



SCHOOL OF
ECONOMICS AND
MANAGEMENT

Transforming into a learning organization?

*A study of challenges and conditions that leaders face when
supporting the development of a learning organization*

by

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Abstract

The concept of learning organizations is one of the most popular concepts within management research. There seems to be a continuous need for learning in organizations as it equips companies to survive rapid changes in the internal and external organizational environment as well as competition. Still, the idea is challenging to implement, and researchers as well as practitioners call for a need to concretize the concept. This study aims to facilitate the practical development of learning organizations. Through a qualitative approach, a systematic literature review was conducted to explore recent empirical research on how leaders can support the development of learning organizations. Additionally, data was gathered from a case study at SSAB, including six individual interviews and two focus group interviews (N=13). The aim was to explore conditions and potential challenges for leaders to support the practical development of learning organizations.

The systematic literature review results indicate that a leader needs to be aware of learning at all times through behaviors such as showing empathy, openness, creating a trusting environment, coaching, and supporting. It is not only concrete practices, but also skills, knowledge, and mindsets that the leader must develop and use situationally to support organizational learning. In the case study, the result of the qualitative content analysis concludes that potential challenges are prioritizing learning, developing a shared vision when dealing with change, and creating an inclusive and supportive learning environment. Furthermore, the results indicate the following conditions to be necessary; time for reflection and collaborative activities, fostering psychological safety, building relationships with employees, and adopting a learning mindset. Given that leaders have an important role in reinforcing learning, this research contributes valuable insights into how practitioners can support and build a learning organization. This awareness can help organizations manage conditions and potential challenges essential when developing a learning organization.

Key words: Learning Organization, Organizational Learning, Leadership Practices, Management, Learning Activities

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Have a great one!

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1. Introduction

Mission: become a learning organization.

Deadline: yesterday.

Comically, this is an organizational reality for many professionals in HR and other fields. There is a battle companies have to win, the battle for skills and the battle for the most innovative solutions. Buzzwords such as innovation, psychological safety, and self-directed learning are frequently mentioned in relation to the concept of learning organization. Nonetheless, these buzzwords describe organizational needs in order to survive rapid changes in the internal and external organizational environment as well as competition. That organizations need to learn is as much a truth today as it was thirty years ago when the concept started to increase in popularity.

Researchers have described the benefits of being a learning organization since the 1990s. The concept of learning organizations is and has been one of the most popular ideas within management research of the last three decades (Örtenblad, 2020). To continuously learn and develop within all levels of the organization is not only a question of competitiveness but a question of survival for organizations today. Learning organizations adopt learning as a strategy. They ensure that learning is built into processes, policies and culture so that it does not happen arbitrarily but by design (Garvin, 1993). The benefits of implementing the concept are described as many. The idea of the learning organization holds the promise of flexibility, reinvention, innovation, and business growth to name a few (Garvin, Edmondson & Gino, 2019; Gino & Staats, 2015). Nevertheless, the incentives and needs remain but the concept and its implementation is proving elusive. Although several companies have implemented parts of the concept, few companies can be said to live up to the full-scale idea. Global firms such as Apple, Google, and IBM to name a few are sometimes highlighted as putting learning at the top of the agenda and ensuring both that resources and commitment to learning are available and shared by all within their organizations (Young Entrepreneur Council, 2020).

A recent report "The State of L&D in 2022" that was commented on by Forbes (Perna, 2022) shows the evolution of Human Resource Development (HRD) in organizations. The responses reflect the top priorities for HR professionals responsible for HRD as well as employee needs. More than half of the HR managers who responded to the survey say their company is facing a skills gap. Half of them are addressing it by training existing employees, in other words upskilling and reskilling their workforce. At the same time, the report shows that employees see a learning culture and opportunities for learning as one of the main

reasons for increasing work satisfaction, with 76 percent of employees in the study stating this. The report is not the only one to describe the need for learning. Learning mindset and learning culture in all parts of the organization is mentioned as one of the most important elements to both compete and deliver today and adapt more easily to future demands (McKinsey Organization Blog, 2021).

In addition to a supportive learning environment, leaders and others in power are often singled out as having an important role in facilitating the development of learning organizations. Garvin, Edmondson and Gino (2019) point out that what leaders signal through their behaviors is important for the organization as it can hinder or create opportunities for employees to learn at the workplace. For example, suppose leaders actively listen to and question their team members, welcome and entertain new perspectives and ideas, and allow activities such as problem identification and knowledge sharing to be part of the work schedule. In that case, employees are likely to feel more encouraged to contribute their unique input and engage in learning activities.

Even so, leaders and companies find it difficult to practice what they preach (Gino & Staats, 2015). Therefore, the remaining question in the practical development of learning organizations is: How do we move from the idea of the learning organization into practice? Through research conducted over the past decade, some conclusions why organizations find it difficult to practice continuous learning are biases that cause people to focus too much on success. Rather than taking time for reflection and encouraging reflection over doing (Gino & Staats, 2015). Garvin, Edmondson, and Gino (2019) point out several factors that make implementation difficult, for example, the lack of sequential steps to create the correct learning conditions and the absence of tools and standards for assessment.

Researchers highlight, among other things, the need to concretize the concept of the learning organization and what it means to be a learning organization (Örtenblad, 2020; Tuggle, 2016). There is a gap between theory and practice and initiatives to bridge this gap could possibly help to make the step towards implementing elements of learning organization easier for practitioners. Örtenblad (2020) suggests using researchers' conceptual expertise and practitioners' practical knowledge to identify possible actions and test these in an organizational context. The author proposes action research which would be a suitable method with a longer time frame. However, our study can be seen as an attempt to fulfill the first part of the concretization of the concept, that is using elements from research and then letting practitioners discuss and concretise them. Furthermore, few attempts have been made to examine what contextual factors influence learning organizations (Tuggle, 2016).

1.1 Purpose and Research Questions

The overall purpose of this study is to facilitate the practical development of learning organizations. We aim to increase the understanding of how practitioners can support and build a learning organization. This research project explores the challenges and conditions for leaders when supporting and building a learning organization.

We will conduct a systematic literature review, followed by a case study. In conducting a systematic literature review, we aim to explore the current empirical research on how leaders can support the development of learning organizations. Afterwards, the findings of the empirical research will be explored in a real-life organizational context. Therefore, we will conduct a case study that aims to investigate what challenges and what conditions are necessary for the development of the learning organization. The case study's relevance is to explore the findings of the systematic literature review from a practical perspective, based on the subjective interpretation of managers and employees in an organization.

The intention is that our research findings will provide insights of the practical development of learning organizations to practitioners, academics, and other stakeholders interested in learning and development.

The research project seeks to address the following research questions to fulfill this research purpose:

1. What practices can be identified on how leaders can support organizational learning based on empirical research?
 - 2.1 What are the challenges for leaders to support the practical development of learning organizations?
 - 2.2 What are the conditions necessary for leaders to be able to support the practical development of learning organizations?

1.2 Delimitations

To fulfill the research objectives within the time limit, some demarcations of the scope were needed. We chose to focus on leaders because they have an influence on the development of a learning organization. However, we are aware that developing a learning organization may involve looking at it from a multilevel perspective: individual, team and organizational (Crossan, Lane & White, 1999). Nonetheless, our focus on leaders is a delimitation.

Furthermore, the case study is conducted at one company and one specific industry. Thus, it is contextually dependent and there may be other factors and potential managerial challenges found in other settings which are not investigated in this research.

An additional delimitation is focusing on the practical development of learning organization. Thus, we aim to do this by collecting data based on empirical research in the systematic literature review, as well as highlighting practical elements in the case study. This was a choice based on the interest of trying to concretize the idea of the learning organization.

1.3 Choice of the case

SSAB is a Nordic and US-based steel company with a leading position in high-strength steel and related services. The company's vision is “*a stronger, lighter and more sustainable world*” (SSAB, 2022). SSAB aims to be the first, in 2026, to offer fossil-free steel to the market and largely eliminate carbon dioxide emissions from its operations around the year 2030 (SSAB, 2022).

When conducting a company information interview, we understood that the company's vision requires it to undergo a significant transformation involving upskilling and reskilling the present workforce. Additionally, it requires large-scale recruitment of new talent and major organizational changes, shifting from traditional industry-related ways of working to those that are more adaptable and promote innovation, change, and learning.

The company sees the need to become a learning organization and is at a stage in the transformation process where it is important to explore what is practically feasible and desirable to support the development of a learning organization. Therefore, this particular company can contribute to our research scope and objectives by providing a leadership perspective of perceived challenges and conditions at this initial stage of transforming SSAB into a learning organization.

1.4 Outline of thesis

The six major chapters consist of an introduction, theoretical background, methodology, findings, discussion, and analysis of the systematic literature review and the case study, together with a conclusion in the end. The first chapter ([Chapter 1](#)) consists of an introduction, followed by a theoretical background ([Chapter 2](#)) that provides a theoretical context of organizational learning and learning organization, how to build a learning organization and how leadership behavior influences learning. The methodology section ([Chapter 3](#)) addresses the research approach, context, and design. Further, the methodology chapter describes the two data methods, namely systematic literature review and case study, and how the data were collected and analyzed with two sections on data quality and

limitations at the end. The chapter aims to provide the reader with a critical reflection on the selected methodological standpoints. Thenceforth, findings of the systematic literature review ([Chapter 4](#)) are presented, with sections of identified themes from the content analysis. The chapter ends with a discussion based on research question 1. Further, a discussion and analysis ([Chapter 5](#)) of the case study is presented in relation to research question 2.1 and 2.2. Lastly, a conclusion ([Chapter 6](#)) is provided to present the research aim, as well as practical and managerial implications related to the findings. In addition, the chapter covers the study's limitations and future research proposals.

2. Theoretical background

This chapter aims to provide a theoretical background of this study's main concepts and key terms. The definition of a learning organization and organizational learning will be discussed, and the topics of leadership in a learning organization will be outlined as we have narrowed down our focus to highlighting the role of the leader.

2.1 Learning organization

2.1.1 Definition of Learning organization and Organizational learning

When defining learning organization and organizational learning, the concept has many definitions and meanings. Örtenblad (2020) states the risk of these different versions and interpretations as it paralyzes both researchers and practitioners who want to put the learning organization idea into practice. Thus, we aim to elaborate on some of the concept definitions that we find most relevant to our research purpose. We attempt to embrace the complexity of the concept as this allows for a more open view of the definitions.

Although there are different approaches to a learning organization, some of the common assumptions are that organizations can learn as they consist of individuals who generate learning and knowledge that benefits the organization. Learning organizations furthermore display continuous learning and adaptive characteristics. The literature describes differences in the concepts of learning organization and organizational learning. The latter is more about collective learning experiences to gather knowledge and develop skills. Organizational learning can be envisioned as acquiring knowledge and using it to streamline processes and adapt to the internal and external work environment. The characteristics of a learning organization should be reflected at different levels; individual, team, and structural or system levels (Yang, Watkins & Marsick, 2004). Learning organization is an idea containing many elements. However, we will use the two terms in a way where learning organization is an intentional effort to integrate and manage several manifestations of the organizational learning process.

One definition expressed by Garvin (1993) is to view a learning organization as one that is “skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights” (Garvin, 1993, p 80). He means that learning organizations do not only think about new ideas but act on them. For example, through actively trying to change behaviors and mindsets to advance operations and decision making.

Another definition is stated by Senge (1990), who defines a learning organization as one where people continually expand their capacity to create the results they strive for. This

requires new expansive patterns of thinking to be nurtured and people who are continually learning how to learn together. The learning organization seeks to harness the power of groups of individuals to solve complex problems using systems thinking, that is, bringing together different parts of the organization to see things as a whole for growth (Senge, 1990). Bui (2020) on the other hand adds more elements to the definition. He means that a learning organization has a supportive learning culture, structures in place that enable learning mindsets, and systems learning across the organization to constantly transform and innovate itself for sustainable development in a complex and uncertain environment.

2.1.2 How to build a learning organization

Creating a learning organization can be seen as an element of the field of HRD. To enhance organizational learning capacities, one must look beyond solely formal learning and training and include informal and incidental learning strategies that collectively contribute to organizational learning culture (Marsick, Watkins & Smith, 2020).

The idea and concept of the learning organization increased in popularity after Senge (1990) published his book, *The Fifth Discipline: The Art and Practice of the Learning Organization*, in 1990. Since then, Senge's definition of the concept has been entertained, developed, and debated by both the research community and practitioners. At its core is the idea of an organization where individuals together increase their capacity and where there is a bigger picture thinking of how to create opportunities for and direct this learning capacity toward a shared vision of individual and organizational growth (Örtenblad, 2020). The five disciplines can be simplified as:

- 1) Personal mastery: self-awareness, the quality of interactions, and ability to challenge personal beliefs.
- 2) Mental models: values and beliefs that steer our ways of thinking and acting.
- 3) Team learning: thinking together, sharing experience, insights, and knowledge.
- 4) Shared vision: exploring what we want to create together, the basis for having a common understanding and commitment.
- 5) Systems thinking: bigger picture thinking for seeing how different parts of a system are interacting and interconnecting. A way to increase a team's capability of navigating complexity and identifying underlying influences. A focus on the interconnections and relationships between different parts of a system.

With his five disciplines, Senge (1990) aimed to describe areas that need to be worked on to build a learning organization. The areas are closely interlinked and interdependent but indicate the elements that need to be in place to realize the idea of a learning organization. Although Senge (1990) used much of his accumulated experiences and knowledge from working with organizational development and change projects within many organizations, the criticism raised is that the concepts are too abstract to apply to real-life (Bui, 2020).

Nonetheless, the framework has been tested empirically, developed several times, and cited by many researchers (Örtenblad, 2020).

Researchers who later expanded on the idea of the learning organization (Bui, 2020; Garvin, 1993; Garvin, Edmondson & Gino, 2008; Örtenblad, 2020) have further added to the concept and how to realize the idea. New ideas and new ways of thinking are essential, but it is not enough. When an organization develops the capability for continuous self-diagnosis and change, the vision changes, and a learning organization evolves. In other words, one that constantly changes to fit the present organizational state more appropriately and better anticipate desired futures (Porrás & Silvers, 1991). Behavioral changes are another aspect of learning (Garvin, 1993). Garvin (1993) emphasizes that building a learning organization takes time; some first steps are to foster a learning environment that indicates a time for reflection and analysis. Training in activities such as brainstorming, problem-solving, and evaluating experiments.

Another step is to open up boundaries and knowledge sharing (Garvin, 1993). Yang, Watkins and Marsick (2004) emphasize continuous learning, inquiry and dialogue, collaboration and team learning as well as vision and connecting the organization to its environment. Their research points out the importance of learning culture as this is necessary for learning to become an integral part of the organization, in other words, a supportive learning environment (Yang, Watkins & Marsick, 2004).

A supportive learning environment is frequently mentioned as part of building a learning organization, Garvin, Edmondson, and Gino (2019) acknowledge it in their building blocks. They argue that three building blocks are important to building a learning organization. The first block is about creating a supportive learning environment, where psychological safety, appreciation of differences, openness to new ideas, and time for reflection are established and encouraged. Secondly, concrete learning processes such as knowledge and information sharing, experimentation, education, and training are defined. Thirdly, leaders must encourage learning and support a learning environment.

One of the issues with the idea of the learning organization that makes it difficult to implement is discussed by Garvin (1993), and these are the three m's: meaning, management and measurement. Although instruments such as The Dimensions of the Learning Organization Questionnaire (DLOQ) assess learning culture in organizations, developed by Yang, Watkins and Marsick (2004), it is still difficult to measure. Researchers have also asked whether the idea is useful today, and further critique has dealt with questions such as "learning for what?" and "learning for whom?" (Örtenblad, 2020).

However, Marsick, Watkins and Smith (2020) point out that interventions to create a learning organization should be viewed as a process rather than an outcome since contextual factors strongly influence it. Therefore, it makes a specific framework for creating a learning organization not successful since an organization is a living organism, and a framework must be strategically tuned to its constantly changing context. However, existing frameworks and interventions may help leaders reflect on what learning is and where to build learning capacities better. Any of these interventions by themselves would not necessarily create a learning organization. It is the vision of the leaders guiding the interventions that matter. It will be crucial in moving the organization closer to one that can continuously transform itself (Marsick, Watkins & Smith, 2020).

2.2 Leadership behavior in a learning organization

Previous research has shown that team learning is related to and affected by various leadership behaviors (Burke et al., 2006; Garvin, Edmondson & Gino, 2019). Both leadership and management play an essential part in the company's success and development (Kotter, 2001). Leadership today requires both leadership and management, where leadership can be understood as navigating complexity, a process of aligning vision and harnessing employee motivation, while management drives a plan forward by problem-solving and structure (Kotter, 2001). Mintzberg (2009) argues that leadership is not distinguished from management. Instead, one can view leadership and management as complementary and as two phenomena that need to be balanced to the demands of the situation (Kotter, 2001; Northouse, 2004). Hence, the terms manager and leader will be used interchangeably in this study.

Garvin, Edmondson and Gino (2019) emphasize that the behavior of the leaders strongly influences organizational learning. When leaders signal the importance of spending time on problem identification, knowledge transfer, and reflection, people feel encouraged to do the same. Therefore, leaders need to be aware of and make an effort to signal to employees that learning is essential for the organization. In such a way, leadership behaviors create and sustain a learning environment where concrete learning practices can continue to exist.

Mintzberg (2009) further argues the importance of leadership development to be integrated to impact the learning of the whole organization. Accordingly, leadership development should be about organizational development, and managers should be expected to drive change in their organization (Mintzberg, 2009). Similarly, Yang, Watkins & Marsick (2004) suggest that system connection, described as the efforts of connecting the organization to its environment, depends on continuous learning opportunities and a collective vision. When efforts by leaders entrust people toward a collective vision, the leadership can direct and drive the organization in the right direction. Hence, in creating a learning organization, it becomes a priority for leaders to understand and communicate a vision for the development of the learning organization.

Earlier literature suggests that leaders who promote participation, give encouragement and support, provide employees with assistance, and provide clear and consistent directions ensure employees the safety to take risks and engage in open communication (Edmondson, 1999; Liu et al., 2014; Newman, Donohue & Nathan, 2017). Psychological safety is the team-level climate that provides a risk-free interpersonal environment where employees do not reject each other for being themselves, have positive intentions, and respect each other's competencies (Edmondson, 1999). A psychologically safe work environment enhances employees' experience of higher support and respect in their organizations (Frazier et al., 2017). Psychological safety is related to organizational learning since it is a valuable resource in a working context where speaking up and providing feedback is essential to reduce errors and improve safety. Furthermore, it is a mechanism that affects a supportive environment and elements of innovation, creativity, communication, knowledge sharing, and employee attitudes (Newman, Donohue & Nathan, 2017). Hence, the leader's practices and behaviors are considered an antecedent of psychological safety and allow learning processes to occur (Edmondson, 1999; Frazier et al., 2017).

2.3 Summary of theoretical background

The literature review has demonstrated how there is a large body of research regarding learning organization, organizational learning, and leadership behavior related to the learning organization. This chapter aimed to present this study's topics and discuss different definitions of a learning organization. Organizational learning is one of the elements that make up a learning organization; however, the latter involves many different elements. A learning organization consists of individuals constantly expanding and increasing their knowledge, and there is a bigger picture thinking of how to create opportunities for individual and organizational growth (Örtenblad, 2020). Furthermore, how to build a learning organization stated by Senge (1990), was presented, and how this was developed and expanded by various researchers. The three building blocks by Garvin, Edmondson and Gino (2019) were introduced. The chapter concluded with a section on how leaders influence organizational learning by different leadership behaviors. Worth mentioning is that the terms manager and leader are used interchangeably in this study. Methodological considerations will be discussed in the following chapter.

3. Methodology

This chapter provides the reader with an overview of the research methodology. Furthermore, it presents the research approach and design. This is followed by a description of our two data collection methods: systematic literature review and case study. The systematic literature review and the case study will be treated separately in this chapter except for the two final sections dealing with data quality and limitations which contain both parts.

3.1 Research approach and design

Taking ontological considerations, we as researchers are aware of the many interpretations of reality. We strive to make sense of what we are studying by drawing on these different interpretations. This can be defined as adopting a relativist ontological position (Easterby-Smith, Thorpe & Jackson, 2015). A relativist ontological position is similar to constructionism, which states that social phenomena are made real by the research processes themselves and are produced through social interaction (Bell, Bryman & Harley, 2019). We follow a research design where we aim to increase general understanding of the context based on different individuals' perspectives (Easterby-Smith, Thorpe & Jackson, 2015). Since we acknowledge reality as constituted through social interpretation in the context in which people are embedded (Bell, Bryman & Harley, 2019) we pursue an interpretivist epistemology. Consequently, in our interest in learning organizations' practical development, it is significant for us to explore the subjective meaning of different perspectives. Due to our research approach and strategy, we conducted a qualitative study where we sought to gain access to people's perceptions and experiences linked to the creation of learning organizations.

Firstly, we conducted a systematic literature review to find empirical research on how leaders can support organizational learning. This part of the method is more deductive as we start from theory and then apply the theoretical results in an organizational context. In other words, theoretical concepts drive the process of gathering data (Bell, Bryman & Harley, 2019). The literature review provided themes that were explored in the case study. This step can be seen as a movement toward induction as the results from the case study “is fed back into the stock of theory” (Bell, Bryman & Harley, 2019, p. 20).

3.2 Systematic Literature Review

To approach our first research question, “*What practices can be identified on how leaders can support organizational learning based on empirical research?*”, a systematic literature review was carried out as the first step of the research process. A literature review can assess the empirical evidence in a particular area of business research and serve as a basis for knowledge development. Likewise, it can play an important role as the foundation of the

study (Snyder, 2019). With this method, we aimed to systematically summarize the available knowledge and get an explicit understanding of the latest empirical research on how leaders can support a learning organization. In doing so, we could develop categories that were used to derive statements for the conduction of the case study.

Demarcations included focusing on leaders and their role in promoting organizational learning. We excluded research on higher education as we were interested in organizations outside of academia. Additionally, we limited our search to examine empirical findings only, meaning we excluded studies that did not show that learning was positively influenced by specific interventions, behaviors, or practices tested in the research.

3.2.1 Data collection

We searched for articles independently on the databases SCOPUS and Business Source Complete. Further, we used the following search words and combinations:

- organizational learning/ learning organization (similar terms)
- AND leadership
- AND empirical
- AND practice

With these search words, we could find relevant results related directly or indirectly to the scope. We filtered for peer-reviewed journals in English published since 2015. The chosen time span was decided due to our focus on more recent research because learning should be put in its context and we are interested in empirical research based on today's business climate. In addition, most recent research refers back to previous theories and empirical evidence.

39 articles were found in the first search in the two databases. We conducted the systematic literature review following Snyder (2019) approach by reading abstracts first and then reading full-text articles last, before making the final selection. Afterward, the articles were screened in full to ensure they met the inclusion criteria. After scanning the articles based on the inclusion and exclusion criteria, a total of 15 articles (see [Appendix C](#)) were included in the systematic literature review. These 15 articles were the findings that dealt with the concept of learning organization or similar concepts as their main topic of the research and result. After the selection was made, we read these 15 articles independently and in-depth.

Figure 1 shows how the articles included in our sample were selected through the research process.

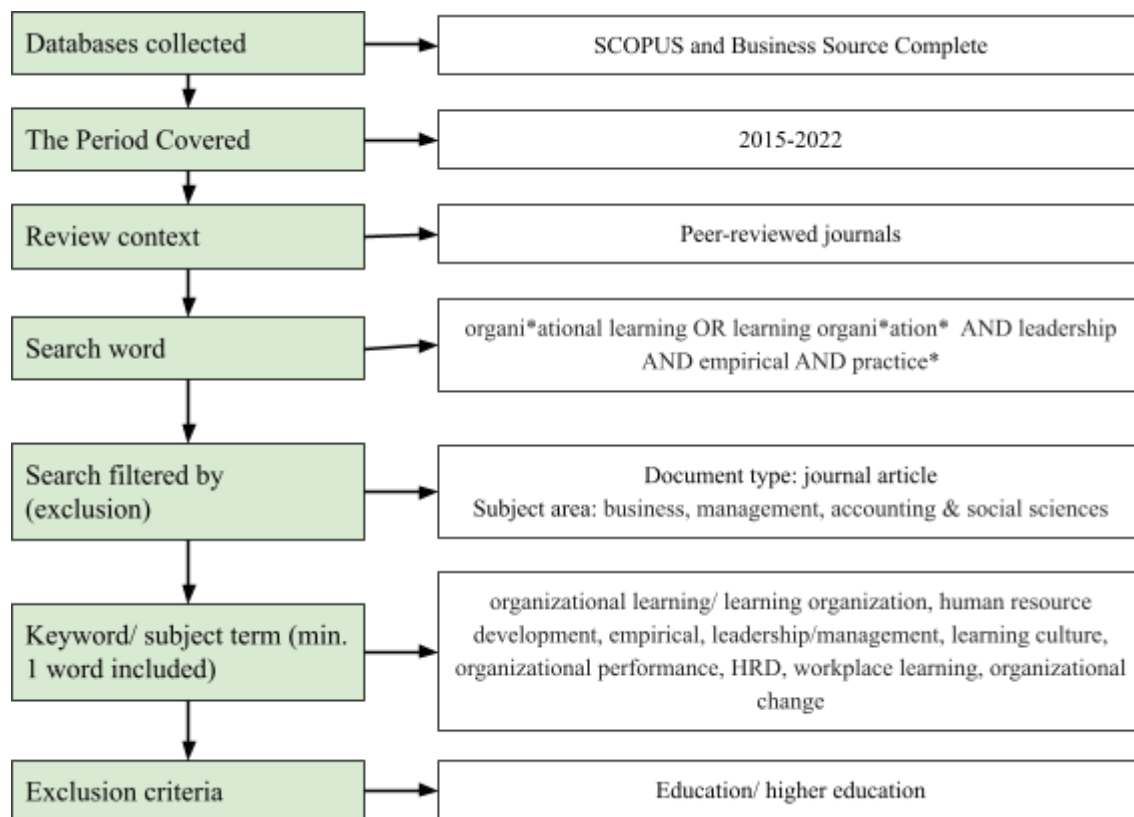


Figure 1: Sample collection process

3.2.2 Data analysis

To analyze our data, we applied qualitative content analysis, whereas we searched for underlying themes in the material (Brell, Bryman & Harley, 2019). Although content analysis is an interpretative, qualitative method, the approach allows for some quantification. The researcher can count how often a word or an idea is mentioned to identify recurring themes as part of the analysis (Easterby-Smith, Thorpe & Jackson, 2015). In our data analysis we read the 15 articles and coded these into different themes which were found in their results. These were then grouped into seven themes that formed the basis of the statements included in our interview guide (see Table 2 in section 4.1).

3.3 Case study

A case study can be defined as conducting empirical research about contemporary phenomena in a real-life setting when the boundaries between phenomena and context are not clearly evident and many courses are used. It is one of several ways of doing exploratory research in organizational and managerial studies. Our case is a representative or typical case (Yin, 2009).

With our purpose in mind, we sought to understand the beliefs, norms, and behaviors that may hinder the development of a learning organization on the one hand and those that enable it on the other. This to identify critical points that may be important to pay attention to for those leaders and practitioners involved in the development of learning organizations. Our case study intended to answer the remaining research questions:

2.1 What are the challenges for leaders to support the practical development of learning organizations?

2.2 What are the conditions necessary for leaders to be able to support the practical development of learning organizations?

The objectives of the case study were, firstly, to find out whether the statements identified in the systematic literature review were also adopted in an organizational context and furthermore, to hear concrete examples of how they possibly take shape in the daily activities of managers. Secondly, investigate challenges connected to the statements through personal experience and leader competence. Thirdly, identify additional conditions that leaders find necessary to be able to support the practical development of learning organizations.

We conducted both focus group interviews and individual interviews, partly because it was more convenient for time reasons for our interview participants, but also because of the different strengths of the two methods. Focus group interviews have the weakness of causing group effects and discomforts among participants, while individual interviews increase the chances of unique views being voiced (Bell, Bryman & Harley, 2019). Therefore, we saw an advantage of conducting both group and individual interviews.

To secure quality criterias and ethical considerations we followed the principles of good research practice by the Swedish Research Council (The Swedish Research Council , 2021) . Furthermore, we have attempted to be open and engaged in systematic and critical thinking and analysis along the whole research process. An example of the email that was sent out to the interview participants with information to secure consent before participating in the study (see [Appendix A](#)).

3.3.1 Sampling

Our contact person at SSAB helped us to identify possible interviewees. We were interested in having access to both managers and employees from different parts of the organization and levels (top-level managers, mid-level managers, employees). This, since our theoretical background gave us the insight that a learning organization requires learning to be embedded in the whole organization, from top management to leaders that are close to the operational work (Crossan, Lane & White, 1999). Moreover, Holmemo and Ingvaldsen (2016) describe mid-level managers as a diverse group of managers with the role of linking strategic

decisions and actions of top-level management with the operational level. This role allows middle management to understand potential weaknesses in communication and systems. Additionally, they can identify improvement areas and required resources to mention some aspects (Holmemo & Ingvaldsen, 2016). These elements are critical for successfully creating a learning organization. Therefore, we chose the majority of our participants to have the role of mid-level managers.

Regarding the sample selection, our contact person at SSAB identified leaders who could participate in the study, and these leaders helped identify further possible interview participants. The sample was thus a combination of convenience sampling and snowball sampling (Bell, Bryman & Harley, 2019). The advantages of this type of sampling are time-saving and it provides good accuracy since we know in advance that the participants will be able to answer our questions (Bell, Bryman & Harley, 2019). On the other hand, the disadvantage is that we may not be able to achieve a spread in the sample as it may be influenced by the contact person's relationship with co-workers. However, in the conduct of the focus group interviews, we intended to explore a collective understanding or shared meanings held by employees of SSAB by using participants who knew each other and were members of the same workgroup (Bell, Bryman & Harley, 2019).

One informant interview, six individual interviews, and two focus group interviews were conducted (see Table 1: Interview participants). All of them were virtual interviews and carried out through Microsoft Teams or Zoom. In one of the focus group interviews, four employees participated, three of whom were managers and one responsible for operational work. The other focus group interview involved three staff members, all of whom were operational. The idea behind this was the chance to hear both employees' and managers' perspectives and see potential similar or different needs when it came to conditions and challenges for learning.

The individual interviews were conducted with both managers and employees across the organization. The interview sample included participants from four different locations and three different countries. The focus group interviews lasted about 1.5 hours, while the individual interviews lasted anywhere from 30 minutes to an hour depending on the participants.

Table 1: Interview participants

Participant	Interview method	Location	Date
HR Manager	Informant interview	Stockholm	21/04/2022 09/05/2022
Business Manager	Semi - Structured interview	Stockholm	27/04/2022
HRD Manager	Semi - Structured interview	The United States	28/04/2022
Head of Department	Semi - Structured interview	Stockholm	29/04/2022
Top Manager	Semi - Structured interview	Stockholm	03/05/2022
HR Manager	Semi - Structured interview	Stockholm	03/05/2022
HR Specialist	Semi - Structured interview	Finland	05/05/2022
Maintenance Manager	Focus Group interview 1	Borlänge	29/04/2022
Head of Operation	Focus Group interview 1	Borlänge	29/04/2022
Head of Section	Focus Group interview 1	Borlänge	29/04/2022
Maintenance Worker	Focus Group interview 1	Borlänge	29/04/2022
Maintenance Operator	Focus Group interview 2	Borlänge	04/05/2022
Maintenance Operator	Focus Group interview 2	Borlänge	04/05/2022
Maintenance Operator	Focus Group interview 2	Borlänge	04/05/2022

3.3.2 Semi-structured interviews

The case study was based on semi-structured interviews since we wanted to have an openness towards the interviewees to be able to address what they thought was of most importance to the questions. Furthermore, this enabled us to follow up on things that came up during the interview. Semi-structured interviews allow us to explore the participants' viewpoints and see things as they see them (Bell, Bryman & Harley, 2019). Following Bell, Bryman, and Harley (2019) we prepared an interview guide with a list of fairly specific questions to be covered with follow-up questions (see [Appendix A](#)). The interviews were carried out online, where the interactions were synchronous and face-to-face using a webcam.

3.3.3 Focus Groups interviews

Online synchronous focus group interviews were conducted to gain a practical understanding of the theoretically defined aspects of how leaders can support a learning organization (see [Appendix B](#)). A focus group method is a group interview with several participants, where the topic is defined. The focus is on the interaction within the group and the joint construction of meaning. The dynamics of the interactions could lead individuals to define business problems in a new way (Bell, Bryman & Harley, 2019).

The purpose of the focus group interviews was to engage in a conversation where the thoughts and experiences of different individuals were allowed to meet those of others. With the unstructured and spontaneous responses, it encouraged reflection of genuine opinions, ideas, and feelings. There may be a serendipitous flow of new ideas among the participants which can provide the researchers with valuable insights due to the snowballing effects of the discussion (Sekaran & Bougie, 2016). This allows us to collect rich data oriented to the contextual uniqueness of the situation that is being studied (Sekaran & Bougie, 2016). Hence, by conducting a focus group interview it enables the collection of data on the views, emotions, and actions connected to the empirical findings found in the systematic literature review.

3.3.4 Data analysis

Following Bell, Bryman, and Harley (2019) suggestion, all interviews were recorded and transcribed. This allowed for a more fluent and focused interview where we as interviewers could engage in the conversations and were able to ask follow-up questions. The collected data was thematically analyzed following the sequential steps proposed by Bell, Bryman and Harley (2019, p.531) when coding our data. Coding is an analytical process in which the gathered data is reduced, rearranged, and integrated to form themes and categories (Sekaran & Bougie, 2016). Firstly, we coded our data immediately after the data collection since it may sharpen our understanding of the data. Thereafter, we read through our transcripts, and thirdly, we reviewed the codes with the research purpose and question in mind. Fourth, we finalized by considering general theoretical ideas related to the codes that we could then categorize into themes.

We interpreted our data following a qualitative content analysis, a strategy for searching and finding themes in data based on the coding approach (Bell, Bryman & Harley, 2019). We used thematic analysis. According to Ryan and Bernard (2003), themes are preferably identified by repetition, metaphors and analogies, similarities, differences, and linguistic connectors. The first step occurred following Ryan and Bernard's (2003) guidelines to identify and sort as many codes as possible. Subsequently, the themes transcended and were built up by groups of various codes (Bell, Bryman & Harley, 2019). We could see a pattern

among the codes through repetition and recurrence in the data, which we reflected on to identify the continuities and linkages among them.

3.4 Data quality

This section seeks to discuss the quality of the study for both the systematic literature review and the case study.

Since our study is qualitative, we believe that the concepts of trustworthiness and credibility are more relevant to discuss than validity and reliability as the latter concepts are strongly related to quantitative research practices. Guba and Lincoln (1994) propose a number of quality criteria that build trustworthiness and credibility. One of the ways to increase the credibility of the data collected is to allow the reader to gain insight into the research process so that the reader can follow the steps and decisions taken by the researchers. Initially, our systematic literature review was conducted, following clear guidelines in collecting and analyzing the data. To allow the reader to evaluate the quality of the data, we aimed to describe different research steps in detail in the methodology chapter, insert figures on how themes were developed and add titles of the screened articles and their overall findings in the [Appendix C](#). Throughout the work, we also reminded ourselves of the pitfalls and biases that exist as we as researchers co-construct reality. One way of dealing with this has been to use codes derived directly from the empirical data in the analysis of our systematic review and to question our choices and judgments to challenge our way of thinking.

The next step was to conduct interviews based on our systematic literature review findings. To increase trustworthiness, we tested the interview guide in a pilot interview in which an HR professional participated and provided feedback on each question. Subsequently, some modifications and adaptations were made to be used in our interviews. When conducting the interviews, we tried to give as much space as possible to the participants themselves to answer our questions. Furthermore, we gave each other feedback for improvement, including allowing silence to occur to secure room for reflection for the interviewees. When conducting interviews, the main problem is the tendency to interpret a certain phenomenon in a way that might be influenced by subjective attitudes, namely observer bias (Bell, Bryman & Harley, 2019). To reduce this bias, we asked interview participants to clarify some of their interview responses, summarized their answers, and then asked if we understood them correctly. As a further attempt to increase the data quality, we treated the result separately from the discussion. We have also kept longer quotes and described the context of the quotes in the descriptive text, something called “thick descriptions” to increase the credibility (Tracy, 2010; Bell, Bryman & Harley, 2019).

However, there is an unavoidable element of subjectivity and interpretation on our part, which partly stems from our academic backgrounds in the social and behavioral sciences,

respectively, and the subject areas we touched on during our Master's programme in Management, which in many ways concerned learning. In any case, we try to be open with our approaches and self-reflect to be aware of our co-construct, and how the study is shaped because of it.

3.5 Limitations

Regarding limitations of the study, the three main limitations that had the greatest potential impact on the quality of our findings and consequently our ability to answer the research question were the following:

Difficulties in distinguishing concrete practices: The majority of the articles found in the systematic literature review also take into account, and examine the relation between other variables than organizational learning and leadership. Hence, it complicates the interpretation between different factors. Additionally, some practices that we found in our systematic review were more or less distinct and therefore it was a challenge to concretise these practices. Since the case study builds on the findings from the systematic literature review this led to difficulties in capturing concrete practices in the interview guide. It is difficult to tell if it is due to the formulation of the statements or due to the concepts being difficult to grasp in real life. In the case study we wanted to come closer to actionable practices but we struggled to make the participants to be concrete in the interviews. In a future study this can be developed by working even more with the formulation of statements and questions and testing these to improve data quality. Another factor is that we did not get a larger result than 15 articles. Our data collection depends on our keywords and the databases we searched. There may be articles we were not able to include in our result based on our search performed. Thereupon, we may have an outlier that is a limitation.

The interview setting: All interviews were conducted virtually instead of face-to-face. Online interviews have the advantage of enabling geographical distances, allowing us to interview participants from different countries and who would otherwise be inaccessible. Furthermore, online interviewing is more flexible and may encourage people to agree to be interviewed (Bell, Bryman & Harley, 2019). However, we are aware of the disadvantages of virtual interviews. There may be potential technological problems, and responses are likely to be less spontaneous. Furthermore, it may be difficult to observe the participants body language and non verbal data (Bell, Bryman & Harley, 2019). Thus, the interview setting was another limitation.

Time limitations and sample: Both the literature review and case study would have required more time for higher quality. In the process we had to move on due to the time frame and adapt to the company and the interviewees' scarce time. Initially, focus groups were the

planned method for all interviews but as this was not possible due to pressing agendas we had to be flexible and use individual interviews to complement the focus groups. From our experience the focus group interviews provided detailed data that captured the context and relationships between participants more, however, the individual interviews complemented the focus group interviews by allowing more in depth conversations with individuals. Another factor potentially influencing the result of our study is the sample. We would have liked to interview people from more parts and other locations of the organization for an even broader understanding. Still, due to time limitations we believe the sample to be sufficient and provides good insights into the everyday life of leaders in relation to learning

3.6 Summary of methodological chapter

This chapter thoroughly explained the methodological approach of our study. We conduct a systematic literature review and a case study. Based on a relativist ontological worldview, the research design is aligned with the perspective of interpretivist epistemology. The focus is set on a qualitative case study at SSAB where we interviewed both managers and employees. We conducted both virtual semi-structured individual interviews and focus group interviews. The conduction of the case study is based on statements derived from the systematic literature review. To conclude the chapter, we discussed data quality and limitations. The findings and analysis of the systematic literature review will be discussed in the following chapter.

4. Systematic Literature Review

This chapter aims to provide an overview of the main findings of the gathered data from the systematic literature review. It begins with a presentation of how the data was analyzed and continues with a presentation of the findings. The findings consist of subcategories of the themes found in the thematic analysis. The chapter finalizes with a discussion of the research question. As a result, we will answer Research Question 1. *What practices can be identified on how leaders can support organizational learning based on empirical research?*

4.1 Findings

As mentioned in the methodology, we conducted a content analysis (see section [3.2.2](#)) based on the systematic literature review findings. We found a total of 15 articles (see [Appendix C](#)). This analysis resulted in seven overarching themes which somewhat build on each other and are more or less distinct. Since the purpose and aim of the reviewed articles differed, it was challenging to synthesize them into clear themes, and we are aware that some are more distinct than others. However, when looking at the article's result, we could identify practices, and the overall focus of these different practices of leaders were translated into an overall theme.

Below, Table 2 shows the seven themes derived out of the content analysis. The selected articles in the systematic review looked at different factors related to learning and not solely on how leaders can facilitate organizational learning. For example, Akdere and Egan (2020) examined transformational leadership, human resource development, and organizational performance. The two most prominent themes in the article's findings were person-orientation and a focus on encouraging change. Hence, we placed them under these two themes in our content analysis.

Table 2: Findings of content analysis and references.

Themes	Articles
Person-orientation	Akdere & Egan, 2020; Bäcklander, 2019; Mallén, Chiva, Alegre & Guinot, 2015; Savelsbergh, Poell & van der Heijden, 2015; Yulianeu, Ferdinand, & Purnomo, 2021; Xie, 2018
Fostering psychological safety	Bäcklander, 2019; Egleston, Castelli & Marx, 2017; Iqbal, Ahmad, Nasim & Khan, 2022; Xie, 2018
Facilitating constructive dialogue	Bäcklander, 2019; Fannon, Munive-Hernandez & Campean, 2021; Mallén, Chiva, Alegre, & Guinot, 2015
Encouraging change	Akdere & Egan, 2020; Bäcklander, 2019; Kjellström & Andersson, 2017; Yulianeu, Ferdinand, & Purnomo, 2021; Xie, 2018
Prioritizing reflection	Egleston, Castelli & Marx, 2017; Mallén, Chiva, Alegre, & Guinot, 2015; Sahoo, 2021; Savelsbergh, Poell, & van der Heijden, 2015
Encouraging collaborative activities	Borzillo, 2017; Iqbal, Ahmad, Nasim & Khan, 2022; Mallén, Chiva, Alegre & Guinot 2015; Naqshbandi & Tabche, 2018; Neher, Ståhl & Nilsen, 2015
Self-directed learning	Bäcklander, 2019; Fannon, Munive-Hernandez & Campean, 2021; Hutasuhut, Aduce & Jonathan, 2021; Iqbal et al, 2022; Sahoo, 2021

4.1.1 Person-orientation

Six of the reviewed articles highlight that leaders focusing on person-orientation promotes organizational learning (Akdere & Egan, 2020; Bäcklander, 2019; Mallén et al., 2015; Savelsbergh, Poell & van der Heijden, 2015; Yulianeu, Ferdinand, & Purnomo, 2021; Xie, 2018). We condensed the results of the six articles into the theme ‘person-orientation’ because they emphasized, in different ways, a focus on the human aspect. Three of the articles highlight transformational leadership, and the three others focus on enabling leadership, altruistic leadership, and person-orientation. We decomposed these leadership styles into practices mentioned in the articles and synthesized these into an overall theme. Person-orientation is a vague statement, but our interpretation of the results is that task-orientation should be balanced with person-orientation to promote learning.

In other words, leaders who direct their focus not only to the task but also to the team and individuals, their needs and behaviors can be said to have a person-orientation. One of the screened articles by Bäcklander (2019) was a qualitative study examining how agile coaches within Spotify practice enabling leadership, which is one out of three components in

complexity leadership theory. Enabling leadership is described as a leadership style that balances structure and flexibility to manage today's organization's complexity. The study showed how an attentive coach might navigate and balance autonomy and alignment in the organization. Practices such as coaching and supporting are helping teams to create conditions for open dialogue that promotes learning (Bäcklander, 2019). The role of agile coaches is to focus on the quality of interactions in the team, helping team members become aware of their behaviors and how these influence others, voicing assumptions, and asking questions. By making their team members aware of each other, agile coaches facilitate a climate where team members dare to put into words what is not visible. Thereby, agile coaches help promote a creative and learning culture and navigate complexity from within the team (Bäcklander, 2019).

Additionally, Savelsbergh, Poell, and van der Heijden's (2015) exploratory field study of 30 project teams conclude that task- and person-oriented leadership influences team learning and performance. However, their findings indicate that it might be of less importance for a leader to pressure the team to get their tasks solved according to what has been agreed on in case things go wrong. Rather, prioritizing time for people and directing the focus to team reflection is more important (Savelsbergh, Poell & van der Heijden, 2015).

4.1.2 Fostering psychological safety

Several researchers accentuate psychological safety as a prerequisite for learning (Bäcklander, 2019; Egleston, Castelli & Marx, 2017; Iqbal et al., 2022; Xie, 2018). Thereby, supporting a psychologically safe working environment can be seen as a way for leaders to support a learning environment. Egleston, Castelli and Marx (2017) address psychological safety to reflective leadership. By conducting 700 surveys, their findings show how leadership behaviors involving reflective learning, such as promoting the creation of an open and safe working environment, contribute to organizational performance and learning. Moreover, Bäcklander (2019) concludes that psychological safety is needed to encourage managerial practices for continuous improvement and change.

An example of practice on how leaders can help promote psychological safety include not allowing themselves or other team members to dominate a conversation but striving to include and capture the perspectives of all individuals. The leader can also invite to the conversation by asking both open and 'stupid' questions (Bäcklander, 2019).

With the background that more and more companies are impelled to introduce new business models, technologies, and supporting policies to respond to the challenges linked to climate change and environmental degradation, Iqbal et al. (2022), explore the moderated-mediation impact of psychological empowerment. The empirical results of the study confirm that sustainable leadership, such as having a long-term perspective and creating sustainable value

with consideration of physical, social, ethical aspects, and economics, has a significant impact on psychological safety. The authors argue that creating a psychologically safe environment that encourages knowledge sharing and an open conversational climate will improve organizational sustainability performance in the presence of sustainable leadership (Iqbal et al, 2022). Although the articles mentioned above do not explicitly study psychological safety and its impact on learning, the studies confirm that psychological safety is a prerequisite for the learning environment, whereupon we have adopted the theme in our analysis.

4.1.3 Facilitating constructive dialogue

Another aspect mentioned in the reviewed articles is how leaders can promote learning by creating conditions for constructive dialogue between teams and individuals (Bäcklander, 2019; Fannon, Munive-Hernandez & Campean, 2021; Mallén et al., 2015). A study shows the critical role of mid-level management in strengthening the organization's continuous improvement capability. There is a clear relationship between the continuous improvement leadership role and competence requirements of mid-level management and the continuous improvement capability of the wider organization. Continuous improvement initiatives take different forms and may be associated with lean and lean production principles. The aim is to reduce non-value-adding activities and strive for improvement and efficiency at all organizational and production levels. The research synthesized a continuous improvement environment model describing a cycle of reinforcing continuous improvement culture. Continuous improvement capability includes knowledge, mechanism, systems, and practices for involving the organization in learning processes in achieving and creating a learning organization (Fannon, Munive-Hernandez & Campean, 2021). Although not using the term 'constructive dialogue,' the authors suggest leaders should incite improvement activities. These improvement activities and behaviors must be integrated into the organizational culture for organizational learning to occur (Fannon, Munive-Hernandez & Campean, 2021).

Bäcklander (2019) points out that organizations must sustain opportunities for constructive dialogue to energize continuous improvement and change. The author proposes that teams may need more or less support to do this from a leader or a coach. Nonetheless, it must happen due to constructive dialogue sparking new and improved solutions. The findings underline the importance of daring to question one's colleagues politely and that the goal is to create an environment where individuals feel safe enough to express ideas and thoughts even when these are not fully developed to ensure an environment open for exploration, change, and critique (Bäcklander, 2019).

4.1.4 Encouraging change

Xie (2018) conducted a systematic literature review to investigate the relationship between leadership and organizational learning culture. Xie (2018) concludes that, among other things, a leader who supports learning should embrace, tackle and even encourage change. Considering change, two of the screened articles explore transformational leadership and its positive influence on the development of learning organizations (Akdere & Egan, 2020; Yulianeu, Ferdinand, & Purnomo, 2021). Furthermore, among the 58 articles Xie (2018) studied, 34 articles connected transformational leadership with organizational learning and learning organization. Transformational leaders help develop a transformational culture necessary to create a flexible and adaptive culture. They are change agents who define the need for change, create new visions, mobilize commitment to those visions and ultimately transform an organization that promotes organizational learning and development (Yulianeu, Ferdinand, & Purnomo, 2021).

One example is a large-scale study investigating the intersection between transformational leadership, human resource development, and organizational performance (Akdere & Egan, 2020). The study showed that transformational leadership contributes positively to firm performance by mediating leader support for learning and performance and HRD culture. The empirical findings suggest that organizations should support managers in developing transformational leadership behaviors, such as actively engaging employees, recognizing their efforts, supporting them, and linking them to learning and performance opportunities for their development (Akdere & Egan, 2020). Likewise, Bäcklander (2019) emphasizes that taking complexity leadership seriously means acknowledging that organizational outcomes emerge from an enabled interaction, which fosters continuous improvement and change.

Kjellström and Andersson (2017) study how adult development theories can improve quality. They find that improvement ideas and practices require structures and environments where people support and are involved in improvement practice, which means that at least a few leaders need to have the capability of more complex meaning-making to create the processes and structures supporting workplace improvement. Hence, to create successful transformational change and learning, recognizing that system knowledge is a developmental capacity (Kjellström & Andersson, 2017). Furthermore, understanding personal development theory can influence when facilitating organizational development and change since it provides fundamental insights into how different people make meaning of change. Thereby, leaders understand better what demands they put on employees and which support is needed so that everyone can contribute based on their own capacity (Kjellström & Andersson, 2017).

4.1.5 Prioritizing reflection

Several authors have posited that leaders who encourage and facilitate reflection can benefit organizational learning (Egleston, Castelli & Marx, 2017; Mallén et al., 2015; Sahoo, 2021). Egleston, Castelli & Marx (2017) shows that reflective leadership is an effective management tool practitioners can employ to improve organizational performance. Reflective leadership can be described as a set of leadership practices to encourage and facilitate reflective learning. These practices create a positive work environment that promotes learning through reflection, sharing, and learning from past experiences (Egleston, Castelli & Marx, 2017). Hence, we find the overall theme to involve practices to prioritize reflection will support the learning environment.

Similarly to reflection, it is mentioned that altruistic leader behavior can be regarded as the catalyst for creating higher levels of awareness (Mallén et al., 2015). Unlike a specific leadership style, altruistic leadership is a broad set of behaviors based on the feeling or tendency to do good to others, even at the expense of personal gain. This indicates promoting an environment of creativity and dialogue where dialogue can be seen as a collective reflection of the processes, assumptions, and uncertainties that make up everyday experience (Mallén et al., 2015).

By prioritizing reflection, a leader can encourage the team to reflect on past and current experiences. For example, Savelsbergh, Poell and van der Heijden (2015) suggests that the team should reflect on questions such as: ‘what did we want to accomplish?’, ‘is this still what we want to accomplish?’ and ‘how did we try to accomplish this so far?’” (Savelsbergh, Poell & van der Heijden, 2015, p. 416).

4.1.6 Encouraging collaborative activities

Five articles discuss how collaborative activities, such as participation in dialogues, peer discussions, and knowledge-sharing activities, promote organizational learning and support a learning culture (Borzillo, 2017; Iqbal et al, 2022; Mallén et al, 2015; Naqshbandi & Tabche, 2018; Neher, Ståhl & Nilsen, 2015). Neher, Ståhl and Nilsen (2015) explain how participation in group processes where the team works towards a common outcome, set up for a special purpose, problem-solving, planning or responding to external changes was received to be one of the most rewarding learning opportunities. Additionally, it can also mean working alongside others to allow people to observe and listen to others' work (Neher, Ståhl & Nilsen, 2015).

Naqshbandi & Tabche (2018) observed the mediating role of organizational learning culture in the association between empowering leadership and open innovation. A learning culture is described as a collection of organizational conventions, values, practices, and processes that

encourages employees and organizations to develop knowledge and competence. Empowering leadership is inferred to create an environment that supports the creation, exchange, and utilization of new ideas, resulting in an effective learning culture that promotes knowledge inflows and open innovation (Naqshbandi & Tabche, 2018). Empowering leadership fosters a trusting environment where the leader coaches the followers to find solutions collaboratively and helps develop a sense of a collective identity where the followers acquire, learn, and share knowledge with other organizational members (Naqshbandi & Tabche, 2018). Hence, leaders who empower their employees promote the learning culture by appreciating and rewarding collaborative activities and by promoting the sharing of ideas.

Similarly, Mallén et al. (2015) explain the role of altruistic leadership, which aligns with another study that indicates leaders who support learning should be altruistic, proficient at perspective-taking, and show empathy (Xie, 2018). Leaders that adopt altruistic leadership and are concerned for the welfare of others promote an environment where employees feel confident to take up the individual and collective challenges that learning requires, and hence facilitate the creation of a creative, participatory and dialogue-based environment that promotes organizational learning (Mallén et al, 2015). Iqbal et al, (2022) shows that sustainable leadership substantially impacts psychological safety and, in turn, fosters social exchange between the employee and the organization. Therefore, sustainable and altruistic leadership behavior supports an environment where participation and collaboration are enhanced.

4.1.7 Self-directed learning

In a qualitative study of 30 participants, the result indicates that self-directed learning promotes a learning environment (Hutasuhut, Aduce & Jonathan, 2021). Self-directed learning emphasizes that employees are in control to initiate and take responsibility for their learning (Hutasuhut, Aduce & Jonathan, 2021). Although formal learning programs are essential, giving employees more freedom to craft their learning may make them feel more empowered and motivated. Thus, enabling employees to direct their learning through more autonomy, self-management and self-control can be something to support as a leader. Leaders may design work to accommodate self-directed learning among employees better and provide rewards for self-directedness in learning (Hutasuhut, Aduce & Jonathan, 2021).

Hutasuhut, Aduce & Jonathan (2021) provide empirical evidence of how self-directed learning is cultivated in an organization that applies the five disciplines of Senge (1990) integrated into the working climate. Thus, an organization needs to ensure that each employee shares its vision, builds synergy for mastery and team learning, trains its employees

to refine their mental models continuously, and improves their ability to think using a systems approach (Hutasuhut, Adruce & Jonathan, 2021).

Bäcklander (2019) has shown that the role of an agile coach is to help the team to have a sense of autonomy and ownership. Even though the study does not analyze self-directed learning, we interpret this as indicating that learning may be cultivated when the leaders help the team independently. This suggests that leaders who support self-directed learning are a way to support organizational learning.

Moreover, supporting a learning environment conducive to cultivating self-directed learning requires commitment from top leaders (Hutasuhut, Adruce & Jonathan, 2021). The role of top management has been mentioned in several studies to have importance in a learning environment and in building a learning organization (Iqbal et al., 2022; Sahoo, 2021; Hutasuhut, Adruce & Jonathan, 2021; Fannon, Munive-Hernandez & Campean, 2021). The role of top management enhances self-directed learning. It can also improve operational performance and facilitate the employees in a psychologically safe relationship (Iqbal et al., 2022; Sahoo, 2021; Hutasuhut, Adruce & Jonathan, 2021). Another study demonstrates the critical role of mid-level management in strengthening the organization's continuous improvement capability. There is a clear relationship between the continuous improvement leadership role and competence requirements of mid-level management and continuous improvement capability of the wider organization (Fannon, Munive-Hernandez & Campean, 2021). This suggests that the commitment from leaders, top to bottom, has significant importance in stimulating the learning environment throughout the whole organization.

4.2 Discussion of research question

In this section, we will discuss the main findings of the systematic literature review related to Research Question 1: *What practices can be identified on how leaders can support organizational learning based on empirical research?* Furthermore, we will discuss the main findings on which we base our case study.

Our content analysis showed that leaders could support organizational learning by adapting a person-oriented approach, fostering psychological safety, facilitating constructive dialogue, encouraging change, prioritizing reflection, encouraging collaborative activities, and promoting self-directed learning. In sum, practices related to the person-oriented approach show that the following leader practices positively influence organizational learning: coaching, supporting, and actively engaging in employees' individual development and related needs. Furthermore, the articles demonstrate a common focus on prioritizing and showing commitment to learning activities such as reflection, constructive dialogue, and knowledge sharing.

Despite inconsistent terminologies, it is obvious that researchers agree on the importance of fostering psychological safety as a prerequisite for learning. We conclude that a climate where employees feel safe increases the chances that they will share their opinions and ideas but also dare to express when they do not understand or have made a mistake. This result reflects those of Edmondson (1999). However, the screened articles investigate further factors concerning psychological safety, namely sustainable and reflective leadership, and the use of coaches to facilitate the conversation to include all employees. These findings suggest that a leadership style that highlights learning and people-orientation can mediate psychological safety, prioritizing reflective learning and creating a sustainable value.

Another important finding is the need for constructive dialogue in an environment that seeks to improve continuously. By facilitating constructive dialogue, such as not dominating or letting individuals dominate conversations, a leader can ensure an environment open for exploration, change, and critique. The findings show that the leader's critical role is to encourage an environment that is safe and open to ask questions, challenge assumptions, and approach a topic critically, as it enhances learning in groups and among individuals. Middle management is also highlighted as having an opportunity to influence the development of such a climate of conversation. These findings help us understand how leaders can help promote constructive dialogue by fostering psychological safety. This type of dialogue stimulates learning that enables the modification of goals and underlying assumptions.

Our findings point to the leader as a facilitator of learning and a catalyst for change and development. This also accords with our earlier observations, which showed that leaders encourage a learning environment by focusing on supporting people in their own learning processes (Garvin, Edmondson & Gino, 2019). The findings emphasize the commitment from leaders, top to bottom, in having significant importance in stimulating the learning environment throughout the whole organization. Therefore, it is possible to propose that all leaders have a responsibility to adopt and act on these practices to support organizational learning.

We recognize that the content analysis results introduce practices that are similar to previous research. For example, encouraging change and collaborative activities have been identified as practices for creating a learning organization decades ago (Senge, 1990; Garvin, 1993). With the research question in mind, the systematic review findings did not result in any pioneering practices that leaders can adapt. The mentioned flaw underlines the lack of challenging and questioning results. A possible explanation for these results may be that the research community seems to approach the topic similarly and with similar results.

The observed similarity with previous research may also be about contextual differences in an organization. Marsick, Watkins, and Smith (2020) point out that an organization is a living organism, and a framework must be strategically tuned to its constantly changing context. The result emphasizes the role of coaches to focus on the quality of interactions to make team members aware of each other and their behavior (Bäcklander, 2019) which are related to the discipline of personal mastery, mentioned by Senge (1990). Another article promotes that a leader coaches the team to develop a sense of collective identity through collaboration (Naqshbandi & Tabche, 2018). The abovementioned practices are contextually bound to the situation and the people within the organization.

Therefore, the findings raise the possibility that concrete practices may not be the only answer to how leaders can support organizational learning, and it is challenging to distinguish specific concrete practices that can be applied to all situations. A majority of the screened articles mention learning as something that a leader needs to be aware of at all times through behaviors such as showing empathy, openness, creating a trusting environment, coaching, and supporting. These different practices are more than just concrete practices, and it leans into skills, knowledge, and mindsets in which the leader must develop and adjust to the context. It can be explained as a melting pot of various skills, knowledge, and mindsets that leaders apply and use situationally to support organizational learning.

In addition, we might ask whether focusing on the practices we have identified would have been sufficient to develop a learning organization? Here we would like to clarify that we are aware that leaders are only one part of many elements that influence the development of a learning organization. For example, a supportive organizational culture and resources for learning and learning activities also build up a learning organization (Garvin, Edmondson & Gino, 2019). However, these findings raise intriguing questions regarding the nature and extent of some practices that are identified on how leaders can support organizational learning. Some of the issues emerging from this finding relate specifically to what leaders identify as practical challenges and conditions necessary concerning these learning activities and practices. Therefore, we used these themes when creating and conducting the interview guide (see [Appendix A](#) & [B](#)) to see if these practices were adopted and to get examples of what they might look like in a real-life organizational context. The next chapter will provide an overview of the main findings and a discussion of the data gathered from the case study.

5. Case study

This chapter aims to provide an overview of the main findings of the gathered data from the case study. Chapter five starts with a presentation of how the data was analyzed and continues with presenting the findings. The findings consist of subcategories of the themes found in the thematic analysis. The chapter finalizes with a discussion where we will answer Research Question 2.1 *What are the challenges for leaders to support the practical development of learning organizations?* And 2.2 *What are the conditions necessary for leaders to be able to support the practical development of learning organizations?*

5.1 Findings

The following chapter analyzes the main findings derived from six interviews and two focus group interviews (see Table 1 in section [3.3.1](#)). 13 participants were interviewed, both managers and employees at SSAB. The collected data were thematically analyzed (see section [3.3.4](#)). An overview of the identified themes is presented in Figure 2, which initially included 16 explored themes. What shows in Figure 2 are the condensed seven themes that came out of the total amount of codes identified. We perceived some themes as more accessible to identify than others, such as trust. Some of the themes were more distinct, like time pressure and reflection, and therefore grouped and selected by their own.

Worth mentioning is that when the data was collected, the participants saw the potential and relevance in all the statements, and no one was unfamiliar with the concepts. Therefore, the conditions and challenges related to the statements overlapped and were analyzed in the content analysis. We decided not to present the statements individually as subcategories but rather focus on the result of the thematic content analysis and divide the chapter into the themes found.

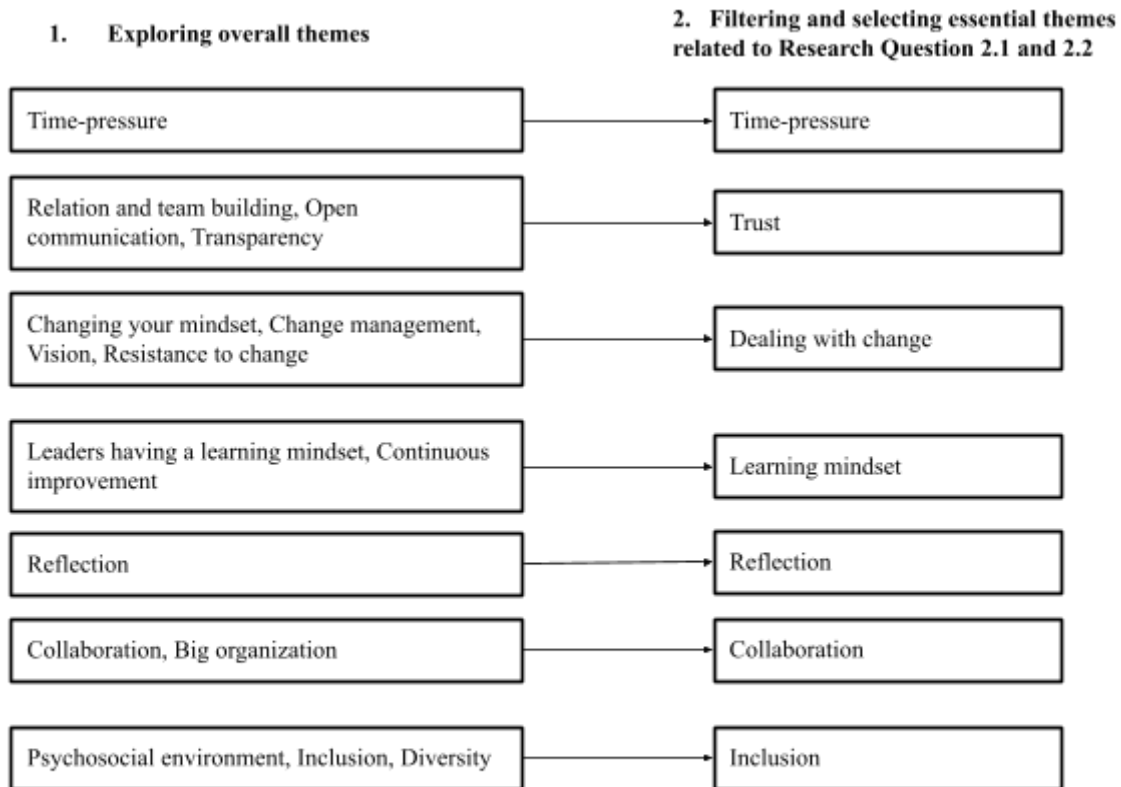


Figure 2. Overview of identified themes.

5.1.1 Time-pressure

All interview participants expressed a feeling of having time pressure related to being able to support and encourage learning. SSAB's strategy is based on a lean management philosophy, and both managers and employees are trained in streamlining processes and finding deviations to improve production flows continuously. The HRD Manager described: *“I think a lot of times especially in our organization we run very lean and we don't have a lot of extra people and so our natural tendency is ‘I have so many things on my plate I just have to check them off and go go go’ ... We have a very strong bias for action. We wanna make things happen and we have the next project already on our plate”*.

The Maintenance Manager expressed that the high level of ambition also creates crowded schedules: *“We have a high level of ambition in everything we want to do. We have a lot of painful calendars where meetings are like, well, if they end at half, the next almost start at half and they run into each other. That can be an obstacle to freeing up dialogue and actually getting issues processed.”*

Several of the interview participants also mention the downside of time pressure. Furthermore, time pressure was one of the most commonly expressed challenges connected to reflection. One Maintenance Operator specified that time-pressure can jeopardize safety as it leaves less room for reflection and that reflection is an essential part of their job to secure safe working conditions and procedures. The HR professionals and middle-managers described that many lessons are lost due to the high tempo. One HR Manager said: *“We're running at such a pace, here we have a lot of learning opportunities that we're throwing away. There's just no room.”*

The Head of Department concluded that managers might need to re-think time-allocation and securing conditions for learning: *“Making sure that you fill your working day with activities may not be the best way to promote learning, you may need some 'slack' and I think that is the responsibility of the manager. You don't need the calendar crammed with delivery. It's important that opportunities are there, but conditions need to be created and secured.”*

5.1.2 Trust

Trust was frequently mentioned as a condition for creating an environment where leaders support constructive dialogue, a person-oriented approach and a psychologically safe environment. This was something reoccurring on different levels in the organization. The Top Manager and the Maintenance Operator, expressed trust as a prerequisite for having a constructive dialogue. If one does not feel safe in the relationship between co-worker and manager, there will be challenges in having a constructive and open dialogue. Interviews also mentioned how person-oriented leadership is relevant and important since it encourages trust. As illustrated by HR Manager: *“I think one of the most important things you have to work with as a manager is trust. That's it. Then I also think it's clear that, if it's person-oriented in the whole chain, from the manager's boss down to the manager and to the employees, it's of course good [for creating trust].”*

Maintenance Manager:

“What I think is the relevance of person-oriented leadership is that you create some kind of trust and a security when you go to the individual. Which makes us create a guilt-free environment which in turn leads to learning because we dare to make mistakes and that's how we learn so it's kind of essential that you create trust and I think you do that by getting to know the individual behind it.”

Related to the question about constructive dialogue, one of the HRD Managers explained they have leadership training concerning this. The training is called ‘crucial conversations’ and includes role-play training and practice in having a two-way dialogue. The HRD Manager expressed how constructive dialogue builds trust within a relationship between

employee and employer. One challenge articulated by HRD Manager related to leadership training and constructive dialogue is mentioned below.

“Sometimes people think that they don't want to have some of those tough conversations because it might hurt their relationship. But actually it builds trust within a relationship if someone can say ‘hey I didn't like when you did this’ or ‘this is how your actions impact me’. So as a team we have to be comfortable having those tough conversations, it's one of those areas where if we don't provide constructive feedback to others, ultimately we are hindering their ability to be even more successful. So if I want you to be successful, I have an obligation to provide that feedback because we can't grow and learn unless we have those tough conversations.”

In one of the focus group interviews, when asked about person-oriented leadership, the participants discussed potential challenges related to trust and transparency. They agreed that being able to be oneself and authentic is a prerequisite for trust. In the discussion, the Head of Operations and the Maintenance Manager discussed that, as a leader, it is important to not go into a role, *“a managerial suit”*, when coming to work. The Head of Operations mentioned that trust is created when a leader is open about their strengths and weaknesses. However, being yourself and being authentic is likewise a challenge when discussing person-oriented leadership, as the Maintenance Manager noted: *“We have several examples of colleagues or individuals who every time they step down the gates, they put on a managerial suit ... and then they're another person outside of work but after a while, it takes a year or 10 years or 5 years until someone cracks, because it does not hold together. Because you can not live the double life if you want to stay. I believe in authenticity, being the person you are, it's absolutely the least costly and easiest way to build trust ... It's shit important to be real.”*

At the same time, one HR Manager implied that as a leader, it is important to be sensible when approaching employees, not all people feel that they can or want to be personal. Another HR Manager also communicated how one can not force people to be personal. However, the manager continued that as a leader, one must be person-oriented and authentic either way: *“You can't force people to get personal, it can backfire. But I think that when you lead, I think it's all about being person-oriented, you can't ignore it.”*

Building and strengthening relationships at work was repeatedly discussed throughout all interviews as a condition to create trust. The participants mentioned that as a leader, it is crucial to set aside time to have informal conversations to get to know their employees better, and understand their needs and how they work. In the focus group interview with middle managers, they were positive about the weekly meetings between employer and employee which they saw as an opportunity to have informal conversations and get to know how one's colleagues are doing in life. By being responsive and listening to the employees, one can

support the team to find “*our ways of working*” which strengthens team building. In one of the group interviews, the Head of Section explained that finding “*a shared language*” in a team is one key mission of the leader, that is, if someone does not understand what is communicated, it is crucial to get to know the person and facilitate the communication so that mutual understanding appears.

Furthermore, the interviewee emphasizes that it is not just about the operation and making steel. It is about giving the leaders resources and tools to tweak their leadership style and adapt to the people and team. Thus, this was a condition for leaders to learn.

Additionally, by being responsive as a leader, one can detect when employees are not getting the tools they need to do their job well. When asking the HRD Manager about the relevance of person-oriented leadership, we got the following answer which emphasized the importance of listening and getting to know their team: “*I think that as a leader, it’s our role to help, motivate and get to know that person ... What are their career aspirations? What motivates them to come to work? They have the opportunity to work for any company, so why do they want to work here? The more that we develop our people, the more that we invest, the more that we listen and ask their opinions, the more they feel respected and feel a part of a larger mission or vision of the company, and the more satisfied they are.*”

5.1.3 Dealing with change

Throughout the interview, interviewees mentioned change as an aspect linked to learning. Several interview responses had in common addressing conditions for managing change at an individual, team, and organizational level. For example, the Maintenance Manager described how a bigger change in structuring work was carried out when a team-oriented approach was introduced, and the last shift managers were removed from the plants. The change meant a shift in responsibility from the managers to the teams themselves. The team-oriented approach meant that teams would be driving their development, identifying their training needs, and taking responsibility for the day-to-day operational work in production. However, both the Maintenance Manager and Head of Section addressed in the interview that the right conditions for this transition were not in place for the change to have the intended outcome. When we followed up on this example and asked the Maintenance Manager what specific conditions they did not give their employees in this change, we got the following answer:

“Yes but, for example, no clear objectives for the group organization or group organized way of working. So there must also be, at group level and through all the different parts of the organization, clear goals of where we are heading towards. It is only then you can break it down as a group, so to speak, and identify where you are today and what you need to build, whether it is knowledge or working methods or tools, it’s the whole palette. I don’t think we’re sufficiently crisp there, to be honest. I also think that we pulled the plug a little too

quickly by removing the shift management. We went from pretty much shift management to zero in a pretty short period of time and didn't realize what this is going to be or mean."

Both employees and managers expressed that they are not opposed to change. However they want to understand the change in order to be able to accept it. For example, the Head of Department described a minor change that involved switching from one tool to another. However, he felt that there was not a good introduction or explanation given to managing the new tool. Moreover, both employees and managers conveyed how change can contribute to anxiety and create different consequences for different individuals. Some changes might be perceived as negative for some individuals while benefiting others. Among other things, employees mentioned that change has been closely linked to negative changes such as redundancies. There are already concerns about people's jobs in the fossil-free transition: *"There is a concern about this fossil-free transition. What will happen to our plant in Borlänge?"*

Some of the participants experience slightly different opportunities and challenges linked to change management. The Business Manager who leads the team described how their business set up enables them to work with continuous improvement. Nonetheless, the Manager emphasized: *"Then again, it can be too much change, or too fast, so you don't have time to embed it. You ought to have a clarity of when a change is coming."*

On the same topic one HR Manager felt that there is a resistance to change among some leaders in their part of the organization but would like to support managers to manage change better: *"We want to make sure that our leaders and managers have enough skills for change management and I think that is going to be a big challenge since we have started this hybrid fossil free project, it is going to be a big change for all of us and going to demand a lot of change management skills in our organizations."*

The Head of Operations described the importance of including the staff in the change initiatives from the beginning and expressed how this requires leaders to dare to be open and include employees, share responsibility and encourage ideas. Only then, according to the interviewee, can valuable feedback and questions be received that can develop the work further: *"If you are open with how you think and tell the purpose of it, and you manage to sell this purpose, then you will get a lot of input. If you are open with that and want feedback and questions, then you will get more thoughts and ideas."*

The Head of Section described another example of how a minor change had taken place. A decision had already been made by the time the leader came into the picture. However, dissatisfaction was obvious among the staff. The Head of Section decided to work the decision through once more to try to find a solution that the staff would accept. The

interviewee recalled: *"We found a nice middle ground. It took time but I don't want it undone because it shows what can happen when everyone has their say."*

5.1.4 Learning mindset

Several managerial-level interviewees raised how being a leader means that one is never done learning. As a leader, one must realize the importance of continuous learning. One HR Manager described this as having *"a learning mindset"*, the ability to learn and adapt to different situations and changed demands. Additionally, the manager expressed how many of their colleagues are seniors in their roles and have many years of experience. However, how they have built their career in the past may not work now. A learning mindset is thus about being open and quick to take advantage of new opportunities. It is mentioned that a more open and inclusive climate of conversation could help people to dare to question both their own knowledge and experience, but also working methods and strategies. Illustrated by the HR Manager: *"The only thing we know is that the way we have worked in the past, what we have built our careers on, it is absolutely not a recipe for success how it looks like in the future. It's not predictable in the same way."*

Other managers did not use the concept *"learning mindset."* However, several of the managers expressed how, as a leader, one does not have all the answers and needs to explore continuously. As the HRD Manager expressed: *"My experience and knowledge can actually be an obstacle and it can't be that simple really... because it's not all certain that those who knew best yesterday might be the ones who are best placed to answer what we need today."*

One HR Manager defined the ultimate responsibility as a leader is *"to drive the initiative forward and not stay stagnant"* since staying stagnant is not going to transform the organization and make people grow. One way of doing this is by listening to the employees and the teams and being curious about learning and development. However, they also argue that one needs the precondition for lifelong learning to promote broad learning.

The HRD Manager expressed how not having a learning mindset can be an obstacle to facilitate and create a psychologically safe environment: *"Sometimes the leaders have a kind of an old way of thinking, that they think 'I am the leader, I should know all the answers, I should you know take the lead' and that's not the case. Its leaders who are vulnerable enough to say 'that's actually a great idea, let's try it' or 'I never thought of it that way' ... So it's a vulnerability on the leadership side to say 'that's a great idea' or 'tell me more' or 'let's explore this'. Because sometimes leaders think that they need to have all the answers and that they can't say what they don't know, but actually that's a good thing because it challenges the leaders to grow as well."*

5.1.5 Reflection

Reflection is mentioned in the interview as one activity that gets down-prioritized when workload and time pressure are high. Although some leaders describe that they take the time to reflect actively at work, most tell there is no room for it due to time pressure and heavy workload. The Maintenance Manager emphasizes: *"From a leadership perspective, it's a possible area for development, I think SSAB and Borlänge, which I have the most insight into, that for a number of years we've been far too operational. We don't take the time to actually lift our gaze and look outside ourselves a bit. If it's about self-reflection or reflecting on your organization's delivery function, we look more and more closer to our operation and deliver, from a shorter perspective. Then you lose a little long-term direction, 'what are we aiming at in a slightly longer perspective?'"*

However, when leaders take the time and prioritize reflection, this is perceived as positive. In one case, a leader describes how he reflects for 10 minutes on the way back home from work each day, but also sets aside an hour for administration and reflection for the coming week every Friday as a way for the leader to *"log off from work"*. The same leader later encouraged a newly hired manager to set aside an hour, take a walk and reflect on work. In the focus group interview, this newly hired manager picked up on this and stressed the importance of hearing it from another manager: *"For me, it was important to hear from you or if you know what I mean, I wouldn't have done it without having it recommended to me because it feels like it's not working time but it is, it's just as important as getting ahead. But I think you have an important role as a leader to really push your employees to dare to take that time off, it was important for me anyway".* (Head of Section)

In the focus group, the mid-level managers further discussed how they had been coached in their leadership in a pilot project they experienced as very positive. The Maintenance Manager had started to work on using reflection as a tool in his leadership role to balance his high tempo. Head of Operation and Head of Section described how reflection can contribute to more sustainable leadership. One of them said: *"I also see reflection as a tool to avoid burnout ... that you take your time, because otherwise you take time for reflection in private [time] which is really working time, but then when you have to sit and be present with the family on Friday evening you sit and think about work instead."*

Head of Department described that it is easy to get carried away and let go of long-term work when the pressure is high. When we asked a follow-up question about his thoughts on what he could do differently to put in some effort that might benefit long-term work, he replied: *"Well it's just to disregard that the workload is high for a moment and that you need to look at these things after. Just like you need to exercise and make sure your body feels good and not just have a quick 10 minute lunch and then get on with your work, you also need breaks of various kinds in life and in work life, you also need to reflect"*.

5.1.6 Collaboration

When asked about collaborative activities, many of the interviewees raised the importance of collaboration to share knowledge in the organization. Leaders who support and give time for knowledge sharing and collaboration facilitate continuous improvement.

One recurring thing, especially when talking to HR Managers, was the leadership training that the company offers the managers. These are, for example, training in coaching skills and constructive dialogue as well as psychological safety. The purpose behind these is to make sure that the leaders have the necessary tools and resources to succeed in team management. The advantage of having leadership training is also discussed as being an opportunity to share knowledge among leaders. In the group interview The Head of Section stated: *"I still want to highlight one more thing that SSAB has done, that we have been coached based on online coaching and there you really got to reflect on yourself. I think it's positive that SSAB has done it... created an opportunity for questioning yourself and your thoughts and so on."*

However, the respondents expressed that this can be systematically improved and more a part of the organization than it is today. In one interview, the HRD Manager shared that their natural tendency is to work in silos, not being sure about what everyone else is doing. Additionally, the manager stressed the need for more knowledge sharing, cross divisional and cross-functional discussions. When we asked this manager why they work in silos, the answer was: *"Because we have so many different sites... I think that sometimes we can kind of get pigeonholed into only seeing this group of people, but we have to look at other ways of knowledge sharing or sharing information ... but when we start to open up our eyes , 'this is actually how it impacts this person' or 'this is how this action impacts your downstream customers' there's more in it and there's more relationship building because they're like 'Oh my gosh what I'm doing is actually impacting someone else'."*

Some of the interview participants feel that practical possibilities to share knowledge exist today. For example, the Maintenance Operators describe how they have different forums for collaboration between different parts of the organization where they can share knowledge. The responses of the interview participants express the need for structural or systemic changes in order to build more collaboration into the daily job activities while at the same time expressing personal responsibility. The size of the company, the geographical and cultural aspects, and the complexity of the tasks on the different levels are all mentioned as challenges. However, the Head of Section says: *"Now it also becomes our responsibility from the central council's side...so maybe it's our responsibility actually to ask the project managers how we should work forward, we have to get involved so that we can solve it in a better way. So there is not only the person responsible, for example, the project responsibility, but also a new personal responsibility. It is also about inviting yourself where you feel you should be."*

Concerning geography and divisions across countries, some participants mention the risk of not collaborating which can result in not steering in the same direction. The balance between allowing for locality while still being united under SSAB's strategy and values. The Head of Department expressed a challenge where he thinks that local divisions go in different directions and would like for better coordination between the different sites, *"we should coordinate within the division and drive a common approach to keep these issues together simply."*

5.1.7 Inclusion

One common challenge when discussing learning and how to facilitate a learning environment was inclusion. In the focus group interview with managers, they discussed that since SSAB is a male-dominated big organization there have been elements where the leadership is not as *"forgiving"* and the environment is not as open to everyone. However, in the group interview, the managers discussed how this is changing since the organization is getting more diverse. For example a female Maintenance Operator described that her manager noted that the climate of conversation changed after she started working. Two other Maintenance Operators also pointed out how they work more with the psychosocial work environment now than before. They strive to increase awareness and openness towards mental health issues. *"I personally think that this macho culture is actually loosening up and disappearing. I think it is a generational shift that is making it more okay."*

Another theme mentioned was about dominant individuals or *"unofficial leaders"*. Several stressed the importance of not having just one or a few individuals dominating a conversation. Instead, one Maintenance Operator highlights that it might be the leader's responsibility to facilitate the conversation by directing questions so that more voices can be heard. *"It is easy that the one who always speaks, always speaks ...This is a leadership issue, that it is important [for the leader] to ask straight, perhaps guided questions to some employees who rarely say what they think so that they can be heard more."*

One of the Maintenance Operators mentioned the risk that these unofficial leaders contribute to a culture not in line with the development SSAB wants to see within the company. Consequently, this does not promote learning if they are not stopped by higher managers or employees who actively interfere. However, the majority of the interview participants concluded that psychological safety, feeling safe, accepted, and listened to, helps create a more open and inclusive conversational climate. Hence, a lack of psychological safety is one of the biggest reasons people leave a company. The HRD Manager stresses that psychological safety and an inclusive work environment is something you as a leader should prioritize: *"What you also have to be aware of is that it's not enough to look at employee surveys, you have to work for this. It's not about a kind of soup that you look at from time to time, what's*

important is that you have to be practical. You have to consistently 'walk the talk' ... You can't relax, you have to work on this, it doesn't come for free and it can disappear very quickly if you mess up as a manager."

5. 2 Discussion of research question

In this section, the main findings of the case study are discussed related to the theoretical background. The discussion aims to address the study's purpose and discuss the research questions 2.1 and 2.2. We highlight the significant challenges and conditions connected to learning organization and some additional insights we gained.

5.2.1 What are the challenges for leaders to support the practical development of learning organizations?

After analyzing the result, this discussion aims to point out the main challenges as identified by the participants. The interviewees describe a working day characterized by high tempo, focus on efficiency and getting the most urgent things done as quickly as possible. Time-pressure is mentioned as one of the biggest challenges for leaders to promote learning and actively implement learning activities into the schedule. All 13 interviewees share this challenge; employees as well as managers at all levels of the organization. However, several leaders express a need to be more strategic. The Maintenance Manager expressed the feeling that the organization in Borlänge has been too operational. Tools to counter the leaders disclosed this to be self-reflection and reflection on their organization's delivery function.

As mentioned previously by Garvin, Edmondson and Gino (2019), a part of developing a learning organization is establishing and encouraging time for reflection. When asked about potential challenges, all participants communicated that reflection, collaborative activities and psychological safety suffer when there is no time to work on these issues actively. However, the interview responses reflect mixed viewpoints on whether work time can be taken for these activities or not. We note that managers higher up in the organization are more likely to express that time and space are not available and instead reflect in their private time. However, a group of operational-level managers is taking initiatives to integrate reflection into their working calendars. In this group, the newly hired manager also described that it was important to be told by the manager who introduced her to the role that setting aside time for reflection in her calendar was encouraged. The findings suggest that managers have an important responsibility to encourage their staff to set aside time for reflection in their working schedule.

Our interpretation of the interview material is that different messages are communicated from the organization about what is encouraged to spend time on, both as a leader and as an employee, linked to reflection. Some leaders see it as an activity that is encouraged to

schedule, while others signal with their behavior that it is not an activity that fits within working hours. Furthermore, the data collected suggests that a learning environment requires leadership that encourages learning activities and that leaders need to communicate what is okay to spend their time on. This is an identified challenge. The participants express a need for leadership that reinforces learning, which agrees with Garvin, Edmondson and Gino's (2019) assessment tool of learning organizations. In their research, they conclude that it is when leaders show in word and action that learning is a priority for the organization that learning can be reinforced.

In accordance with the present results, previous studies have demonstrated that one crucial step in the development of a learning organization is articulating a shared vision for a shared understanding and commitment in the whole organization (Senge, 1990; Örtenblad, 2020). Furthermore, Garvin (1993) states that it takes time to build a learning organization because it includes changing behavior. The findings illustrate that creating a shared vision when implementing change is perceived as a challenge for leaders. The results show that both leaders and employees want to understand changes, share their input, and feel included to accept a change. When this is not the case, even smaller changes can meet great resistance. We can also notice that involving people in the change process can be challenging since it may be time-consuming. Hence, this suggests that in becoming a learning organization, everyone must be included in the change process. However, the perceived challenge is creating a shared vision and involving everybody in the change.

Another challenge identified is the culture in the team. There is a culture and an old way of thinking that still exists in some parts of the organization, hindering a psychologically safe and inclusive work environment. Another element was unofficial leaders who set the culture in different parts of the organization that may oppose the development the company wants to see in its organization. Previous research argues that leader's behavior are considered an antecedent of psychological safety and allow learning processes to occur (Edmondson, 1999; Frazier et al., 2017). The team culture is critical for learning, and Bui (2020) argues that a learning organization has to involve a supportive environment. Therefore, an observed challenge for leaders to support and include all employees, may be identifying informal leaders and taking active steps to ensure that more team members have their voices heard.

Summary of discussion

In sum, time-pressure is one of the biggest challenges for leaders to promote learning and actively implement learning activities into the schedule. We note that it's a challenge in different ways, some leaders are more likely to express time and space for reflection than others. Furthermore, the findings suggest that a learning environment requires leadership that encourages learning activities. Leaders need to clearly communicate what is okay to spend their time on and lead by example. In accordance with the present results, previous studies

have demonstrated that to create a learning organization, one must take time for informal and incidental learning where time for reflection and analysis is promoted (Marsick, Watkins & Smith, 2020; Garvin, 1993).

This observation supports the idea of how leaders on all levels in the organization influence and signal to what degree learning should take place. These findings suggest that if not all leaders are a part of creating a learning organization and allocate time for self-reflection and learning for themselves, learning will not be encouraged. In return, this will affect the learning environment in the organization negatively. Another possible explanation why allocating time and secure conditions for learning might be a challenge is the identified action bias towards operational success. An additional challenge identified is to create a shared vision when implementing change. In order to be a learning organization, there is a requirement for a shared vision that aligns the employees and facilitates the change processes. A final challenge is the critical role of the leader to interfere and be observant when individuals or teams are creating a culture that is not inclusive or psychologically safe.

5.2.2 What are the conditions necessary for leaders to be able to support the practical development of learning organizations?

When reviewing the literature and analyzing the empirical findings, it has been difficult to separate what leaders identify as potential challenges connected to learning activities and practices in an organizational context from conditions they feel necessary. A possible explanation is that some conditions can turn into challenges. For example, prioritizing time for reflection is a condition identified by the leaders. However, it can also be a challenge since time-pressure is a challenge when implementing learning and learning activities into the schedule. Therefore, by creating awareness regarding the challenges that leaders identify, they can potentially reduce the risk of facing them. This suggests that the challenges and conditions are somewhat connected and complement one another.

In order for leaders to better facilitate the development of a learning organization, we were able to interpret the following conditions necessary : 1) prioritizing time for reflection and collaborative activities 2) working actively to foster psychological safety and building relationships with employees and 3) adopting a learning mindset.

One of the conditions for leaders is to take time for reflection and collaboration. The data collected shows that those leaders who take time for reflection feel that it is positive for them. Partly because they can make better use of learning opportunities and because it is a way to process their experiences. In some leaders' cases, it is also a tool for managing work-life balance. We can also see that cooperation occurs somewhat arbitrarily and depends on time allocation. Many express that there is room for improvement. Today, the findings show that collaborative activities depend on the individual leader's initiative and personal responsibility.

It may be that these participants would have benefited from a more systematic approach to collaborative activities and knowledge sharing with another organization unit. These results reflect those of Garvin, Edmondson, and Gino (2019). They argue that time for reflection is part of a supportive learning environment and collaboration is an element in concrete learning processes and practices.

Leadership training such as individual coaching is highlighted as very positive and helpful. However, since there is no systematic approach to reflective and collaborative activities daily, it is the responsibility of the leader and the team to identify the activities and occasions that benefit them. Our interpretation of what leaders can do concretely is to allow for more space in their and their employees' schedules, just as the HR Manager suggested: *“Making sure that you fill your working day with activities may not be the best way to promote learning, you may need some 'slack' and I think that is the responsibility of the manager.”* High ambitions and action bias does not need to be a problem, but allowing some space to process might mean going outside the comfort zone for some managers or organizational units within SSAB. Hence, we believe in daring to try out learning practices, creating routines around these activities, and continuously evaluating and redesigning them together.

The second condition concerning inclusion and psychological safety, as stated by the interviewees is trust, transparency, open communication, and relation-building, but all leaders state trust as the foundation in the employer-employee relationship, following previous research (Edmondson, 1999; Liu et al., 2014; Newman, Donohue & Nathan, 2017). The empirical findings of this study highlight getting to know your team, daring to be personal and vulnerable, and sharing leadership and information as factors a leader can work with to improve a work environment that is more inclusive and psychologically safe.

Leaders deal with relation-building in different ways. Some try to be available for their employees when they need a chat or guidance. Others lift the importance of informal meetings, such as weekly meetings, as great occasions to follow up on work-related and personal issues. Another condition that leaders mention as helping them promote psychological safety and a supportive learning environment is transparency, in other words, sharing information with their team and including them in decision making. The findings suggest that authenticity can increase trust. Furthermore, daring to be personal and showing yourself vulnerable as a leader can help set the tone for an open working environment. This is how a leader can show example and inspire other team members to do the same.

The third condition is for leaders to adopt a learning mindset. The leaders, especially those in HR, communicate that today's business environment requires leaders who continually take a constructive approach to their knowledge and experience. The ability to learn and adapt to different situations requires leaders who are self-aware, who listen to and are curious about

other individuals' and team's input and alternative ways of solving problems. Interviewees point out that one cannot assume that what has brought success in the past will bring success tomorrow or in the future. We feel that this is something that HR believes the organization needs to work on further and that leadership as it stands today may need to be opened up and shared more by team members. These findings suggest that a learning mindset has to be integrated throughout the whole organization on all levels. Operational Managers, as well as Top Managers need to adopt a learning mindset so that leaders can lead by example and the learning mindset becomes a part of the organization. Supported by previous research (Bui, 2020) a learning mindset can be enabled through learning structures and system learning across the organization.

Summary of discussion

To conclude, we have seen that leaders who take time for reflection find it positive and inspire others to do so as well. On the one hand, there is a tendency within the organization to work in silos. On the other hand, collaborative activities are described as learning opportunities that would mean more learning within the company and a more joint strategic development for the company going forward. We also note that leaders try to build trust and emphasize the importance of informal conversations. In addition, a learning mindset is described as a prerequisite for leaders to be able to support the development of a learning organization. Here, self-awareness and a constructive approach to one's own knowledge are mentioned as important steps.

A closer look at the findings for this research question suggests that the challenges and conditions described by the interviewees are interrelated and thus make the two difficult to separate from each other. Nonetheless, the findings from the case study indicate leaders' needs concerning promoting learning. However, the results do not explain the conditions necessary from different organizational levels. We did not separate these, but one could argue that conditions must be secured at all levels; organizational, team, and individual. Whether defined as a learning environment or a learning culture, previous research emphasizes the need for a structure and culture that supports the learning organization (Garvin, 1993; Marsick, Watkins, & Smith, 2020). That is, conditions need to be secured at all organizational levels, and here it can be argued that leaders can influence all of them. It may be helpful, similar to Marsick, Watkins, and Smith (2020), to view the development of a learning organization as a process that needs to be fine-tuned to the context. Thus, SSAB and its leaders have the opportunity to adopt practices and structures that best suit their needs and future transformation in order to ensure learning within the organization.

6. Conclusion

In this final and sixth chapter, we will present the research aims together with practical and managerial implications. Further, this section presents future research suggestions.

6.1 Research aim

This research aimed to discover how to facilitate the practical development of learning organizations. Furthermore, the aim was to explore conditions and potential challenges for leaders to support the practical development of learning organizations. Our point of departure was a systematic literature review based on empirical research focusing on what practices can be identified on how leaders can support organizational learning. Through a thematic analysis, we translated the themes into statements. The second part of our method was to access leaders' thoughts and experiences related to the statements derived from the systematic literature review. Hence, we conducted a case study at SSAB, a Nordic and US-based steel company. The case study aimed to examine if these practices were adopted and explore how they might evolve in a real-life organizational context. We further wanted to analyze the challenges and conditions necessary for leaders to be able to support the practical development of learning organizations.

6.2 Practical and managerial implications

The present research has provided knowledge on what practices can be identified on how leaders can support organizational learning based on recent empirical research. Answering the first research question, the systematic literature review showed that leaders can support organizational learning by adopting a person-oriented approach, fostering psychological safety, facilitating constructive dialogue, encouraging change, prioritizing reflection, encouraging collaborative activities, and promoting self-directed learning. This was in line with previous research and similarly stated by our theoretical background. The findings imply that a leader needs to be aware of learning through behaviors such as showing empathy, openness, creating a trusting environment, coaching, and supporting. It is not only concrete practices but also skills, knowledge, and mindsets that the leader must develop and use situationally to support organizational learning.

The results of our case study have gathered both managers' and employees' thoughts, perceptions, and experiences concerning a learning organization. The findings show that leaders face challenges that prevent them from fully promoting learning. Furthermore, it explores the conditions necessary to put in place when supporting the practical development of learning organizations. The challenges and conditions described by the interviewees are interrelated and thus make it difficult to separate from each other. Here, the present study contributes to the research area of learning and development, practitioners, and policymakers

by explaining why some practices are not happening and where efforts need to be made if organizations want learning to be at the top of the agenda.

Time-pressure is one of the major challenges for leaders to promote learning and actively implement learning activities into the schedule. One managerial implication is allocating time and prioritizing learning, even when there is time-pressure due to daily operational work. Similarly, scheduling time for reflection and collaborative activities was an identified condition for promoting learning. Prioritizing learning can be seen as part of having a learning mindset that is described as a prerequisite for leaders to support the development of a learning organization. The results indicated that a learning mindset could include working with self-reflection and self-awareness to learn continuously, question one's knowledge and experience, and be open to new ways of working and thinking. Furthermore, our results show the importance of all leaders to adopt this mindset since leading by example inspires others to adopt similar behaviors. In summary, the leader inspires and reinforces behaviors that promote learning.

An additional challenge identified is to create a shared vision when implementing change. This result suggests that change takes time and needs to involve and include all employees in the organization. Consequently, a sustainable change can happen with less resistance and better alignment in the change process. A final challenge is the critical role of the leader to interfere and be observant when individuals or teams are creating a culture that is not inclusive or psychologically safe. Since an inclusive and psychologically safe work environment influences the learning environment, a practical implication is that a leader should be observant and sensitive to the team's culture. Naturally, as a leader, one way to respond to this challenge is to be transparent and initiate informal communications. It generates trust and connection, which is essential in enhancing psychological safety in the learning process.

In conclusion, the result of this study recommends that conditions need to be secured at all organizational levels and that leaders have a crucial role at all levels. Becoming a learning organization is a process and every element and practice must be adjusted to the unique needs in the specific organizational context.

6.3 Future research

Given the delimitations of this study (see section [1.2](#)) the hereby research and its findings are to be considered contextually dependent. Other factors and potential managerial challenges may be found in other settings and companies that are not investigated in this research. Further investigation of other industries and contextual aspects might be of interest.

Furthermore, considering future implications that might add value to the present study, the scope of the research and findings might be enriched by conducting various studies to explore further how these findings can be applied and used. Investigating further could involve (1) considering another sample, for example, by broadening the population, that is, the sample size and different positions in the organization. That would enable the researcher to investigate further factors, such as cultural differences, challenges, and conditions experienced in various positions within the organization, and compare samples from different industries or organizational contexts. (2) One could also investigate the impact of organizational culture on these empirical findings and practices. (3) To test whether these findings might be generalizable and valid within an already existing “learning organization”. (4) Use this research result to explore more in-depth employee needs or observe leaders' behavior to examine the discrepancy between what they say in the interview and how they act in the organization. (5) Örtenblad (2020) concludes that there is a need for the concept of learning organization to be concretized. He suggests that both researchers and practitioners could critically examine the suggestions and ideas behind the concept to synthesize conceptual and practical expertise. Örtenblad (2020) suggests this can be done through action research. Therefore, in the next step, one could try implementing these findings in action research to assess the current findings of this research.

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Appendix

Appendix A: Semi-structured interview guide

Ethical considerations: An Invitation email that participants received a few days before the interview:

The results from the interview will be used to answer our research purpose; to facilitate the practical development of learning organization and how leaders can practically support and create a learning environment in our Master's thesis at Lund University.

- Participation is voluntary, and you are free not to answer questions or withdraw your participation at any time without any negative consequences.
- The responses given will be kept confidential. We will include your position in the company and the company name (SSAB). However, your name and your answers will be anonymous in the final result. We might use anonymized quotes.
- The interviews will be recorded. Recordings and transcriptions will be safely stored only accessible to the two authors of this thesis. The recorded interview will only be used for research purposes and deleted at the end of the research project.

By participating in the interview you agree to the above-stated points.

Introduction: Their role in the company and personal involvement when it comes to organizational learning.

- Can you briefly tell us about your role in the organization?
- What importance does learning have in your working role?
- How do you think that you (as a leader) could contribute to your employees'/team members' learning?
- What are the practical possibilities for developing learning opportunities in your role?
- What are the possible challenges for developing learning opportunities in your role?

Statements related to how leaders can support organizational learning:

- In our research, person-oriented leadership has been mentioned as positively influencing learning (e.g. taking time to be available and responsive to the well-being and motivation of employees in addition to operational work). What are your thoughts on coaching and supporting your employees, as part of your role?
 - a. Would person-oriented leadership be relevant in your organization?
 - b. What may be the practical possibilities/challenges for person-oriented leadership in your organizational role?

- c. What are your needs to coach and support your employees?
- Creating a psychologically safe working environment (i.e. an environment where employees feel free to speak up and share their thoughts and opinions, feel they are allowed to be themselves and make mistakes) is mentioned as a factor in building a learning organization. How do you recognize this in your role and organization?
 - a. What do you see as potential practical challenges to getting all employees to feel safe and dare to be honest and open?
 - b. What are the pre-conditions for a psychologically safe working environment?
 - c. What could be the needs to create such an environment?
- Leadership behavior such as facilitating and encouraging constructive dialogue has a positive impact on learning (ie. as a leader facilitates a dialogue where everyone has the opportunity to question, criticize and share in the dialogue). Do you feel it is relevant to encourage constructive dialogue in your role?
 - d. What may be the practical possibilities/ challenges for encouraging constructive dialogue?
- Learning can be seen as a process that requires constant adaptability to change. Leaders who support learning should embrace and encourage change (ie. leaders encourage new perspectives, opinions and ways of working and question assumptions). What are your thoughts on this related to your role?
 - e. What may be practical possibilities/challenges for encouraging change?
- Reflective leadership can be described as a way to promote learning through reflection on past and current experiences (e.g. reflecting on what has gone well in a project and what needs to be improved to develop work and teams). Is there room for reflection today?
 - f. What may be practical possibilities/challenges for reflection?
- Appreciating and rewarding collaborative activities where employees share knowledge with each other, have a positive effect on organizational learning. Is there any room for that today?
 - g. What may be practical possibilities/ challenges for collaborative activities?
- Self-directed learning, where individuals create and take initiative for their own learning (e.g. identifying their needs and goals and managing their own learning), what are your thoughts on that?
 - h. What meaning does self-directed learning have in your part of the organization?

- i. What could be the practical opportunities/challenges for testing self-directed learning in your role?
- j. What might be the needs to make self-directed learning possible in your workplace?
- k. For self-directed learning to work across the organization and for learning to be promoted, commitment and active action from senior managers is needed. How do you experience this today?

Appendix B: Focus group interview guide

Ethical considerations: An Invitation email that participants received a few days before the interview:

The results from the interview will be used to answer our research purpose; to facilitate the practical development of learning organization and how leaders can practically support and create a learning environment in our Master's thesis at Lund University.

- Participation is voluntary, and you are free not to answer questions or withdraw your participation at any time without any negative consequences.
- The responses given will be kept confidential. We will include your position in the company and the company name (SSAB). However, your name and your answers will be anonymous in the final result. We might use anonymized quotes.
- The interviews will be recorded. Recordings and transcriptions will be safely stored only accessible to the two authors of this thesis. The recorded interview will only be used for research purposes and deleted at the end of the research project.

By participating in the interview you agree to the above-stated points.

Statements related to how leaders can support organizational learning:

Person-oriented leadership has been mentioned as positively influencing learning (*e.g. taking time to be available and responsive to the well-being and motivation of employees in addition to operational work*)

- How do you see the potential and relevance of person-oriented leadership in your business?
- How do you see practical opportunities and challenges for testing person-oriented leadership in your organization?

A psychologically safe working environment (*i.e. an environment where employees feel free to speak up and share their thoughts and opinions, feel they are allowed to be themselves and make mistakes*).

- How do you see the potential and relevance of a psychologically safe working environment in your business?
- How do you see practical opportunities and challenges for a psychologically safe working environment in your organization?

Leadership behavior such as facilitating and encouraging constructive dialogue has a positive impact on learning (*ie. as a leader facilitates a dialogue where everyone has the opportunity to question, criticize and share in the dialogue*).

- How do you see the potential and relevance of promoting a constructive dialogue in your business?
- How do you see practical opportunities and challenges of promoting a constructive dialogue in your organization?

Learning can be seen as a process that requires constant adaptability to change. Leaders who support learning should embrace and encourage change (*ie. leaders encourage new perspectives, opinions and ways of working and question assumptions*).

- How do you see the potential and relevance of encouraging change in your business?
- How do you see practical opportunities and challenges of encouraging change in your organization?

Reflective leadership can be described as a way to promote learning through reflection on past and current experiences (*ie. reflecting on what has gone well in a project and what needs to be improved to develop work and teams*).

- How do you see the potential and relevance of reflective leadership in your business?
- How do you see practical opportunities and challenges of reflective leadership in your organization?

Appreciating and rewarding collaborative activities where employees share knowledge with each other, have a positive effect on organizational learning.

- How do you see the potential and relevance of collaborative activities in your business?
- How do you see practical opportunities and challenges of collaborative activities in your organization?

Self-directed learning, where individuals create and take initiative for their own learning (*e.g. identifying their needs and goals and managing their own learning*).

- How do you see the potential and relevance of self-directed learning in your business?
- How do you see practical opportunities and challenges of self-directed learning in your organization?

Appendix C: Articles found in Systematic Literature Review

Source	Purpose	Method	Major Findings
The interplay of leadership, absorptive capacity, and organizational learning culture in open innovation: testing a moderated mediation model. (Naqshbandi & Tabche, 2018)	Researchers used several constructs to explain the success and failure of organizations' open innovation initiatives.	Quantitative. The model is tested empirically using data sourced from managers working in diverse sectors in India.	Results reveal that empowering leadership leads to enhanced open innovation outcomes through the intervention of organizational learning culture.
Transformational leadership and human resource development: Linking employee learning, job satisfaction, and organizational performance. (Akdere & Egan, 2020)	Explore the intersection between Transformational Leadership, Human Resource Development, and organizational performance.	Large Scale study (n = 5,349) customers from 69 healthcare locations in the United States.	The results of this study support Transformational leadership through leader learning and performance support behaviors linked to a supportive Human Resource Development culture.
Does team stability mediate the relationship between leadership and team learning? An empirical study among Dutch project teams. (Savelsbergh, Poell and van der Heijden, 2015)	It examined the influence of leadership on team learning behaviors and included team stability as a potential mediator, all analyzed at the team level using structural equation modeling.	Cross-sectional approach among 30 project teams in the sectors of building and utilities, engineering and construction, infrastructure, and area decontamination and development in the Netherlands. A survey was sent to all members of the project teams selected (N = 335), and to their team leaders (i.e., project managers) (N = 40)	Results indicated that both person-oriented and task-oriented leadership behaviors were directly and positively related to team learning. Team stability did not mediate the relationship between leadership and team learning; however, a strong direct relationship between team stability and team learning was found.
Applying adult development theories to improvement science. (Kjellström & Andersson, 2017)	The purpose of this paper is to address how adult development (AD) theories can contribute to quality improvement (QI).	A theoretical analysis and discussion on how personal development empirical findings can relate to QI and Deming's four improvement knowledge domains.	This study illustrates that some competences in QI efforts are a developmental challenge to professionals, and should be considered in practice and research.
Learning opportunities in rheumatology practice: a qualitative study. (Neher, Ståhl & Nilsen, 2015)	To explore what opportunities for learning practitioners in rheumatology perceive in their daily practice, using a typology of workplace learning to categorize these opportunities.	Participants (N=36) from different professions in rheumatology were interviewed. Data were analyzed using conventional qualitative content analysis with a directed approach, and were categorized according to a typology of formal and informal learning	Findings showed that work processes with learning as a by-product in general, and relationships with other people in the workplace in particular, were perceived as important for learning in the workplace. Barriers for learning were a perceived low leadership awareness of learning opportunities and factors relating to workload and the organization of work.
How a learning organization cultivates self-directed learning. (Hutasuhut, Aduce & Jonathan, 2021)	This study aims to provide empirical evidence of how the five disciplines of learning organization introduced by Senge (1990) are practiced and how it could cultivate self-directed learning among employees.	This qualitative study used a case study approach to get an in-depth understanding of how organizational learning is practiced in an innovative motorcycle-manufacturing company in Indonesia. (N=30) staff (N=19) and managers (N=11) were interviewed in practicing the 5 disciplines in their daily work-life. .	This study provides empirical evidence of how self-directed learning is cultivated in an organization that applies the five disciplines of learning organization introduced by Senge (1990). This study found that to cultivate self-directed learning, an organization needs to build a working climate where the five disciplines are integrated into daily work-life.

Balancing control and autonomy in communities of practice: governance patterns and knowledge in nine multinationals. (Borzillo, 2017)	This research aims to uncover three forms of communities of practice (CoPs), based on a set of six governance mechanisms.	The method used is a multiple case study conducted in 16 CoPs within nine multinational organizations. Ninety-two informants were interviewed over a period of four years.	Data revealed three distinct governance patterns for CoPs (three forms of CoPs), each associated with different knowledge processes and representing a different path toward a balance between autonomy and control.
Transformational Leadership and Energizing Organizational Learning: Empirical Model for Improving Community-Based Eco-Tourism Performance in Indonesia. (Yulianeu, Ferdinand & Purnomo, 2021)	This paper aimed to examine the effect of transformational leadership, energizing organizational learning and teamwork efficacy on improving Indonesia community-based eco-tourism organization performance.	A field survey was conducted in the Tasikmalaya tourism sector. A total of 205 eco-tourism workers were surveyed to obtain data.	The findings show that transformational leadership and energizing the organizational learning process positively affects organizational performance in the eco-tourism community. The author argues that energizing the organizational learning process mediates the relation between transformational leadership and organizational performance.
Developing, validating, and testing a model of reflective leadership. (Egleston, Castelli & Marx, 2017)	The purpose of this paper is to develop, validate, and test the impacts of reflective leadership (RL) on organizational performance.	Empirical study based on over 700 survey responses from business leaders around the world. An instrument was developed to validate the model, and the statistical significance of its impacts on organizational performance was tested.	The findings show that a model of RL consisting of three leadership practices, creating an open and safe work environment, defining purpose, and challenging assumptions had significant impacts on organizational performance.
Doing complexity leadership theory: How agile coaches at Spotify practise enabling leadership. (Bäcklander, 2019)	This study examines how AC practice enabling leadership, a key balancing force in complexity leadership.	Based on interviews with sixteen agile coaches at Spotify.	Findings suggest flexible structure provided by an attentive coach may prove a fruitful way to navigate and balance autonomy and alignment in organizations.
Process quality management and operational performance: exploring the role of learning and development orientation. (Sahoo, 2021)	The paper aims to assess the influence of process quality management practices on a firm's operational performance and investigate the mediating role of a firm's learning and development orientation in the PQM–OP relationship. The paper also assesses the extent to which the proposed mediation is moderated by senior management support.	This paper draws on the sociotechnical system theory to carry out a survey study of 278 functional managers from various manufacturing firms in India through a postal mail survey approach.	The study shows that both process quality management and learning and development orientation lead to better performance and should be encouraged. The results also show that an enhanced learning capability of an organization can significantly influence improvement in OP through a stronger support of senior management.
A moderated-mediation analysis of psychological empowerment: Sustainable leadership and sustainable performance. (Iqbal, Ahmad, Nasim, & Khan, 2022)	The present study has investigated the mediating effect of psychological safety on the relationship between sustainable leadership and sustainable performance as well as evaluating the moderation impact of psychological empowerment on that relationship.	The data for this research was collected from 405 SMEs from Kuala Lumpur (Malaysia), Jakarta (Indonesia), and Bandar Seri Begawan (Brunei Darussalam)	The empirical results confirm that sustainable leadership has a positive indirect effect on sustainable performance through psychological safety which amplifies in the presence of psychological empowerment.

<p>Leadership and organizational learning culture: a systematic literature review. (Xie, 2018)</p>	<p>This paper aims to investigate how the relationship between leadership and organizational learning culture (OLC)/learning organization (LO)/organizational learning (OL) is measured in the literature.</p>	<p>This systematic literature review analyzes published peer-reviewed English articles that examine the relationship between leadership and OLC/LO/OL empirically. A total of 58 articles have been found in 42 journals.</p>	<p>This paper provides a holistic view of the types of leadership that have been connected with OLC/LO/OL in various countries and industries.</p>
<p>Mastering continuous improvement (CI): the roles and competences of mid-level management and their impact on the organization's CI capability. (Fannon, Munive-Hernandez & Campean, 2021)</p>	<p>This paper establishes a comprehensive basis for understanding the roles and competences of mid-level management and their influence on the effectiveness of continuous improvement (CI) capability within an organization.</p>	<p>A comprehensive framework is introduced to define CI leadership roles and competence indicators. A quantitative benchmarking study involving structured interviews with 15 UK organizations was undertaken to collect evidence for a causal relationship between CI leadership competences and CI capability.</p>	<p>Analysis of the benchmarking data provides clear evidence of the causal relationship between the CI leadership competences of mid-level management and CI capability of the organization. Given that the empirical study was structured on the basis of the CI leadership roles and competences framework introduced in this paper, this also provides validation for the proposed framework and the CI environment model.</p>
<p>Are altruistic leaders worthy? The role of organizational learning capability. (Mallén, Chiva, Alegre & Guinot, 2015)</p>	<p>The purpose of this paper is to investigate the relationship between altruistic leader behaviors, organizational learning capability and organizational performance.</p>	<p>The sampling frame consists of several databases or listings of business that consider people as a key element of the organization and are considered by their employees to be good firms to work for or organizational environments where human resources management has high priority</p>	<p>Results suggest that organizational learning capability fully mediates between altruistic leader behaviors and organizational performance.</p>