐ Woman

☐ Other

☐ Don't Know

3. Are you a manager (i.e. do you have staff and budget responsibilities)?

☐ No

☐ Yes

4. How many subordinate managers are you directly responsible for?
(Drop-down list with number)

5. How many subordinate staff are you directly responsible for
(Drop-down list with number)

6. How long have you had a managerial position? Combine all your experience.
(Drop-down list with years)

7. Which industry do you work in?
(Drop-down list with industries)

'Before the pandemic' refers to the period leading up to the end of February 2020.

'During the pandemic' refers to the period from the pandemic's outbreak in Sweden in spring 2020, until it was no longer classed as being dangerous to public health and society in spring 2022. We are interested in this period as a whole, even though there were various waves of Covid-19.

'Now' refers to the period from March 2022 to present day.

8. Did you/do you work...? Full-time (40 hours/week) Part-time

Before the pandemic	☐
During the pandemic	☐
Now	☐

9. What percentage of full-time did you/do you work...?

Before the pandemic	___ %
During the pandemic	___ %
Now	___ %

10. What percentage of your working hours was/is spent working from home...?

Before the pandemic	___ %
During the pandemic	___ %
Now	___ %

11. Did/do your direct reports (including any managers) work primarily...?

	in the regular workplace only	remote only	hybrid (i.e. combine work in the regular workplace with working from home)	none of the above, I am responsible for work groups where some work in the regular workplace and others work from home
Before the pandemic	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐
Now	☐	☐	☐	☐

To what extent do the following statements apply to you?

12. I worked/work many hours per day

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

13. I worked/work evenings and weekends in order to keep up

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

14. I had/have a good insight into my employees' work and tasks

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

15. I had/have good access to information when needed

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

16. Getting the organisation to run as expected

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

17. Organisational development

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

18. Keep the team and tasks together (maintain a group feeling, seeing each other at meetings)

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

19. Adapt work and tasks based on (individual) employees' conditions and needs

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

20.Communicate and spread information

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

21. Support and encourage employees' learning and continuing professional development

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

22. Manage conflicts and victimisation

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

23. Follow up on employee performance

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

24. Take quick decisions 'firefighting', etc. (reactive work)

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

25. Take long-term decisions, strategic planning, etc. (proactive work)

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

26. Complete administrative tasks

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

To what extent do the following statements apply to you?

27. There were/are high demands on me and my leadership

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

28. My leadership had/has great focus on the task, structure and organisation

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

29. My leadership had/has great focus on employees, work group and relationships

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

30. My leadership had/has great focus on change, innovation and novel thinking

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

To what extent do the following statements apply to you?

31. We had/have established work environment management procedures

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

32. We worked/work regularly with the physical work environment

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

33. We worked/work regularly with the organisational/social work environment

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

34. I had/have sufficient equipment (e.g. furniture, technology) at work

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

To what extent do the following statements apply to you?

35. I had/have the right conditions for completing my work

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

36. I had/have enough time to complete my tasks

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

37. I had/have enough authority at work

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

38. My role and tasks were/are clear to me

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

39. I received/receive enough support from formalised support systems (e.g. HR, IT, finance) when needed

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

40. I received/receive sufficient informal support when needed (e.g. meetings with manager colleagues)

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

41. Management was/is involved in the work I did

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

42. Employees were involved in the work I did

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

43. I had/have good opportunities for learning and skills development

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

44. I had/have sufficient financial conditions (e.g. budget) at work

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

45. Work premises could/can be adapted based on the organisation's needs

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

To what extent do the following statements apply to you?

46. Generally, I felt/feel I have a good work-life balance

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

47. I had/have the right conditions to work efficiently

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

48. I was/am appreciated for the work I did, to the extent I believe I deserve

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

49. I had/have good opportunities for career development

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

50. I often thought/think about stopping managerial work

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

51. I was/am very satisfied with work as a whole, everything combined.

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	don't know/ choose not to answer
Before the pandemic	☐	☐	☐	☐	☐	☐
During the pandemic	☐	☐	☐	☐	☐	☐
Now	☐	☐	☐	☐	☐	☐

Swedish Agency for Work
Environment Expertise

www.sawee.se

ISBN 978-91-89747-37-1