Master's thesis

NTNU
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Department of Education and Lifelong Learning

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Psychological safety in a knowledge intensive company

A case study looking at drivers and barriers of psychological safety and knowledge sharing and the impact of leaders and employees

Master's thesis in Counselling
Supervisor: Jonathan Reams
May 2022

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Kunnskap for en bedre verden

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Abstract

The purpose of this case study has been to investigate both drivers and barriers to psychological safety and knowledge sharing in a Norwegian consulting company. Observation of a department meeting has been conducted, in addition to interviews with head of department, sub leader and two employees. The department meeting observed was a review of the employee survey, and through the process with gathering data a distinction in the importance of psychological safety related to types of meetings was discovered. This has influenced the focus and choices in the writing process. The study has dived into how managers and employees think about psychological safety and knowledge sharing, as well as how they affect different drivers and barriers.

The research question was looked at through a qualitative case study including observation and semi-structured interviews to achieve in-depth knowledge of the research topic. Observation data was used to develop the interview guide. By applying thematical analysis on the findings, main themes and subthemes were discovered. Being transparent throughout the research process has been my priority.

When analyzing the data, patterns were discovered which in turn led to the following main categories: structural system constraints, relationships, expectations, and individual differences. The findings illustrate that structural system constraints within the organization often can be a barrier to psychological safety and knowledge sharing because the constraints limit resources like time and money. High-quality relationships were found to be a driver for psychological safety and knowledge sharing because it increases the perception of feeling welcomed and that your concerns are acknowledged. Expectations work as both driver and barrier, as they are tightly linked to the organizations shared beliefs about appropriate and expected behavior. The last category, individual differences, is used both as an explanation for variations in behavior from the participants point of view, as well as something discovered through the case study. In addition to the categories highlighted, the case study itself lead to increased awareness among the participants.

Findings show that when the daily work is characterized by facts, numbers, and calculations, facilitating meetings about the work environment becomes even more important because it differs so much from the daily way of talking. The expectations of leaders and employees seem to influence such meetings to a great extent. Establishing high-quality relations between coworkers as well as between leaders and employees work as a driver for psychological safety and speaking up. However, it depends on the topic, and the organizational culture has significant influence on employees and leaders' engagement when discussing work environment and soft parameters. There are indications that system barriers such as invoicing rate and time pressure work against employees who want to share knowledge and contribute to psychological safety. Based on the findings, it seems appropriate to have an awareness of the culture and group dynamics, and the effect it has on the productivity of the meetings.

Sammendrag

Hensikten med denne kasusstudien har vært å undersøke både drivere og barrierer for psykologisk trygghet og kunnskapsdeling i et norsk konsulentselskap. Det er gjennomført observasjon i en avdeling, i tillegg til intervjuer med avdelingsleder, underleder og to ansatte. Avdelingsmøtet som ble observert var en gjennomgang av medarbeiderundersøkelsen, og gjennom prosessen med innsamling av data ble det oppdaget et skille i betydningen av psykologisk trygghet knyttet til type møte og tema. Dette har påvirket fokus og valg i skriveprosessen. Studien undersøkte hvordan ledere og ansatte tenker rundt psykologisk trygghet og kunnskapsdeling, samt hvordan de påvirker ulike drivere og barrierer.

Forskningsspørsmålet ble sett på gjennom en kvalitativ kasusstudie inkludert observasjon og semistrukturerte intervjuer for å oppnå dybdekunnskap om forskningstemaet. Observasjonsdata ble brukt til å utvikle intervjuguiden. Ved å bruke tematisk analyse på funnene ble hovedtemaer og undertemaer oppdaget. Det har vært en prioritet for meg å være transparent i prosessen.

Ved analyse av dataene ble det oppdaget mønstre som igjen førte meg videre til følgende hovedkategorier: strukturelle systembegrensninger, relasjoner, forventninger og individuelle forskjeller. Funnene illustrerer at strukturelle systembegrensninger i organisasjonen ofte kan være en barriere for psykologisk trygghet og kunnskapsdeling fordi begrensningene begrenser ressurser som tid og penger. Relasjoner av høy kvalitet ble funnet å være en drivkraft for psykologisk trygghet og kunnskapsdeling fordi det øker oppfatningen av å føle seg velkommen og at bekymringer og tanker blir anerkjent. Forventninger fungerer som både driver og barriere, da de er tett knyttet til organisasjonens felles oppfatninger om hensiktsmessig og forventet atferd. Den siste kategorien, individuelle forskjeller, brukes både som forklaring på variasjoner i atferd fra deltakernes ståsted, samt at det ble oppdaget gjennom kasusstudien. I tillegg til kategoriene som ble fremhevet, førte også kasusstudien i seg selv til en økt bevissthet blant deltakerne.

Funn fra kasusstudien viser at når det daglige arbeidet er preget av fakta, tall og beregninger, blir det enda viktigere å legge til rette i forkant av, og underveis i møter om arbeidsmiljø, fordi det skiller seg så mye fra den daglige måten å snakke på. Forventningene ledere og ansatte har, ser ut til å påvirke slike møter i stor grad. Styrking av relasjoner mellom medarbeidere så vel som mellom ledere og ansatte, fungerer som pådriver for psykologisk trygghet og det å ytre seg. Det avhenger imidlertid av temaet, og organisasjonskulturen har betydelig innflytelse på ansattes og lederes engasjement når de diskuterer arbeidsmiljø og myke parametere. Det er indikasjoner på at systembarrierer som fakturering og tidspress virker mot ansatte som vil dele kunnskap og bidra til psykologisk trygghet. Basert på funnene virker det hensiktsmessig å ha en bevissthet om kulturen og gruppedynamikken, og effekten det har på produktiviteten til møtene. I lys av funnene kan det argumentere for at det er viktig å ha et bevisst forhold til kulturen og gruppedynamikken, og effekten dette har på produktiviteten i møtene.

Acknowledgements

This master's thesis marks the end of two exciting and educational years in the master's program in counselling. Managing my own little research project has been exciting, energizing, and challenging. It has been a pleasure to immerse myself in something I am curious about.

I would like to thank the company that let me in, trusted me, and let me observe and interview leaders and employees. Thank you so much for your participation and letting me be curious.

I would also like to thank my supervisor Jonathan Reams, who with his unique presence and insight has guided and challenged me through this process. Your availability and knowledge are much appreciated. Thanks!

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Last but not least, thanks to my dear Olav, for regularly adding humor and entertainment in everyday life, proofreading, and enormous support in general during the study period.

Now I look forward going from being a student to becoming an employee and being challenged in new ways!

Trondheim, May 2022
Fride Thorsdatter Vaagland

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1 Introduction

In a fast-paced century where routine and modular work is on the decline (Edmondson, 2019), leaders and employees are trying to use their knowledge and skills to create value in an efficient way. Even if technology and digitalization is a part of the future solution in our society, there will still be people working in organizations. Both employee satisfaction and company return on investment are important for organizations to succeed. Unfortunately, research shows that there is a lack of psychological safety in many organizations, in a wide range of industries. However, there is a growing interest in psychological safety across sectors and on how to implement it. When people know something but do not speak up, organizations will miss something important because organizations are built on every person's personal competence (Edmondson, 2019).

Psychological safety is becoming a term of employment, and if organization do not supply psychological safety, they will bleed out their top talent (Clark, 2020). As one of the leaders told me: "If they are not satisfied, they can just change company", which illustrates what Clark (2020) says. Knowledge intensive companies depend on knowledge sharing in their work, which in turn is highly influenced by the culture, relations, and norms within the company (Carmeli & Gittell, 2009; Ipe, 2003). According to Siemsen et al. (2009), psychological safety should be seen as a factor that lessens the reluctance to share knowledge, rather than a motivator. Therefore, I have a loose hypothesis that psychological safety can be one factor in relation to this.

1.1 Reason for the chosen topic

Ever since I was a teenager, I have worked in several different places and thus experienced different leaders and coworkers, and organizational cultures. The feeling of not being scared to ask any question and to speak up when something seems incomprehensible is something I value highly. I have been a newcomer in various positions several times myself and experienced how different the newcomer period can be from workplace to workplace.

When the opportunity arose, I wanted to dig deeper into this feeling of safety. The study sought to gain a richer appreciation of how employees and leaders experience factors related to what is termed psychological safety. Thus, I felt that it was appropriate to conduct a case study where observation and semi-structured interviews were my main source of data. There is significant research suggesting employees feel uncomfortable speaking up (Milliken et al., 2003), however, I wanted to get a better sense of the implicit theories employees and leaders have in relation to this. Thus, the thesis has a worthy topic in relation to society, the organization, and my personal interest (Tracy, 2010).

1.2 Research question

Since I wanted to explore the perception of psychological safety in more depth, and how leaders affect it, my research question ended up being:

What are the possible drivers and barriers to psychological safety among employees in a knowledge intensive Norwegian company?

1) *How do leaders and employees influence these drivers and barriers?*
2) *What organizational characteristics appear to promote or inhibit psychological safety?*
3) *What are possible effects of psychological safety on knowledge sharing?*

The term knowledge sharing is defined as "the act of making knowledge available to others within the organization" (Ipe, 2003, p. 341) and it differs from communication and information distribution (Ipe, 2003; Haas & Hansen, 2007; Hendriks, 1999). In this thesis the term knowledge sharing is used when describing the exchange of knowledge between coworkers, and between leader and employees. It includes knowledge about both social norms and specific knowledge in their field of expertise.

Psychological safety in a team is defined as "a shared belief that the team is safe for interpersonal risk taking" (Edmondson, 1999, p. 352). In this thesis, the term is used primarily in relation to how participants share expert knowledge as well as general discussions about work environment.

The research question is examined through a case study in a Norwegian consulting company using observation and interviews as methods. The company is anonymized due to privacy considerations.

1.3 Further structure of the thesis

The thesis is divided into 6 main chapters. Chapter 2 provides a presentation of recent research and relevant theoretical framework used to examine the research question. Chapter 3 includes an overview of the case study method, the analysis process, ethical considerations, quality of the research, and reflections on my role as a researcher. In chapter 4 I present the findings, and in chapter 5 these findings are discussed in connection with theory presented in chapter 2. In chapter 6 I summarize the thesis, give concluding comments, and discuss limitations of the study. Finally, further recommendations for future research are presented.

2 Theory and literature review

This chapter contains two main sections that will provide an overview of what psychological safety is, why it is important in teams, and how it affects teams in organizations in the form of knowledge sharing, communication, and work environment. The chapter will also address the impact of leaders, and leader-employee relations, on psychological safety.

2.1 Literature review

This section will provide a review of recent research on the topic relevant to my research question. Research on psychological safety has flourished the recent years, but I have reviewed three research articles I found relevant to my research question.

When exploring psychological safety at the workplace, Remtulla et al. (2021) discovered barriers and drivers at multiple levels in the organization using semi-structured interviews followed by thematical analysis. They have chosen to use the term "facilitators", however, the term refers to the same feature, something that within the organization can work for (or facilitate) psychological safety. The barriers and drivers discovered ranged from individual to organizational level. Some of the barriers discovered were hierarchy, personality, perceived lack of knowledge and authoritarian leadership. At an organizational level, they identified hierarchy as a barrier because it made people perceive that their opinion was less important, that other members valued their ideas less, a feeling that other had something more important to say than themselves. At the team-level, when people felt a lack of knowledge it increased the feeling of being the only one without knowledge about the specific discussion topic. This indicates that for knowledge sharing to happen, people have to believe that their contribution is as important as others. Feeling a lack of knowledge also increased the fear of saying something incorrect. At the individual level, personality was perceived as a barrier especially because of those with dominating personalities. This barrier caused unequal dynamics as well as participation in the discussion. Another individual-level barrier was fear of public speaking or being shy in general.

In addition to barriers, Remtulla et al. (2021) also discovered drivers at different levels, like leader inclusiveness, open culture, strong interpersonal relationships, small groups, and vocal personality. Drivers were related to both practical and relational aspects within an organization. When leaders were acting supportive and had a friendly attitude, they were perceived as a driver. The study revealed that when people have worked in the team for a longer period and do not feel as a newcomer anymore, speaking up feels a lot safer. Remtulla et al. (2021) highlights the effect of establishing smaller groups, making the team members feel both more confident and comfortable in speaking up about their own opinion. At the individual level, personality played a significant role, especially having a vocal personality and having an inherent confidence which gives you a perception that you are allowed to voice your opinion. Remtulla et al. (2021) note that the influence of different personalities and individual differences on psychological safety is less explored than e.g. leader's behavior. They suggest that their findings highlight the importance of exploring own and other people's personalities within a team to improve the work environment (Remtulla et al., 2021).

Psychological safety is important both for experienced as well as newly hired employees. Mornata & Cassar (2018) used in-depth semi-structured interviews to study how newly hired employees, newcomers, perceive organizational socialization support and what they do when they think that there is a lack of such support. The findings show that when employees perceive a lack of formal organizational support, they start to engage in informal interactions with other coworkers in the organization. This type of behavior, looking for help among coworkers, come with a cost. Asking for help affects your self-image, and Mornata & Cassar (2018) found that those newly hired search for coworkers who they perceive as psychologically safe. Those who were newly hired valued psychological safety as important characteristic, and those who helped them displayed expertise, availability, and accessibility.

When the newcomers in Mornata & Cassar’s (2018) study perceived a context as psychologically safe, it required coworkers who were experienced, available, and willing to involve new coworkers in the work activities. In addition to this, it was important that they were perceived as happy to share information. The researchers suggest that every organization’s human resource management should take this into consideration when developing learning programs for newly hired employees, because interaction with coworkers is the main learning strategy for newcomers. Interpersonal skills are therefore seen as important to be aware of when hiring someone, because it affects the socialization process. The study also highlights the important role coworkers have in establishing a psychological safe environment. They emphasize the need for more research that focuses on the regulation of employees’ proactive behaviors, and why someone perceive a context as safe while others don’t. The researchers also highlight the importance of studying those who do not manage to socialize into the organization (Mornata & Cassar, 2018).

Siemsen et al. (2009) collected data from four companies and investigated how employees perceive psychological safety, and how it is moderated by the employee’s confidence in knowledge sharing. The findings show that low employee confidence in knowledge is a barrier, and that psychological safety is a way to overcome that barrier. In addition to that, the study shows that increased communication frequency leads to increased psychological safety, which emphasizes the importance of available meeting spaces, appropriate group norms, and leaders’ who encourage this type of sharing behavior. If, however, a barrier like this works as a moderator for sharing inaccurate knowledge and information overload, Siemsen et al. (2009) argue that increasing psychological safety not necessarily is productive.

Given these various findings in some of the research literature, it was interesting for me to dig deeper into what role it has in a Norwegian setting in a knowledge intensive company in Norway. What type of barriers and drivers do they perceive? How does being a newcomer in the company affect the perception of psychologic safety? What role does the leader play in all this? These are all questions I will highlight in the discussion in chapter 5.

2.2 Theoretical framework

In this section, theory related to the research question will be presented. The section forms a basis for the discussion of empirical findings in chapter 5.

2.2.1 Psychological safety defined

As long as humans have existed, psychological safety has existed as phenomenon. However, the first person naming it "psychological safety" was psychologist William Kahn in the 1990's. In recent years, researchers like Amy Edmondson, Warren Bennis and Edgar Schein have been central in understanding the influence it has on organizations and business results. Before that, Carl Rogers used the term "unconditional positive regard" (Clark, 2020, p. 2), meaning what happens when people accept the expression of negative, "bad", painful, and defensive feelings as much as positive, "good" and confident feelings (Wilkins, 2000).

When people feel comfortable expressing themselves within a team, the team climate can be characterized as psychologically safe. Psychological safety refers to the perception that the team will not reject or embarrass a team member if he or she speaks up (Edmondson, 1999; 2019). Teams are a widespread way of organizing workplaces today (Schei et al., 2020). The term "team" in this context means an organizational work team that "exists within the context of a larger organization (…) and shares responsibility for a team product or service" (Edmondson, 1999, p. 351). This term will be used when writing about people working together in the department in the case organization. By using teams, organizations will be able to achieve more than the sum of each individual, because the whole is greater than the sum of its parts (Fyhn, 2020).

Prior to Edmondson's work on psychological safety, Schein and Bennis (1965, in Frazier et al., 2017) introduced the term and defined it as "a critical part of the unfreezing process required for organizational learning and change" (p. 115). The perception of threats is reduced and barriers to change removed. It is not about the perception of your tasks, it is about the perception of the environment (Frazier et al., 2017). Speaking up within a team involves a range of activities, giving feedback, volunteering on a concern in a meeting or sending an email to clarify something (Edmondson, 2019). When speaking up, there will often be an interpersonal risk associated with that. Sometimes speaking up occurs after having overcome a feeling of fear, while other times it feels easier and more straightforward for the person speaking up, which sometimes can be due to natural variations. However, research has shown that leaders tend to overlook how much of the exchange is hindered by fear in the team (Edmondson, 2019).

From an evolutionary point of view, humans are group-living species made to adapt and match the responses of others to survive. This conformity, the need to belong and not stick out, is deeply grounded inside us. This is happening both consciously and unconsciously, but the majority in a group has significant influence in such situations, also called majority influence (Cialdini & Goldstein, 2004; Coultas & van Leeuwen, 2015). Since conformity affects both statements and behavior within a group (Coultas & van Leeuwen, 2016), it is likely that it affects psychological safety, at least at some levels (Clark, 2020).

Workplaces that work towards enhancing psychological safety, speaking up and talking about ideas occur more often than holding back, showing that psychological safety is a powerful way to shape behaviors within a team (Edmondson, 2019). With the definition of psychological safety in mind, it seems likely that a team with a high level of psychological safety speaks more freely and has a greater extent of exchange of ideas. On the other side, teams experiencing a low level of psychological safety will, in worst case, suffer from exchange of important ideas and perspectives (Clark, 2020; Edmondson, 2019).

2.2.2 Clark's 4 stages of psychological safety

According to Clark (2020, p. 6-13), psychological safety consists of four elements. Those are:

1) Inclusion safety
2) Learner safety
3) Contributor safety
4) Challenger safety

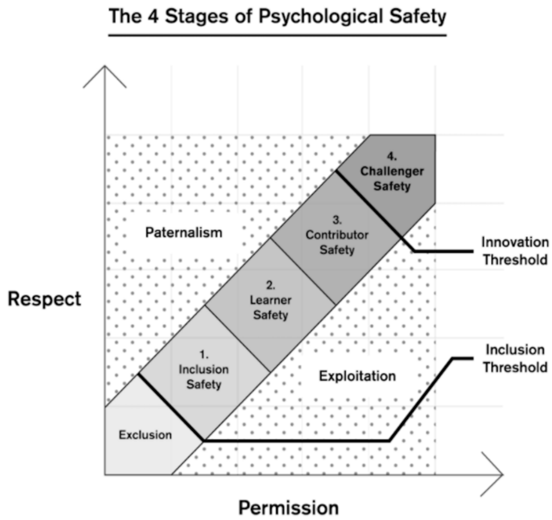

Figure 1: 4 stages of psychological safety (Clark, 2020, p. 6)

Inclusion safety

The first of the four stages described by Clark (2020), is *inclusion safety.* In this stage you become a team member and the team offers you a shared identity. When you are hired, you are formally admitted to the team, and the informal part of admission comes from the people you work together with. To experience inclusion safety, you need the sociocultural acceptance from the team (Clark, 2020).

Learner safety

After gaining sociocultural acceptance, you enter the *learner safety* stage, where discovering things and asking questions feels fine. Humans have an innate need to learn and grow, and organizations' ability to learn works as a basis for competition. Not having this learner safety leads to passive behavior, and it differs from inclusion safety in the way that learning safety requires more from you as a team member. Leaders and coworkers can help adding more confidence in this phase, and their roles are therefore important. According to Clark (2020), this stage has a lot of potential if reached. Compared to the previous stage, where participation was not required, this stage is riskier and displays vulnerability. Before asking a question or suggesting something, you look around and try to find out whether it is safe or not. We always assess the potential interpersonal risk around is, either conscious or unconscious (Clark, 2020).

Contributor safety

This stage involves participation in the team, not only by asking questions, but also performing in your role. Autonomy is provided in exchange for performance. This performance is expected by the team, and they assume that you can do it because you are assigned to your role. However, even if you are competent and able to perform, experiencing this safety is not a matter of course. Leaders can impact this type of safety by behaving arrogant or insecure, and coworkers can discriminate or be affected by prejudices. In this stage, facilitating autonomy and encouragement are important tasks for the leader (Clark, 2020).

Challenger safety

When people feel able and safe to challenge the current situation, we can say that they have reached the stage of *challenger safety*. Conformity, which is "the act of fitting in with the group" (Coultas & van Leeuwen, 2015, p. 189), is no longer an obstacle for them, and they are not afraid of their reputation. In this phase one can say that the individual has developed from a socialized to a self-authoring mind (Reams & Reams, 2015). Creative processes are most likely to emerge in this fourth stage (Clark, 2020), because creative ideas are seen as risky endeavor and requires more safety than e.g. ask questions or participate in a meeting (Carmeli et al., 2010). In this stage of psychological safety, people feel so safe that they leave their comfort zones and suggest disruptive or creative ideas. They present their opinion and challenge the way things always have been done. From a psychological safety point of view this is risky behavior because speaking up about your opinion involves a greater personal risk than telling facts (Clark, 2020).

2.2.3 Related constructs

It is worth noting that there are constructs related to psychological safety. Three commonly studied are trust, work engagement and empowerment. They all represent positive states towards work life. However, psychological safety represents a broader perception of the social environment as well as how people will think others will react to their own behavior (Carmeli & Gittell, 2009). Psychological safety goes beyond the concept of trust because it describes the climate within the team rather than just the feeling of being able to rely on others. It is about team members being comfortable being themselves and sharing a belief that discussing errors and experiences is constructive, not dangerous (Edmondson, 1999). Psychological safety focuses on the self and not others, and is therefore, despite its similarities, distinct from trust (Edmondson, 2004). It is important to note that trust is also vital to collaborative job designs, but psychological safety can explain something beyond that. Another similar construct is work engagement, which is more a cognitive state where people are investing their energy and personal resources into the work. The third similar construct, psychological empowerment, refers to a motivational state where people feel that they have control over their work (Frazier et al., 2017).

Despite these conceptual similarities to other cognitive and motivational states, psychological safety is unique because it captures perceptions (Frazier et al., 2017). Psychological safety is not about just being nice, because it is not about always agreeing with each other. Having established psychological safety does not mean that you will always get support when suggesting something within the team. However, it might foster a type of discussion that can be both honest and productive. Neither is psychological safety about lowering performance standards, people shall still be held accountable for their actions and contribute to a challenging and collaborative work environment (Edmondson, 2019).

2.2.4 Barriers to psychological safety

As this case study sought to investigate the drivers and barriers of psychological safety in the case organization, it is relevant to present what the literature says about this. As described more fully in the literature review, Remtulla et al. (2021) identified four barriers to psychological safety at different levels in the organization: hierarchy, perceived lack of knowledge, personality, and authoritarian leadership. Contrary to this, recent research on psychological safety argues that personality has little or nothing to do with perceived psychological safety (Edmonson, 2019; Schei et al., 2020). A high score on extroversion or introversion says something about how you behave in the social world, however, psychological safety refers to the climate which again affects people in almost the same way regardless of personality type (Edmondson, 2019). Contrary to Edmondson's (2019) findings, a meta-review by Frazier et al. (2017) supports that some personality traits increase the likelihood that you will perceive a team as psychologically safe, e.g. proactive personality. However, differences between individuals will influence how they perceive and engage in different situations (Kahn, 1990).

In addition to the barriers identified by Remtulla et al. (2021), the culture of the work environment is another potential one and most difficult to change during an organizational change process (Clark, 2020). Culture shapes and controls what not to say and what to say and has strong impact on social interaction, which in turn impacts psychological safety and knowledge sharing. Highly competitive cultures seem to be a barrier to knowledge sharing because each individual values their own knowledge so highly that they want to guard it from their coworkers (Ipe, 2003). In those situations, we can see that knowledge does not flow automatically across individuals within an organization. Knowledge is something that is strongly tied to people's identity (Crane, 2012). Someone who possess more knowledge than others in a field might perceive themselves as an expert, at the same time as they perceive those with less knowledge as novices. The social action of giving advice, both solicited and unsolicited, strengthens someone's expert identity. On the other side, those who seek for advice and request information, see themselves as novices (Yu & Wu, 2021).

If you don't trust that others will contribute equally, it is likely to become a barrier to sharing. Likewise, if you believe that what you share will be exploited, it reduces the likelihood of you sharing your knowledge (Ipe, 2003). While the culture can be one potential barrier, confidence among the employees can also be one. The members of a team possess knowledge that they must share for the organization to benefit from it, which leads to the concept of knowledge sharing (Ipe, 2003). For knowledge sharing to happen, those who possess the knowledge must have opportunities to share. If such opportunities are not made, individuals' knowledge might stay at an individual level and the knowledge is lost when the employee leaves the organization. Losing both individuals and knowledge is not a preferred situation, and a lack of knowledge sharing is seen as a barrier to effectively manage knowledge in organizations. It is therefore important to look at what types of barriers to knowledge sharing that exist. The motivation to share knowledge depends on how people perceive the "cost of transfer" (Hansen, 1999). Having strong relations might lessen this cost perception, according to Szulanski (1996).

2.2.5 The impact of culture and norms

Opposite to barriers, believing that your contribution means something and will not be exploited enhances the likelihood for sharing more knowledge and is therefore a driver (Edmondson, 1999). These beliefs strongly relate to the organizational culture, which according to Schein & Schein (2016) can be observed on multiple levels. He suggests that the culture within an organization covers everything it has learned as it has evolved. It can be defined as:

> … the accumulated shared learning of that group as it solves it problems of external adaptation and internal integration; which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, feel, and behave in relation to those problems. (p. 6)

Schein & Schein (2016) suggest that within an organization, there exists a system of values, beliefs, and behavioral norms, that the members are not necessarily aware of. Norms are expectations you share about the group members general behavior (Hackman, 1986), and already in 1977 Argyris (1977) noted how powerful they are within organizations when it comes to speaking up about something you know. Organizational norms are also one out of four building blocks necessary for psychological safety to be present (Frazier et al., 2017; Kahn, 1990), and "taken-for-granted rules" about speaking up can cause challenges when trying to achieve innovation and employee engagement (Edmondson, 2019, p. 34).

Staying on the inside of these norms makes people feel safer than standing outside, meaning you will be safe as long as you do not question or challenge the habitual way of how things are done (Kahn, 1990). The feeling of "rocking the boat" (Milliken et al., 2003, p. 1455), or creating unnecessary discussion, is for many employees a good reason to not speak up. However, to know what might create discussion from speaking up about a particular issue, you must develop a cognitive map of the communication norms of the organization. This map guides what is appropriate and less appropriate in that organization, and what consequences it has (Milliken et al., 2003; Morrison & Milliken, 2000).

Norms are basic assumptions that have consequences for example on team performance and cooperation. They are stable and seem to be a source for finding out how to do things later. Norms are not automatically barriers to psychological safety, however, since they are stable and affect members in the organization they are important to take into consideration (Schein & Schein, 2016). Normative or social pressure within a team is one of the reasons people choose to be silent within a team (Morrison & Milliken, 2003). There is a social dimension to silence, because when entering an organization, for example as a newcomer, you must learn how things are done there, what we do and do not discuss (Van Maanen & Schein, 1979). Employees often learn to be silent by observing their coworkers, meaning that if they see people decide to sit in silence, they do it themselves as well. The communication upwards are affected by the quality of the relationship between employee and leader (Milliken et al., 2003; Kahn, 1990).

According to literature in the field there are several terms for the act of speaking up or remaining silent within an organization: employee voice, employee silence, and voice behavior. However, they all refer to the same phenomenon; to speak up or remain silent in a work situation. In a team people often have to decide whether they are going to express their opinion or not. In fact, most people keep silent and choose not to share thoughts and input that could have been valuable for other people on the team. There are various reasons for remaining silent, however, a common denominator is that people focus on avoiding negative consequences of speaking up (Morrison & Milliken, 2003).

2.2.6 The impact of leaders

In creating a culture where people feel safe to raise their thoughts, leaders have an important role by being able to remove barriers and motivating employees to use effort in speaking up (Edmondson, 2003). Leaders have a key role when it comes to facilitating quality in relations between employees (Carmeli & Gittell, 2009), as well as in establishing appropriate group norms (Schei et al., 2020). In 2012 Google conducted "Project Artistotle", studying 180 teams within the company to find out how to make a perfect team. They discovered that one common feature of well-performing teams was that the amount of talking was about the same. This was something the researchers referred to as "equality in distribution of conversational turn-taking". The other common feature was that the well performing teams were better at intuiting how others felt, by reading their non-verbal cues like expressions and tone of voice, also called average social sensitivity. The teams who had unequal distribution of conversational turn-taking experienced a decline in collective intelligence (Schei et al., 2020; Duhigg, 2016).

A good leader can create conditions for development and learning, so that achieving excellence is possible (Edmondson, 2019). Traditionally, leadership is understood as the use of social influence to organize the work so that the organization or group reaches its goals. However, leadership is not something static, it changes with society's demands and needs (Kaufmann & Kaufmann, 2015). Team members will be fully aware of the leaders' behavior whenever they share something, whether it is new ideas or reactions to something the leader said. Thus, the leaders' behavior will be important to the employees thinking the climate is safe or not (Edmondson, 1999). However, it is not only about how the leader appears like highlighted here, but also about the relationship between the leader and the followers. In a meta-analytic review based on 136 independent samples, Frazier et al. (2017) summarize "as leaders develop positive relationships with followers, higher perceptions of psychological safety are likely to occur" (p. 147).

In terms of leaders' impact on psychological safety and knowledge sharing, it is worth taking into consideration how leaders may function as role models (Gächter & Renner, 2018). While there are potentially additional constructs and theories that could have been included in this chapter, I have chosen to focus on leader-member exchange theory (LMX) which I see as most relevant to this topic. The importance of relationship quality is central in LMX, which is a dyadic, relationship-based theory of leadership. Contrary to many other leadership theories that focus on behavior, LMX is based on the assumption that leaders influence employees through the quality of the relationship. High levels of voluntary behavior from employees, e.g. speaking up, might come as a result of a high-quality relationship between the employees and leader (Erdogan & Bauer, 2015; Hu et al., 2018). Therefore, LMX is relevant to take into consideration when looking at psychological safety in organizations. Relations between coworkers and between leaders and coworkers is a part of daily work life and is relevant to take into consideration in this project because of the importance relations have on creating psychologically safe conditions (Mornata & Cassar, 2018).

When employees observe their leader, they learn both from them, but also from other people's reactions towards them, according to Bandura's social learning theory (Bandura, 1971). This can be connected to organizational socialization, meaning the process where employees learn knowledge and behaviors to adjust themselves to the organization (Mornata & Cassar, 2018). When newcomers are getting socialized into the organization, leaders work as role models (Gächter & Renner, 2018). How that socialization process turns out has significant impact on the quality of LMX (Sluss & Thompson, 2012). However, the importance of high quality LMX seems to vary between employees (Erdogan & Bauer, 2015), but regarding newcomers, high quality LMX has been seen as an important factor in successful onboarding processes. According to Sluss & Thompson (2012), the onboarding process is more complex than a learning process, because it involves social exchange where relational mutuality plays a role. Coworkers within the organization play an important role by having the opportunity to display psychological safety to newcomers, which again creates conditions for learning and knowledge sharing (Mornata & Cassar, 2018). The formalization of expectations regarding appropriate behavior is strongly influenced by the exchange between leaders and employees (Edmondson, 2004). Experiencing relations that are supportive and trusting promotes the perception of psychological safety. These relations provide a flexibility that allows people to suggest things without thinking about the consequences (Kahn, 1990). Both Edmondson (1999) and Kahn (1990) argue that when employees have positive relations to their leaders, is impacts the perception of psychological safety in a healthy way.

Contrary to psychological safety, some organizations are perceived as psychologically *unsafe*. When organizations are perceived as such, it is often the leaders and coworkers who display social undermining behaviors that hinder the establishment and maintenance of e.g. positive interpersonal relationships (Duffy et al., 2002). Such social undermining behavior can create fear, which limits effective action (Diamond & Allcorn, 2004). Leaders who display this kind of behavior will over time hinder the development of a psychologically safe work environment, where proactive behaviors are less likely to happen (Mornata & Cassar, 2018).

Such harmful workplace culture is what Diamond & Allcorn (2004) call "moral violence", which is the exact opposite of a psychological safe environment. They found that the presence of moral violence is related to hierarchic structures and narcissistic people who gets support from subordinates. It is, unfortunately, well established in the research literature that these leaders influence organizational culture, employees, and decisions. This harmful culture will over time be perceived as normal, something that just has to be tolerated and lived through (Diamond & Allcorn, 2004). On the other side, social undermining behaviors do not necessarily impact everyone the same way. Some employees seem to be able to handle psychological unsafe environments better than others, based on their own, strong self-efficacy. They know they are good at their job and are therefore less affected (Mornata & Bourgeois, 2014). Research has shown that psychological safety may differ across teams and is often related to the leader's ability to effectively create conditions for psychological safety (Edmondson, 2019). When leaders exhibit inclusive behaviors like accessibility, openness, and availability, psychological safety is likely to emerge (Edmondson, 2004; Kahn, 1990).

In a psychologically safe organization, knowledge sharing is a part of daily work. Knowledge sharing is influenced both directly and indirectly (Xue et al., 2010). Indirectly, employees' subjective attitudes can be changed and by that increase knowledge sharing. Directly, social pressure or facilitating conditions can encourage knowledge sharing. If a leader wants to increase knowledge sharing within a team, she or he should focus on cultivating a nurturing team climate. The team is where the employees frequently interact with peers and team climate is therefore important to pay attention to for leaders, and it is important to establish teams where high-frequent communication is the norm. Leading the process thus means setting a framework that ensures that every employee dares and has the possibility to participate in effective information exchange. The leader can, for example, start by establishing norms for the team's social interaction (Schei et al., 2020).

This is in line with what Ipe (2003) found as one of the four main factors that influence knowledge sharing. When reviewing the research in the field, they found that opportunities to share must be made, and the leader is often in a position where that is possible to implement.

Even if conditions for sharing knowledge are established, the influence of leaders and coworkers play a significant role. According to Gächter & Renner (2018), leaders have an important role in shaping employees' beliefs and contributions. They argue that those who expect others to contribute, are more likely to contribute themselves. In this way, expectations about others can play a significant role in a meeting situation. This is in line with a long tradition within psychological research suggesting people's way of behaving when cooperating with others (Gächter & Renner, 2018).

2.2.7 How psychological safety affects performance

Sharing knowledge in an efficient way has an important impact on performance, and a team's performance can often be linked to the degree to which goal achievement takes place (Schei et al., 2020). Performance is directly impacted by psychological safety because the potential negative consequences of taking initiative or making mistakes is then minimized, allowing the team to focus on their tasks (Frazier et al., 2017). Having high standards and high psychological safety makes the work environment a high-performance zone but having only one of them is not enough. High standards and low psychological safety might transform the work environment to an anxiety zone, which is unhealthy even if fear might work as a motivator to some employees. Vice versa, low standards and high psychological safety makes it a comfort zone, not so productive as a high-performance zone (Edmondson, 2019, p. 18). It is important to take into consideration that this is not necessarily so rigid as it may seem. In real life the distinction between these different zones might not be this clear. However, when working with psychological safety in the workplace, it is important to avoid that it becomes only comfortable and not productive as well (Edmondson, 2019).

Investing in team learning behavior facilitates performance even if it is time consuming Edmondson (1999; 2019). The notion that it is too time consuming might exist in several organizations, but the potential gain is great compared to the risk of wasting time. An argument supporting this is that to understand what is happening within a fast-paced organization, some sort of learning behavior is required (Edmondson, 1999). Discussion of failure and learning from that is important to enhance the quality of the work, and there is a distinction between "learning-what" and "learning-how", the last one requires a team. "Learning-how" involves discussions within the team, e.g. suggesting improvements, brainstorming and sharing knowledge (Edmondson, 2019). This may be part of the explanation for why research on psychological safety has increased in recent years, because of the change in how the work is organized.

3 Methods

This chapter will provide an overview of the different approaches used to gain greater understanding of my research question. A combination of observation and interviews works as basis for analysis and discussion, aiming to see the topic of interest from two different perspectives. In addition to observation and interviews, I got access to the results from the employee survey from the case department which was used as background data when preparing for observation and interviews. This document contributed to a common basis of understanding between me and the participants.

3.1 Research design

Using qualitative research design, the researcher can gather information about something by talking to people and observe them in their natural setting (Creswell, 2013). In a case study, the researcher is using various types of sources to gain data (Creswell, 2013; Rowley, 2002), in my case observation, interviews and documents. Using multiple sources can yield different kinds of insights making it possible to see the topic of interest from multiple perspectives (Rowley, 2002). Studying the same phenomenon by using multiple sources is also suggested to increase validity (Patton & Appelbaum, 2003). When doing observation and interviews, the researcher is the most important instrument, as surveys are in quantitative approaches (Ryen, 2002).

The closeness to reality is a key advantage in qualitative research, and closeness in itself does not automatically make findings less valid (Silverman, 2020). Qualitative research approaches are often used to describe how people perceive a certain phenomenon or a process and can provide deeper understanding of a phenomenon and richer descriptions of real-life situations compared to quantitative research approaches. Within qualitative research, case study is one of the approaches that can be used to achieve valuable information on the "why" and "how" of a phenomenon (Silverman, 2020). Approaching a phenomenon this way relates to the philosophical approach phenomenology, trying to understand the social phenomenon from the perspective of the participants (Smith, Flowers & Larkin, 2009). One of the features of case studies is the ability to investigate a phenomenon in its context (Rowley, 2002), which will be elaborated further in the following section.

3.2 What a case study is and why use it

Social reality is complex and approaches that include context and embrace this complexity are necessary (Mabry, 2008). Among students and new researchers, case studies are often a popular choice of approach in projects (Rowley, 2002). However, what a case study is, appears to be poorly defined despite its popularity (VanWynsberghe & Khan, 2007). Some researchers define it as an "empirical investigation of a specified or bounded phenomenon" (Mabry, 2008, p. 214), while others use the definition; "detailed examination of a single example of a class of phenomena" (Flyvbjerg, 2006, p. 221). In Eisenhardt (1989), the following definition is found; "a research strategy which focuses on understanding the dynamics present within single settings" (p. 534). There are many definitions to be found in the literature, and not all of them will be mentioned here. However, what most of them have in common is the focus on the study of a phenomenon, e.g., a process within an organization (Silverman, 2020).

Case study as an empirical inquiry is useful when you want to investigate the "how" or "why" of a phenomenon in a real life and contemporary context and especially when boundaries between context and phenomenon are not so clear (Lee & Saunders, 2017a; Rowley, 2002; Yin, 2009). What case studies can provide is useful context-dependent knowledge, which can be extremely valuable in those situations where we are trying to develop from beginners to experts (Flyvbjerg, 2005). One of the strengths of using case study is that it allows a holistic perspective (Tight, 2017a), which is suitable when studying organizations.

As a master's student a case study is appropriate because it is bounded and thus, more feasible. In master's program there are limitations in time and resources, which makes case study a relevant alternative. Even if the case study might not change the society, it can be of interest for more people than the researcher (Tight, 2017a). In addition to these strengths mentioned above, it is also a feature that case studies challenge the social truths in organizations, by recognizing their complexity. Also, insights from case studies might be "a step to action" (Tight, 2017a, p. 30). For example, when studying change within an organization, case study can be useful to understand, and also explore, the dynamics and the processes that occur (Tight, 2017a).

When choosing to conduct at case study, I had all these features in mind. I was interested in looking at a psychological safety as a phenomenon from multiple perspectives in a real-life context, and a case study also suited my holistic perspective on leadership and the work environment, which a case study allows (Tight, 2017a). The context of the organization's interests made this a good choice, because they were interested in looking at how they can improve leadership and the work environment. This developmental goal can be seen as a process within the organization, which makes case study a proper choice (Silverman, 2020).

Having a well-defined research question is important, which will help the researcher avoid the risk of getting too much data material as you go along with your process (Eisenhardt, 1989). I strived to have a clear idea from the start about what I wanted to find out and how, but at the same time be open to new ideas throughout the project. In the planning phase, I was eager to talk to as many as possible, to every employee in the department "to get the whole picture". However, that was not realistic in this study. Through discussions with my supervisor, I decided that in addition to observation, interviewing four to five participants were appropriate. To avoid ending up with too much data material, and also due to limitations in time and resources, I set a limit on the number of participants. I also tried to end the interviews when they lasted over one hour, in an appropriate way by summing up some of the topics we have been through and asking if there was something more the participant wanted to tell.

3.2.1 Using case studies in organizational science

As the previous section highlights, case study as a qualitative approach has its qualities. Historically, quantitative research has been seen as the approved science, meaning that concepts like objectivity and rigor are seen as related only to quantitative measures. This notion of quantitative research as the most accepted research approach go back to when natural science was the only way of investigating organizations, believing that objective information exists and can be retrieved when having a quantitative approach. By only doing quantitative research on organizations, you will lose individual perceptions, or "the flesh and bone of everyday life" as Patton & Appelbaum (2003, p. 62) pronounce it.

Organizations often struggle with issues related to the intersection between the structures in the organization and humans. Therefore, when case studies are seen not just as a supplement to natural sciences but as having an independent role, it might contribute an advance of sociological issues within an organization. Having what Patton & Appelbaum (2003) names a holistic view, which refers to the belief that the whole is more than the sum of its parts, is in line with using case study as approach. Case studies fit complex settings because the goal is not to reduce it to a single cause or explain it as easy as possible (Van Wynsberghe & Khan, 2007). By approaching a phenomenon through a case study, I as a researcher show respect for the complexity of social structures at the same time. The complexity within the organization is captured to a higher degree compared to quantitative approaches (Mabry, 2008). Empirical details that constitute the study object is considered in the perspective of the particular context, which makes it an inductive approach (Patton & Appelbaum, 2003), thus it can be a valuable approach when doing research on organizations.

When doing a case study in an organization, establishing trust is essential to get into the organization and obtain valuable data. Before observing, I strived to establish trust. I assured that the project was approved by NSD (Norwegian Centre for Research Data), provided them the opportunity to read the information letter and sign consent form, and assured that raw, non-anonymized data material would be shared only with my supervisor. This was also part of my ethical considerations, which I see as something reciprocal. By taking my precautions, follow research guidelines, and behave in an ethical way, I wanted to show them that I respected their privacy and thus build trust and establish rapport.

Rapport is built over time, and several factors impact this process, e.g. trust. When trust is established, the members of the organization feel safer when sharing information to you as an external person, which can give you access to the everyday life in the organization (Kawulich, 2005; Mabry, 2008). Being truthful and show respect and empathy are other factors influencing the process of establishing rapport, as well as listen actively. It is also important to show a commitment to the well-being of the members of the organization. As a part of the rapport building, reciprocity is important. The organization might ask themselves: "What's in it for us?". I wanted to clarify to them something I can provide them after the project is finished, a report summing the most important findings, as recommended by Kawulich (2005). I also accepted handing over the thesis in the end, to those asking for that. The topic I am doing research on might be relevant for the organization in relation to work environment, meeting culture, communication, and teamwork. Therefore, it might be in their interest to see where improvement is needed or recommended, by getting some new insights from this case study.

3.2.2 Types of sources

Case study research often draws on various sources of evidence, e.g., documents, observation, and interviews (Rowley, 2002; Creswell, 2013). I wanted to see what the insights from these sources could tell me about the phenomenon, making this an appropriate approach. Since observation and interview separately has its own strengths and weaknesses, combining them is likely to strengthen the study and provide stronger substantiation of hypothesis, if done properly. This use of multiple sources to study the same phenomenon is also suggested to increase validity (Patton & Appelbaum, 2003), which is important for the relevance of the results. When doing observation and interviews, the researcher is the most important instrument, as surveys are in quantitative approaches (Ryen, 2002). That is why throughout the project I wrote a researcher log to avoid forgetting my own reflections that occurred during the process, everything from reactions to thoughts about what could have been done differently. Further reflections on my role as a researcher is presented in section 3.6.

3.2.2.1 Documents

Documentary evidence may be one of the sources in a case study (Yin, 2009), e.g. internal documentation and reports (Lee & Saunders, 2017a). When studying organizations, we distinguish between secondary data within the organization and secondary data external to the organization. The raw secondary data within the organization has originally been gathered for other purposes than research and might serve as a support for the human resource management or marketing department in the organization. Employee satisfaction surveys are example of such raw secondary data material (Lee & Saunders, 2017a). However, such raw data will only be available if you have got access and illustrates the importance of gaining trust and maintaining confidentiality (Kawulich, 2005).

3.2.2.2 Observation

Observation can provide valuable description of the culture and social norms in an organization, as supplement to interviews and documents. A situation that may be relevant to observe can e.g. be a department meeting. Silverman (2020) points out that observations can serve as something fundamental to understand another culture, providing "thick descriptions" (Geertz, 1973, in Silverman, 2020). When observing, we put ourselves as researchers in a position where we can look after and listen to what goes on in the organization (Dingwall, 1997). It is the naturally occurring activity that is interesting. Compared to interviews where people to a greater extent can construct the answer they think fits in, observation can to some degree disclose an eventual discrepancy between what they say and what they actually do, and also what they say they do (Fangen, 2010). However, a limitation is that the situation can be impacted by the presence of the researcher, which is important to be aware of. The researcher will always be biased in some way, which is important to take into consideration because she/he is the instrument for data collection. A limitation when doing observation, is that those who are being observed might behave different than if they were not being observed, known as the Hawthorne effect. Even if such observation provides in-depth information about the phenomenon studied, it is time consuming (Lee & Saunders, 2017a).

3.2.2.3 Interviews

Interviews can be described as a conversation with purpose, and as a social interaction between the researcher and the participant (Ryen, 2002). If interviews are done in a proper way, they may provide important insight to how participants experience reality and think about situations which is valuable when conducting a case study (Yin, 2009; Silverman, 2020). To conduct interviews in a proper way means for example that you as a researcher are responsible for obtaining interesting and useful information about the lifeworld of the participant. In addition to these important elements in the interview process, the interviewer should also be somehow familiar with the language used by the participants. Since the interview is a social interaction, behavior plays a role, and it is important to emphasize honesty, be calm and supportive, pay attention, listen, and stay curious. On the other hand, it is important to maintain a balance between trust and professionality in the researcher role (Ryen, 2002).

3.2.3 Challenges

All methods come with challenges, and this section will elaborate on the most common challenges of case study research. According to Rowley (2002), the most challenging element when using case study as approach in research, is to lift it from a descriptive account of "what happens" to "a piece of research that can lay claim to being a worthwhile if modest addition to knowledge" (p. 16). Another common criticism of the case study is the notion that the research is strongly influenced by the researcher and that the research therefore becomes too subjective. In which ways can research be influenced by the researcher? Patton & Appelbaum (2003) point out two important factors: access and preunderstanding. Access refers to "the ability to get close to the object of study to truly find out what is happening" (p. 68), while preunderstanding means "… such things as people's knowledge, insights, and experience before the engage in a research project" (p. 68). These factors explain two ways the identity of the researcher can influence the case study.

Being aware of one's own preunderstandings is important, which are influenced by five elements: knowledge of theories, knowledge of techniques, knowledge of institutional conditions, and the personal attributes of the researcher such as creativity and human understanding (Patton & Appelbaum, 2003, p. 68). On the other side, a total lack of these factors is not good either, because it will cause time consuming activities such as getting to know the organization and gathering basic information. Despite these negative sides of a total lack of preunderstanding, not being aware of it when you have it can be a threat to the subjectivity of the research. By acknowledging and reflecting upon one's own prejudices, biases, opinions, and values, maintaining objectivity will be easier (Kawulich, 2005; Patton & Appelbaum, 2003). I strived to be transparent through the whole process and thus reducing the impact on my participants' responses. The department I conducted my research on was new to me, and I had no information about it before I came to do my observations and interviews.

3.3 Practical implementation

This section will provide an overview of how the research was conducted, including how participants were recruited, the use of the different data sources, developing the interview guide and conducting the interviews.

3.3.1 Selection and recruitment of participants

When trying to get access to for example an organization, gatekeepers and participants are important, especially the gatekeeper, who opens the gate into the organizational life and those who work there (Patton & Appelbaum, 2003). Since it is important to be transparent throughout the research process to ensure quality (Tracy, 2010), I will describe how initial contact with the organization was made. When starting the data collection in the autumn of 2021, I contacted someone in my network who was my organizational insider (Alexander & Smith, 2018). That person put me in contact with the organization's HR department. After that I continued communication with the HR department, discussing my thoughts and plans, as well as asking them what they thought would be good to know more about. After establishing contact with the HR department, the person in my network was not, at any level, involved in the project any longer. However, I informed every participant about how initial contact was made through my network, but that the person had nothing to do with the project other than putting me in contact with HR. I also informed them that I know some general internal concepts, platforms, and programs belonging to the organization. It was my highest priority to be as transparent as possible and, in that way, build trust between the participants and myself.

To recruit participants, my contact person in the HR department in the case organization sent an email with some information about the project to some department managers he thought were positive about participating. I continued to converse by mail with one of the department managers who answered, scheduling time for my observation of a department meeting. For reasons of confidentiality, I will not give the exact number of participants in the department meeting, but it was between 15 and 20. After an interview with the head of department, I received contact info for two sub leaders. I sent email to both and one of them said yes to participate. In the end of the interview with the sub leader, I asked if invitation to participate could be passed on to the employees of the section, preferably one newly hired and one with several years with experience. This resulted in interviews with two employees in that section and the sample method is known as "snowball sampling" (Silverman, 2020, p. 63). This method allows the researcher to use the network of some participants to reach even more participants that fits into the selection criteria. Having an appropriate sample, as well as using appropriate procedures throughout the research process, increase the rigor of the study according to Tracy (2010).

When choosing to contact an organization in this way, it fits into what Silverman (2020) calls purposive sampling, which "allows us to choose a case because it illustrates some feature or process in which we are interested" (p. 63). This sampling method is appropriate when you study organizations and social processes, like psychological safety within a team (Silverman, 2020). Appropriate sample has important consequences for the quality of the study, as it contributes to the criterion "rich rigor" (Tracy, 2010). By recruiting participants from an organization that you already have knowledge about in one way or another, there will always be a risk that preconceptions will impact your data material and/or analysis, which I was aware of. However, the fact that I have some knowledge of the organization may have given me insight in formulating questions and express myself in a way that helped establish good relation to the participants, as well as show understanding of their work situation.

3.3.2 Documents and observation

The observation took place at the organization's office in the autumn of 2021 with a duration of one hour. The agenda was discussing the employee survey report, and I received the same meeting notice as the participants with the survey report attached. When the meeting started, I presented myself, the project and assured them and the company anonymity. Then informed consent was read and signed by the participants. I was mindful of my role as an observer and therefore I took some steps to limit my own biases. I only wrote what I saw and heard, not writing how I interpreted what happened. For example, if someone laughed, I wrote "laughter" and noted who was laughing, if it was everyone or just some. I have reflected upon my location in the room, I sat in a corner in front of the room where everyone could see me. The downside with it, is possibly that it became harder for them to forget my appearance. On the other side, I got to see everyone's face expressions, which I found valuable when observing interaction.

During my observation I actively looked at the interactions. Sometimes I focused on specific people, e.g. the leader, or cast a glance at those who appeared to be more quiet than others. I felt somehow like a camera, zooming in and out, depending on what happened during the meeting. I also took field notes, as exact as possible, writing down some of the behaviors, e.g. laughter, as well as topics and specific words. Fields notes are an important part of conducting observation, and it might be appropriate to keep your own thoughts and reflections in a separate document, do not start to analyze your notes while observing. Using exact quotes, describing activity in the order which they occur, and include relevant background information, will improve the field notes (Kawulich, 2005).

3.3.3 Developing the interview guide

When collecting data through semi-structured interviews, an interview guide is used as a basis for the conversation. Semi-structured interviews aim to understand or get a description of something (Kvale & Brinkmann, 2015). When developing the interview guide, field notes from observation were used as background data with the theoretical framework in mind. I wanted to avoid having too abstract question. I chose to look at my field notes and formulate questions about specific events from the meeting I observed and wanted to hear more about. These questions allowed me to listen for examples of psychological safety and knowledge sharing. For example, I formulated a question like this: "was your general feeling after the meeting positive, negative, or neutral?" With follow-up question: "What do you think was the reason for this?". My plan with asking this first question consisting of three alternatives was to give them something concrete to start with, and then move over to more reflection. During the interviews I was open to associations and exploration of what the participant felt was important considering the topic. It differed how strictly I followed the interview guide, because some of them approached topics by themselves. Conducting tightly structured interviews might also feel unnatural after having met participants in natural situations before, in the field, before conducting interviews (Bernard, 2013).

3.3.4 Conducting the interviews

In this study four interviews were conducted, with an average duration of approximately one hour. Two of the interviews were conducted on a digital platform, and the other two were conducted in a meeting room at the participants' office. Conducting interviews on digital platforms offers several advantages including deducting travel time and convenience for both parts. Participants might also feel more comfortable remaining at their own location. However, digital platforms limit non-verbal communication, which often helps interpreting what is being said and give context (Remtulla et al., 2021). From the beginning I focused on establishing a good relation between me and the participant. When conducting interviews, it is important to be aware of the possibility that there are multiple interpretations of the same situations (Silverman, 2020). This became clear to me, when I asked the participants the same questions about the meeting they all attended.

As well as the balance between trust and professionality, the order of the questions and how precise they are will impact the quality of the interview. I chose a semi-structured interview because it allows the researcher to precisely focus the case study by asking questions that are accurate to gain insightful explanations. I also tried to create a room for the participants to talk about relevant experiences and perceptions relevant to the research question, which is among the most important things the researcher does (Lee & Saunders, 2017a). Follow-up questions were ready if the participants needed some help reflecting on specific questions, which was sometimes the case. To maintain professionality, I was constantly aware of how I appeared, such as being polite and showing respect to the organization and the employees, their time, as well as how I presented myself and my education.

3.4 Data analysis

Doing analyses in an effective way helps give structure to the writing process afterwards. A good starting point when analysing your data material might be to take a step back, to look at what the original goal of the study was. However, there are no clear guidelines or recipe for how to analyse a case study, but you may want to follow some guidelines. Case studies with good quality in the analysis part are often characterized by using all relevant material, checking out conflicting topics, and are based on the researcher's knowledge in the field, but in a way that is as objective as possible (Rowley, 2002).

To ascertain only what one has seen and heard, falls within the first-degree interpretation. By trying to see broader meaning contexts, you can set what you observed, into a new perspective. Analysing on a second-degree level gives more distance to the data, allowing the researcher to go beyond "common sense-understanding" (Fangen, 2010, p. 211), and thus avoid appearing as a journalist presenting what has been said and done (Silverman, 2020). In the process of making thick description, I wrote what I interpreted, and then systematized the interpretations. When I interpreted what the participants have said or done, I tried to see it in relation to what context it appeared in, as suggested by Fangen (2010). Looking for patterns, links, relationships associations etc. and trusting what I perceived as key labels, was a good place to start (Silverman, 2020).

3.4.1 Transcription and coding of data

After conducting the interviews, I started processing the material immediately after each interview by transcribing. Transcribing was completed because text is more appropriate for analysis compared to speech only (Kvale & Brinkmann, 2015). However, important elements from the interview like laughter and hesitation was noted in the transcription. During transcription all information about people, places and age were anonymized to protect the participants. After transcription I ended up with approx. 60 pages with transcribed material, which became the foundation for further analysis.

When analyzing the data material, thematical analysis (TA) was chosen as an appropriate analysis method because it is flexible and can provide a rich and detailed account of data of lived experience. According to Braun & Clarke (2006), TA is "a method for identifying, analysing and reporting patterns (themes) within data" (p. 79). When identifying a theme during the analysis process, it shall capture something important in light of the research question (Braun & Clarke, 2006). During the coding process, the computer program NVivo was used as a tool gather the categories and store them systematically. It was also helpful to use NVivo when receiving supervision on digital platforms, because it felt easier to look the categories and discuss them when sharing screen. In addition to working in NVivo I had the transcripts in paper form next to me where I have made some comments.

3.5 Quality considerations

3.5.1 Generalisibility

There are some weaknesses that should be taken into consideration when using case study. One of the main weaknesses to which the critique refers to is the lack of generalisability, which refers to "the capacity of each case to be informative about a general phenomenon, to be broadly applicable beyond the specific site, population, time, and circumstances studied" (Mabry, 2008, p. 225). Generalisability is among the most frequently discussed issues in relation to case study research. Those who argue against this common issue usually highlight the possibility of doing case studies on the same topic to compare them and in that way identify similarities or differences (Tight, 2017a). Single case study research can be scaled up by repeating it, e.g., in another team in another organization (Tight, 2017b). Seeking to generalise from a master's project is not advisable, however, the generalisability issue is not restricted only to case study, it also applies to other social research approaches (Tight, 2017a).

Even if generalisability is a common issue discussed, Thomas (2011b, in Tight, 2017a) argues that what is being offered by inquiries like case studies, is "exemplary knowledge" and if you are seeking to generalise from such research, he argues that you have missed the point. If your study offers something other people can learn from, that is the main point, however, other researchers are welcome to apply the findings to other cases (Tight, 2017a). Can case study research give valuable insights without proving generalisability? Generalisability has no easy answer, but what is important is that it needs to be addressed in every case study that is being carried out (Tight, 2017a).

3.5.2 Validity and reliability

Both generalisability, validity and reliability are related to how the readers of your research view the quality and the results. Validity, defined as: "the way in which you are collecting your data appropriate for answering the questions you wish to answer" (Tight, 2017a, p. 33), and refers to how accurate your data is. Was my data influenced by unnecessary bias? Were the limitations explained thoroughly? To ensure validity in my own project, I strived to be as transparent as possible throughout the process to minimize the impact of bias. My use of multiple sources to study the same phenomenon increases validity (Patton & Appelbaum, 2003), as well as framing my case using prior literature in the field which strengthens the internal validity (Eisenhardt, 1989). Reliability, defined as: "would another researcher collecting the same data in the same way produce the same results?" (Tight, 2017a, p. 33), highlights the importance of providing information about the procedures throughout the research process (Rowley, 2002). Therefore, to ensure reliability, the procedures in getting participants, collecting data, and analyzing is described.

Both validity and reliability in qualitative research has been discussed for a long time for many reasons, but one of them is because the researcher is the one interpreting the data (Lee & Saunders, 2017b), as noted previosly. However, to get that in-depth understanding a case study can provide, it is my interest in psychological safety and the work environment that is the main force for gaining a deep understanding of that topic, which is the feature of case study research (Mabry, 2008).

3.5.3 Ethical considerations

When studying a case in-depth, taking ethical considerations became necessary. Doing research on human beings means that you as a researcher should be aware of the vulnerability that comes with establishing rapport. Participants are giving you access and welcome you into their organization, and tell you their thoughts and reflections, resulting in a proximity that the researcher should be aware of. As a case study researcher, you learn a lot about the participants you interview and the team you observe, maybe even more than the participants will understand (Mabry, 2008). To be open about what you are doing research on, is necessary. Ensuring to work ethically is in line with conducting a good case study, and this is important even if you already have gotten an ethical approval prior to data collection. No one outside the organization should be able to recognize the participants when I write up my report or thesis, and information like this is important to include in the information letter to behave in an ethical way (Lee & Saunders, 2017a).

3.5.3.1 Informed consent

When doing research on people and their thoughts and experiences, ethical considerations become important. Participants have their right to be informed that they are part of a research project, and right to get information about the project (Ryen, 2002). When taking care of privacy throughout a research project, preparation of informed consent is necessary. I used a standardized template from NSD, where information about the purpose of the study, responsible parts and confidentiality was given. In line with Silverman (2020), I gave the participants information that they were allowed to withdraw from the project anytime until the end of the project. For more details on informed consent, see appendix A.

3.5.3.2 Confidentiality

Confidentiality is an important ethical aspect to include to protect both the participants and the organization. When promising participants confidentiality, it is seen as a promise that information will not be passed on in ways that go beyond the agreement. This is closely linked to the trust between the participant and research in general, as well as trust in the researcher's credibility (NESH, 2021). In this project, confidentiality is maintained in several ways. However, it is not only about credibility and trust, but also about legal guidelines stressing the importance of protection of participants' privacy (NESH, 2021). It is important to give information about who is going to have access to the data until the end of the project, which was my supervisor and me. This information was included in the information letter, in line with Ryen (2002).

When transcribing, I replaced every name with codes both when taking observation notes and transcribing audio files. The audio files were deleted after transcription, which I also informed the participants about in the beginning of every interview. Company internal information was also anonymized when transcribing, e.g. names of other departments, internal platforms, and office locations. Everything in the data material that seemed to not have any implication on the results was anonymized, according to Nilssen (2012). Another step I took in maintaining confidentiality, was to store the signed consent forms, in paper format, on a location away from my working station. This was to minimize the risk for participants to be identified by others in the transcribed data material.

3.6 Reflections on my role as a researcher

The researcher's role is central in qualitative research, as many choices are made throughout the process. In this section I will reflect upon my role as a researcher and the impact it may have had on the project, both on the participants and the data analysis. The importance of transparence and which steps I have taken to maintain that, is discussed in section 3.5.

When using observation as a data source, the researcher uses eyes and ears with the research question in mind. How the situations are interpreted is affected by the researcher's role, and the researcher should become familiar with the organizational culture. For example, by developing social networks that might help the researcher to understand more of what happens in the social world of those who are being observed (Kawulich, 2005). Having that in mind, it can be considered an advantage that I was familiar with the organization before I entered it, due to my relationship with the gatekeeper. However, I was not familiar at all with the specific department, so I was aware of some limitations there. Given the fact that a lot of organizational research does not provide information about how the researcher gained access to the organization, I will argue that information about this strengthens the quality of the study (Alexander & Smith, 2018).

When trying to observe the social world in the organization, looking for keywords and switching focus is important. E.g. switching between narrow and wide perspective to get as much as possible from the observation. Also actively looking at the interactions to see who talks to whom and how decisions are made, will be extremely valuable when observing within an organization (Kawulich, 2005). When I conducted the interviews, I took some steps to increase quality by being fully transparent (Tracy, 2010), for example about how I got access to the organization. As I did when observing, I was during the interviews trying to avoid implying meaning when asking question as well as being mindful of my own biases. Despite the steps I took, I believe that entirely removing the impacts of my biases is not possible. Throughout the writing process I have become more aware of the interview as an intervention, me visiting their organization as a researcher from the social sciences. There was a dynamic interplay between what I presented to them and their responses, even if the questions asked were open-ended and as neutral as possible. The feeling of visiting them as a researcher from the social sciences were especially apparent in the first interview I conducted, however, several of the participants were interested in what I thought about the observation.

4 Empirical Findings

In this chapter, findings from the thematic analysis of the data material will be presented and works as a basis for the discussion in chapter 5. The categories will in some ways overlap with each other. The interviews were based on my observation of a physical department meeting. Part of my mandate was that the HR contact person wanted to know more about how to improve elements related to the use that was made of the survey. The observation was of this type of meeting where the employee survey was discussed, while the interviews covered a broader range of related topics as well. This was possible due to my choice of interview method which opened for exploration of related topics the participants wanted to discuss.

This chapter is divided into several major categories which include subcategories, which are the themes I want to describe. All quotes are written in italics and translated by me from its original Norwegian formulation to English. These quotes are used to illustrate the categories and subcategories that my analysis led to. The participants have been given the following pseudonyms to protect the anonymity of the participants. These are 4 random common women names, regardless of the gender distribution among the participants: Helene, Marie, Lise and Ingrid. Helene was head of department (HD), Marie was a sub leader (SL) within that department, while Lise and Ingrid were employees (E). Ingrid had worked for a longer period than Lise. During the interviews, it turned out some had more to say than others. The extract from interviews will therefore vary somewhat among the participants.

Below is a model illustrating the major categories and subcategories.

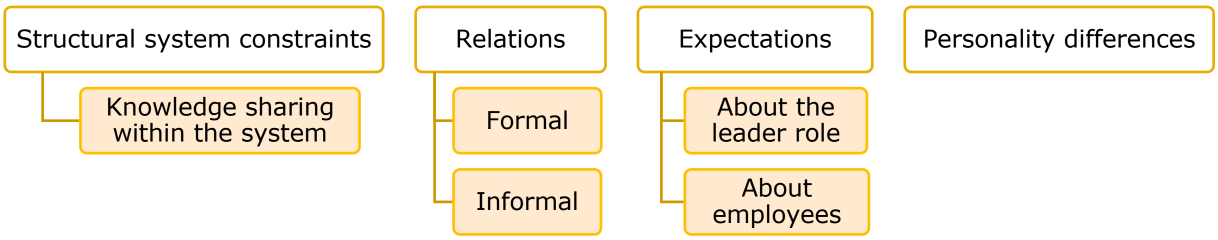

Figure 2: Model of finding themes

4.1 Findings from observation

During the observation of the department meeting, head of department Helene presented the results of the employee survey on a screen. The employees in the department sat in a horseshoe formation in a meeting room at the company's office. Helene (HD) stood in front controlling the presentation. The meeting started with Helene (HD) explaining the purpose, and she continued talking about a decline in the average results of the different themes in the survey. She then explains her opinion about the decline, emphasizing people being busy the last two years as a potential explanation.

The main findings from observation were that there was unequal amount of talking among those who attended the meeting. Someone was silent during the entire meeting, and the majority spoke little. I transcribed my fieldnotes and color coded those who spoke, ending up discovering a pattern showing an unequal amount of talking. Except for the leader, there were mainly two to three people talking most of the time during the meeting. The one talking the most pointed out early on that there seemed to be an overall agreement in the results. Some other people added something sometimes. Sub leader Marie said that the system is top-down, and someone replied that they disappear because the organization is so big, feeling like a "working ant". Helene (HD) asked if they had reflected about if there was something in the survey results that surprised them. Then they started talking about missing information flow and the Marie (SL) said that the feeling of belonging increases when the flow of information increases. After a while Helene (HD) said that some group tasks were planned, but that it is not necessary because they have been through the most. In the end of the meeting Helene said, "they must be clever and speak up", referring to speaking up about what's on their mind. The observation gave me clues about what I wanted to dig deeper into in the interviews, like unequal dynamics, choosing not to conduct group tasks, and how they perceived the meeting.

4.2 Structural system constraints

In the knowledge intensive organization studied, time and the billability of time seemed to be factors that impacted their focus in day-to-day work to a high degree. Therefore, a category called "structural system constraints" seemed to cover many of the reflections in the interviews. The category refers to constraints that are perceived as an obstacle or something that makes it harder to work with psychological safety and knowledge sharing and can therefore also be thought of as a potential barrier. Having a high degree of billability means that most of an employee's working hours can be registered on a project for a customer.

The participants described that the pressure lies on their professional work, delivering on time for their customers who are paying them for the job. This might have significant consequences for internal development in the organization. The following quote from the interview with Ingrid (E) might illustrate that: *The professional work we do is what there is the most pressure to complete, so everything that is internal to the company is in a way a bit downgraded.* She illustrates what tasks are supposed to be prioritized. During the interview with Marie (SL), she points out that the reality is that they have to prioritize to get enough assignments, if not they will be temporarily laid off:*… that is what determines it all. We can well imagine more training, or company trips and... maybe daily coordination meetings or whatever. But it somehow does not help if we do not get enough assignments. That is what pushes and steers.*

The registration of working hours seems to be another structural system constraint, as expressed by Marie (SL): *We register hours on everything and if you spend half an hour on it, where should that half hour be registered then? If you get it presented at a meeting anyway.* This was something Marie (SL) expressed when talking about preparation for the meeting where the employee survey was going to be discussed. She continues: *We are probably very affected by the fact that we register hours for everything we do.* What Marie (SL) expresses might illustrate the structural system constraint and can be interpreted as something that shows that the meeting structure makes it possible to not prepare and therefore, hours can be used on working with a project instead. Hours used on preparation for an internal meeting about this year's employee survey, cannot be registered on a project, and therefore it will not be prioritized. *The department meetings are like a short break in everyday work […] We participate but may not always be so well prepared if there is something to prepare for. Unless you have to present something yourself then* (Ingrid

(E)). Not having a specific role in front of a meeting, seem to have significant impact on how you choose to prepare, if at all. However, Lise (E) said that she had more time to prepare to the meeting compared to her coworkers. She emphasized that her expectations were low or non-existing, since she has worked there for such a short time.

4.2.1 Knowledge sharing within the system

Structural system constraints seem to have consequences for knowledge sharing. Factors like time and number of billable hours seem to affect everything from emotions to communication. Telling coworkers what to do instead of sitting down together with them and explain how to do it, seems to be a consequence of not having sufficient number of hours available. Thus, it will affect both communication and knowledge sharing in the work environment. Ingrid (E) said: *If you are very stressed, in the middle of something and then you get a question, then you get more annoyed… You can quickly get a little abrupt in the answers.* This feeling of stress also seems to have consequences for the quality of knowledge sharing, telling coworkers what to do instead of teaching them how to. *Instead of teaching, you just say "you do it like this and like that and then like that", instead of making that person understand why you should do it like this and like that* (Ingrid (E)).

An example of knowledge sharing in the case organization is that juniors always work together with more experienced seniors on projects. The juniors learn and the seniors ensure that quality is maintained. That usually has consequences for the economy, meaning that both juniors and seniors are aware of that it is more expensive compared to if a senior works on the project alone. Ingrid (E) told me that it is very important, but that the budget is often blown on these projects. She also reflects upon how structural constraints affect her needs in relation to knowledge sharing and training: *It is the financial framework, as the requirement for invoicing rate and carry out projects and… If we could have one hour dedicated, every day, for training, it would have been, well, a little depending on where in the project we are of course, then it would have been very nice. But it's not... it's not that easy to do in practice.*

Within the case organization there were seniors who had great and unique knowledge in specific programs and wished there were more time to share this knowledge to juniors. As Marie (SL) emphasized that she wished for a better balance between seniors and juniors: *It had strengthened the work environment in a way, that it is sometimes a bit like... not difficult, but that it ... it makes it difficult to be offensive then, because all the younger ones need some support.* As an employee in this organization, you are constantly under pressure. According to Ingrid (E), the ideal solution would be to have projects with increased number of hours, so that the training can be taken into consideration. After she presented the potential solution, the conclusion was that it is not possible because the customers will not pay for the training of juniors.

4.3 Relationships

One of the major themes that emerged in the data material was the role of relations at the workplace and the impact it has on feeling safe and sharing knowledge. Both leader-employee relations and relations between coworkers seemed to be important. This section is therefore divided into two subcategories, formal relationships, and informal relationships.

4.3.1 Formal relationships

Relations in general seem to have a significant impact on the perceived quality of work environment, as well as how safe it feels to speak up about personal thoughts of professional questions. During the interview with Ingrid (E), she reflected upon the importance of a good relationship with the nearest leaders when it comes to feeling safe and seen at work. A belief that the leader will welcome you and really listen to you, about both professional and private topics that impacts daily work life. Ingrid (E) pointed out the importance of being understood and supported by the nearest leader. *They* (the leaders) *want us to do the best we can, so it is very good that you have leaders who can... who do not just work on projects, but also has time to provide support*.

However, it also emerged in the interviews that the more people the leader is responsible for, the greater the chance that you feel that you are disturbing the manager when you have a question or want to tell something. Ingrid (E) was talking about an experience from back in time: *That leader was responsible for so many people, so… You feel like you do not want to take up the leader's time too much.* Given this evidence, it seems like some employees take the leader's availability into consideration when deciding to speak up or not, meaning that the employee thinks that something else is more important for the leader.

Another participant, Marie (SL), expressed the importance of prioritizing to listen when someone has something on their mind, even if it takes some more minutes from the workday. It may seem that some leaders actively choose to defy structural barriers and, in that way, contribute to healthy and safe relations. *Of course, I talk a little longer with that person than I had thought, but the person needed to tell what had happened and... Trying to figure out how we can support the person to get a little better. Not something that has to do directly with the job, but everything has an impact on everything.*

Marie (SL) also describes different types of facilitation at the workplace and ends up pointing out that not everything needs to be extensive, but that it is important to always be present if someone wants to vent their thoughts: *That there is always someone to talk to, and come up with your challenges to, without you necessarily having to get something negative back.* Ingrid (E)'s and Marie (SL)'s reflections might illustrate two sides of the formal relationship between leaders and employees. On that involves employees not wanting to impose on leaders, the other that leaders want to make time even if their calendar is full in the first place.

4.3.2 Informal relationships

As well as formal relationships, informal relationships emerged as a theme during the analysis process. However, this seems to be valued differently depending on who you ask. Ingrid (E) focused more on the importance of good relations than Lise (E) did, for example. When talking about relations to other coworkers, Ingrid (E) explained relations as a factor influencing the work environment. Having strong relations to other coworkers was something she appreciated a lot, but at the same time she has experienced the downsides to it when they quit their job and left after some time. This shows how important role coworkers can have for someone. *When they quit their jobs, it becomes very heavy... mentally* (Ingrid (E)).

Another aspect of the informal relationship category is the effect of the leader as a role model, which means that someone starts to treat their coworkers like the leader treats them. Having a well-established relationship with your leader seem to strengthen this effect. When talking about what a safe work environment is like, and who is responsible for it, Ingrid (E) focused on the importance of that everyone is responsible, not only the leaders. Especially seniors are responsible for creating a safe environment, according to her. *It is not just the leaders who are responsible for it, it is a joint responsibility. But it is... the seniors should also be involved in the responsibility, or those who have been there for a while then. They should have that responsibility too*. Contrary to Ingrid (E), Lise (E) emphasized that she was happy doing her job and did not care so much about the organizations and leaders: *I do not focus so much on the organization or management. I'm a little more relaxed there. Or I am comfortable in my work situation and what is expected of me.* For Ingrid (E), a leader is one of the factors that serve as an inspiration when it comes to feeling safe. She says: *It may well be that inspiration has come from them, in addition to getting older, gaining more experience, and becoming more confident in the company and more confident in the field. So, I guess it's a mix of all the things that have made it that way.*

As another link to the topic of informal relations, Helene (HD) stated that being completely new is overwhelming because it is difficult knowing who to ask, but that the coworkers play an important role. This is something that gets easier with time, and after being here for a while, they have learned from their coworkers who to ask and how to get the information you need: *As they have been here for a while, they probably know who to ask in our department, and then there is always someone who knows about someone in other departments, right? So, it can go via-via. But to come in as brand new, and somehow try to gain control and knowledge, I understand well that it can feel quite overwhelming.*

4.4 Expectations

All participants talked about expectations in some ways, ranging from expectations about the leaders and employees, to expectations about meetings, the organization, and the work environment. When talking about the specific meeting I observed in the organization, everyone described the meeting "as expected". They experienced it as a "normal meeting". This means that the meeting must have, to a high degree, met their own expectations about it.

Something that seems to affect expectations and how things are done, is the pattern the organization has gotten into. Marie (SL) explains it this way, reflecting upon my role as the observing researcher during the meeting: *When you come from the outside you kind of see with completely different eyes the pattern we have stuck to. That's how we have done it, right. Then of course we continue to do it that way.* This illustrates that a pattern, or a habitual way of doings things, affects the expectations about the leaders as well as the employees. Marie (SL) also talks about this pattern as going into a "track": *There is also something about going into a track, you are used to the same 4-5 people saying something. Then you might sit and wait ... "Well now someone has said something so then I may not need to say anything more".* She also highlights that the dynamics of the group is consistent, locked in a pattern somehow. *So, there is something about the dynamics of the group, that you might get used to a certain pattern.* This notion of "this is how we have always done it here", can also be connected to culture of the organization, as underlying assumptions affects the psychological environment of an organization. As Marie (SL) puts it: *There is something about the amount of people and the pattern you have entered. Without me being able to put it into words.* According to this evidence, no one has ever questioned the dynamics and this pattern described by Marie (SL).

A good meeting consists of a lot of engagement, according to Helene (HD). Engagement is what makes a meeting good. Regarding expectations about engagement the meeting I observed, Helene (HD) described it as better than she expected, due to her previous experiences with meetings. *I think the engagement was good, at least in relation to what I'm used to. I know the department, and they do not always think that this is so interesting, to put it that way *laughs a little*.* Helene (HD) reflects further on the reason why not everyone seems to be so interested. She thinks that they feel well taken care of otherwise in everyday work, so such meetings are not the most important thing. *At the same time, I think it turned out a lot of things like that in relation to the fact that they want more information about different things.* When Helene (HD) continues to reflect on what she expects from a meeting, she highlights the importance of getting something back. *I can stand there and present and present, but when I do not get any particular response, I do not feel that we have anything left for it.* This implies that a meeting without response feels like waste of time and emphasizes the importance of asking questions about how things are done and why.

Lise (E) talked about expectations related to showing disagreement in a meeting like I observed: *To disagree in such a meeting will create some discussion, and then you must be able to argue for it.* She explained that it is easier to argue about things that has to do with the field, compared to what she calls "soft parameters", by which she meant social and psychological factors. Discussing work related topics feels different because she thinks that people are interested in what she has to say, compared to these soft parameters and work environment topics.

4.4.1 Expectations about the leader role

Being a leader involves employees having expectation about your role. The interviews gave evidence that both leaders and employees have expectations to the leader role and the different aspects of it, ranging from meeting structure to empathetic behavior. Lise (E) explained that she expected the leader to speak when it becomes quiet during a meeting: *I think the leaders feel a little more pressure. That they... if no one says anything then they say something instead.* Lise (E) continues to reflect upon that the leader sometimes maybe experiences less engagement than they are hoping for. Despite this, she tells me that she chooses often to be silent, because she knows that someone else will say something, which overlaps with the next subcategory "expectations about employees".

Given this evidence, the leader role seems to affect both meeting structure, knowledge sharing and the day-to-day work life. Marie (SL) reflected upon the change in expectations of the leadership role throughout the years, from the beginning of the working career and until now. *When I started working, a leader was more of a person who decided what I should do. And now a leader is a person who is called a facilitator, so... It has almost completely changed what the role is.* This tells us something about a change in expectations, that it has almost changed to the opposite, according to the leader. Now a leader should facilitate so that the employees have the best conditions to get the job done.

During meetings there will also be expectations about the leader's behavior. Often the leader has decided a meeting agenda, which also was the case in the meeting I observed. The meeting agenda consisted of some questions about the results of this year's employee survey that the employees were supposed to reflect upon. Considering expectations, the leader reflected upon the feeling that the employees did not expect her to ask questions about what they had reflected upon. Helene (HD) received a question about what it would be like to start the meeting asking them what they had reflected upon. That led to reflections on whether her behavior in previous meetings had affected how prepared they met. The employees had no reason to believe that there suddenly would come direct questions about their reflections on the employee survey results. *If they had been aware that this is how I do it, then perhaps more people would have felt that they had to prepare.*

Lise (E) had some reflections considering the leader's role during meetings in general: *The leaders have the role of telling us what is actually going on, and news from past and future news. We listen mostly. There will also be some discussion, but maybe not as much as they always hope for.* This tells us that there are both expectations about the leader role as well as awareness of what the leader wants from the employees.

4.4.2 Expectations about employees

Expectations about employees seem to affect how the participants think of behaviors like speaking up during a meeting. When I asked the participants about the meeting I observed, someone started to explain possible reasons why someone is talking more than others, which I also see in relation to expectations of others. According to the participants, if you once started out not saying so much in meetings, you will continue the way you started, almost like a pattern. People in the group also expect that those who usually speak, will speak this time as well, like a pattern. According to Lise (E), those who speak more than other will feel a pressure to speak because others expect them to do so. It seems like meetings can be driven forward by a few people taking responsibility for talking. *Those who are more reluctant expect someone else to speak, and those who often speak also probably feel a little more pressure to actually speak then, if it gets a little quiet. Because otherwise so ... If not, it will be quiet. They may have reflected a little that if they do not say anything, then no one says anything*. When reflecting about expectations about other employees, Ingrid (E) says: *Those who have worked for a long time, like me, know that there are others who take those questions, or start the questions*.

A pressure to work is also a part of expectations about employees. As a statement of degree of expectations, Marie (SL) explained that you are employed in a 100% position but supposed to work 120%. This says something about the expectations the employees meet, and when you are working 120%, prioritizing what you do during a day becomes important, especially when the customer has paid for a specific number of hours. What you think others at the workplace expect of you, seems to affect your behavior.

What also came up during the conversation with Helene (HD), was that her experience was that when knowing that the employees are not prepared, giving a PowerPoint presentation becomes the solution: *That I may know from experience that they have not done so* (prepared)*, so I put up a presentation. Maybe... I'm doing them a disservice.* After talking about this part of expectations, Helene (HD) tells me that she wants to try change the structure in future meetings, as a consequence of this interview with me. She is convinced that it will have a significant effect to start the meeting with asking reflecting questions in the beginning of a meeting.

This might have consequences for both knowledge sharing and psychological safety, by taking responsibility for creating safe space to share any reflection. Lise (E) explains that if the leader had started the meeting by asking about their reflections, it would have become uncomfortable for the first person supposed to respond. *I would think that the first person asked would not have been so comfortable, perhaps. To begin the conversation.* Lise (E) continued talking about how similar the answers would be after the second person had presented a reflection. *It's easier to just say the same thing as before, and agree then* *maybe, instead of ... I think it's very difficult for the last person at least, to bring up something completely new.*

Lise (E) then began to explain why doing such, in plenary, would have been uncomfortable for most group members. *Everyone is probably ... Most people are probably not so comfortable with sticking out. We are one unit, the same group. If you think the same as the others, it's easier to... I think sticking out is not a very fun thought for most people.* When analyzing this, I get a perception that there exists a shared opinion that how safe it is to express your reflections, depends on how similar they are to the other people's reflections. The employee survey report presented at this meeting consisted of statistics, and Lise (E) pointed to the difficulty of saying something that does not meet the majority according to the statistics: *It was about rankings, 0-5, and we had pretty good results, I think. Between 4 and 4.5. But if you were to say that... If you were to say that "yes but this should have been 1", then you stick out.* This implies that the visual part of the meeting, the presentation of employee survey results, raises the threshold for saying something that differs from the results. As Lise (E) puts it: *I do not think it is so comfortable at least, to see that the others think completely differently.*

Lise (E)'s explains what is not so comfortable. There seems to exist an expectation that different opinions or reflections are something that "sticks out". She reflects upon the effect of dividing the group into smaller groups, that it leads to more discussion and feels better to discuss within a smaller group first, and then split up and present the reflections for the bigger group. Lise (E) says she feels safer if a group stands behind the utterance, compared to if you say something without having discussed it in a group beforehand. *Because it's not a regular conversation you have. Much more like a presentation. Because you tell something that very many, or very ... that many listen to, so you take up their time. So, it feels much more important to say something good, or something right or important. If you are going to say something in a large group then yes, it is more important to say it correctly.* Lise (E) says that to say something that is obvious, leads nowhere, as the time passes. She also does not see the reason why she should say out loud if she agrees with something: *I think if someone says something like that, that is, just agrees… You expect something more, than just such an answer.* She adds that other people have greater interest in questions that she does not put so much emphasis on: *And in those questions I do not feel that I have so much pressure on me to actually express my opinions.*

In two of the interviews, different views arose from Helene (HD) and Lise (E) about the effect of establishing smaller groups during a meeting. One of the leaders, Helene (HD), claims that establishing smaller groups would not have helped on the engagement in the meeting. She says that it would have been the same differences as in bigger groups. *I think maybe some of them would not have said so much then either. Because there are always some who are a little more forward than others, and then there are some who are almost... yes, who almost MUST be asked directly then before they say something.* Lise (E) presents the following argument for establishing smaller groups during a meeting: *Because if you are groups of two or four, well then you are getting more involved. It will not be as easy to just sit back and not answer then. But if I then ask someone or try to present my first thoughts that appeared in the head with 20 or 30 people, then I think it will be a little harder for someone else to answer my thoughts or continue my reflections then.* Expecting that others will have a hard time answering your thoughts, seems to affect if you choose to say it or not. Also, this utterance shows that Lise (E), who characterizes herself as a silent person, thinks a lot.

When Marie (SL) receives a question about why most people in the meeting were quiet, the reflection is about that it is due to their type of profession. *Most people in this profession are actually a bit quiet. [...] At least when it is something other than a subject in question.* Considering this statement, it is natural to think that this has an impact on what expectations a leader has towards the engagement in a meeting.

Ingrid (E) explained how it felt like when the expectations about a newly hired coworker were not met and she got surprised. *I remember the person was very active in the meetings from day one and talked a lot, and I was a bit like, "you are completely new, and you are starting to ask a lot of questions already, help!"* Clearly this was an experience that was the opposite of the expectations of a newly hired coworker in the group. *When you are a relatively new employee, it may be a little difficult to ask if you do not know how it was last year or know how the culture is in relation to talking in the meetings.* Which makes it reasonable to think that it comes as a surprise if someone starts out asking a lot of questions when it is not expected.

Lise (E) said that she expects the leaders to start talking in open discussions, and that no one expects *her* to say anything: *At least I do not think I'm expected to take the first word in such open questions then. I'm rather in the background and listening.* Given this evidence, it seems that what you think other expect of you, affects your engagement. It also highlights a mismatch between the leader's need for response and the employees' expectations.

4.5 Personality differences

This category overlaps in some way with the prior, "role expectations". However, it differs in the way that the participants had the perception that individual differences have strong impact on how personality affects engagement and how safe people feel at the workplace and during meetings. They expect people to behave different and thus, they expect varying degrees of activity and engagement. Someone started talking about personality, others stated that people are different, and therefore there will always be differences in such meetings, and at the workplace in general. Marie (SL) reflected upon individual differences, and divided people into two groups, people who are "socially strong" and people who are "professionally strong". *There are two groups of people, first those who are professionally strong. They know that their arguments are emphasized. Then you have those who are socially strong, that is, they are good at talking to people, always have a smile on their face.* She explains further that this is not something that is used as a system in everyday life, but sometimes it helps to know who to ask an extra question. *Because there are some who are stronger professionally than socially, who do not dare to speak, and then I often ask directly "what do you think about this?". Then I know that I get a well-reflected answer. They are very clever, but they do not dare to speak. They may not take the floor without a direct call.*

During the conversations some participants noted that personality must have an impact on how safe it feels to speak up and share thoughts, reflections, and knowledge. Ingrid (E) says: *There is a difference between people, how easy it is to talk in large gatherings. I also find it easier to talk in small gatherings than in large ones.* Lise (E) says that she sees herself as a silent person, however, during the meeting she had some thoughts that didn't necessarily emerge. Lise (E) reflects on the difference she perceives between herself and her coworkers: *I often spend maybe more time, actually reflecting on the questions that come up. Maybe I need to hear some things, some kind of answers, to know what I'm* *thinking too. If there is something I would really like to say, then I have thought about it for a while in advance.*

Helene (HD) highlighted that she expects the personal differences to be consistent: *In general, I would say that it is often the same people who talk the most. That's how I think it will always be, that there are some who are more outspoken than others, that there are some of us who are very quiet and modest, and who never say so much in large groups.*

Something that demonstrates personality differences, is that Lise (E) emphasized that she might feel different than her coworkers around some questions than her coworkers: *I feel good in my role, I do not put much energy into how the organization does things or questions around the department. Many people have a much greater interest ehm, yes, around questions that I do not put so much emphasis on. And in those questions, I do not feel that I have so much pressure on me either, to actually express my opinions.* This quote also says something about what she thinks others expect of her, as an explanation for her own behavior in meetings like I observed. At the same time, she noted that she maybe had prepared more than others in front of the meeting.

4.6 Summing up

So far in this chapter, I have presented the findings from the thematical analysis conducted. The following sub chapter will provide a short summary of the key point for each theme.

Structural system constraints: Several constraints, or barriers, were discovered through the analysis process. The number of hours available and billability were among the barriers, especially in relation to knowledge sharing between juniors and seniors.

Relations: Relations between coworkers as well as leader-employee relations seemed to have significant impact the perception of psychological safety. According to my findings, leaders are also central in shaping shared beliefs in the team, affecting behavior in meetings.

Expectations: Expectations seemed to affect both leaders and employees in multiple ways, both what you expect of yourself and what you expect of others.

Personality differences: During the conversations, differences in personality was something the participants emphasized. Someone reflected on differences when comparing self with others, while the leaders pointed out that the variances in dynamics was a result of personality differences in their team.

5 Discussion

This chapter will look further into the findings presented in chapter 4 and discuss them in relation to previous research and theoretical contributions in the field. The basis for discussion is the participants' experiences and relevant theory presented in chapter 2. When I put the themes from the analysis next to the theory, I saw it as appropriate to organize the themes different than the analysis chapter. First, barriers are discussed in 5.1, followed by discussion of the role of relations in 5.2. Then the role of expectations is discussed in 5.3, including subchapters on norms and conformity, expectations of the leader role and the employee role. Finally, in subchapter 5.4, I discuss how this case study can lead to action.

5.1 Barriers

Throughout the analysis process, several barriers to psychological safety and knowledge sharing were discovered. These barriers will be laid out here and referred to throughout the other discussion sections. They were related both to the system, like time and billability, as well as the meeting structure. Lack of language around soft parameters is also found to be barrier. The size of the group also seemed to have an effect on the employees, according to the participants in this study.

When analyzing the data material, system constraints emerged as a theme, as there were several related factors that seemed to have major impact on both leaders and employees when it came to the perception of being able to establish psychological safety and contribute to knowledge sharing. Working hours are supposed to be registered on a project they get paid for rather than internally "on the house". Within this system, newcomers (juniors) are supposed to be both welcomed in a good way, but at the same time trained to be as effective as the more experienced employees (seniors). Having newcomers in training together with seniors in projects requires using more working hours compared to using only seniors, yet it is an effective way to share knowledge because it can increase high-frequent communication (Xue et al., 2010). Including juniors in projects might also be a way to adjust behaviors and thus getting socialized into the organization (Mornata & Cassar, 2018).

Ingrid (E) suggested that the leaders should make sure that meetings were arranged so that possibilities to talk and share what is on your mind. This is in line with what Schei et al. (2020) and Ipe (2003) suggest being the leader's responsibility. Interestingly, the meeting I observed was something the leaders saw as a possibility for employees to speak up about what is on their mind, but maybe there are too many people attending. The system can therefore be seen as a barrier or constraint, because the pressure works against those who want to work for a psychologically safe knowledge sharing environment. In what ways might this pressure have this effect?

Some participants emphasized that there were too many people to get a good discussion and highlighted the possible effect of smaller groups consisting of 2-3 people. This is in line with recent research on drivers for psychological safety, suggesting that small groups make people feel more safe sharing their opinion (Remtulla et al., 2021; Siemsen et al. 2009). The famous Artistotle project conducted by Google also stated that while the well-functioning teams had little difference in communication frequency, there was more equal dynamics compared to the teams that did not function so well (Schei et al., 2020).

Interestingly, the leader who held the meeting was planning to conduct some group discussion but decided to drop it. When receiving a question during the interview about what made her take that decision, she first said it was due to lack of time. I reminded her that she had told me it after the meeting that it was because the discussion during the meeting was so good. Given these different explanations, it makes me wonder if there were other, less conscious reasons that played a role in that decision.

From my perspective, it seems like there are different opinions what a good discussion is among my interviewees. The leader chose not to conduct the group discussion she planned to. There might be multiple reasons for that, as there are a number of factors influencing such a decision, some of which she may be conscious of, some of which she may not be, and some of which she may be able to reflect on with me as an interviewer or some which she cannot. The fact that she told two different things about that decision, gives one clue that maybe she wasn't so aware of the reason. Based on her expectation that emerged in the interview, that smaller groups would not foster more discussion, it is likely that it influenced her decision to drop establishing smaller groups. Yet the employees seemed to be clear about the positive effect of establishing smaller group during such meetings. To discuss things in a small group before telling a bigger group the same thing, is something the employees imagine as helpful for the feeling of safety. This leads me to think that the leader has the power to influence the productivity or outcome of the meeting without using extra time or money, but by taking conscious decisions that foster meaningful discussion. It also underlines what prior research has stated, that smaller groups are helpful in getting everyone's opinion on the table (Remtulla et al., 2021; Siemsen et al., 2009). Setting a framework that ensures that every employee has the possibility to participate in effective information exchange is something the leader should engage in, according to Schei et al. (2020).

To sum up this section, establishing appropriately sized discussion groups is a way to overcome potential barriers speaking up like the uncomfortable feeling of sticking out when there are too many people listening, as supported by Remtulla et al., (2021), Schei et al., (2020) and Siemsen et al., (2009). These decisions about groups and the size of the groups, are something the employees expect the leader to take care of. However, if no guidelines exist for what a good discussion is, and especially if there are varying perceptions of what a good discussion is, then maybe decisions like these will be difficult to implement. Making the leaders' and employees expectations explicit seems to be a way to achieve more equal dynamics and increased psychological safety.

5.2 The role of relations

Another major theme emerging through the analysis process was the role of relations and their impact on psychological safety and knowledge sharing. Both leader-employee relations and relations between coworkers are relevant and seemed to be of significance for the perceived quality of the work environment. The impact leaders' have on psychological safety and knowledge sharing is worth discussing because there is research emphasizing the importance of high-quality relations between leader and employees on e.g., speaking up (Erdogan & Bauer, 2015) and psychological safety in general (Frazier et al., 2017). High-quality relations have certain characteristics that in turn can lead to an experience of increased psychological safety (Carmeli & Gittell, 2009).

Informal relations between coworkers seem to have an impact on knowledge sharing because they can be important for establishing different types of safety, like learner safety and contributor safety. According to Kahn (1990) it is also one of the four building blocks of psychological safety. Ingrid (E) described the relationship with her leader as very good and expressed a warm and welcoming person open for whatever is on her mind. Yet Lise (E) told me that she does not focus on such, and just want to do her work and not focus on the organization. This is in line with prior research stating that the relationship quality varies between employees (Erdogan & Bauer, 2015). It turned out that experiencing a good relationship with the leader was of varying importance to the participants, which I discovered through the differences in what they emphasized in the conversations. Despite that Erdogan & Bauer (2015) point to the importance of high-quality relations for voluntary employee behavior, this does not seem to apply to my findings considering the discussion of soft parameters in big groups. Soft parameters are, according to the participant, the opposite of facts that has one right answer for and has to do with for example the work environment which was the topic of the meeting I observed. The expectation that other coworkers take responsibility for talking is a more influential factor, no matter how good the relation to your leader is.

The quality differences in leader-employee relations seem to affect the perception of psychological safety, as well as relations between coworkers. Yet the findings show that there are individual differences regarding how important relations seem to be. Lise (E) and Ingrid (E) emphasized this differently, and from my point of view relations were of significant importance for Ingrid (E), while Lise (E) did not mention it at all, just wanted to do her job and let other people engage in the organizational topics. This difference in importance of relation quality is supported by Erdogan & Bauer (2015) and shows that one cannot draw conclusions from this case study that applies to all members of the organization. Being able to develop high-quality relations seem to change employees focus, from short-term, individual needs towards something more long-term oriented (Hu et al., 2018). Interestingly, this is also what my findings indicate, since those who focused on relations and the importance of that, seemed to care more about the organization and the work environment than those who did not focus on the importance of relations.

According to Hu et al. (2018), high-quality relations foster engagement and motivates employees to reciprocate. During my observation, I saw that Ingrid (E), who had a significant focus on relations in the interview compared to Lise (E), did not contribute more to the meeting than Lise (E) did. It might be that even if Ingrid (E) has a strong relation to her leader, the perception of psychological safety was not necessarily high in relation to discussing soft parameters in large groups. However, if I were to interview more employees my findings might have provided a stronger support to the importance of high-quality relations for engagement as Hu et al., (2018) and Erdogan & Bauer (2015) suggest.

Despite the differences in how important it feels to have good relations established, the quality in the leader-employee relation is important in the organization’s socialization process of newcomers (Sluss & Thompson, 2012). According to Ingrid (E), both leaders and coworkers might work as role models, and research supports that leaders especially set the culture and forms shared beliefs (Schein & Schein, 2016). Newcomers value psychological safety as an important characteristic (Mornata & Cassar, 2018), and Ingrid (E) told me she wants to be a coworker that is perceived as psychologically safe, but time and billing pressure work as barriers to that. In addition to relations between coworkers, leader-employee relations also strongly influence how expectations are formed (Edmondson, 2004), and the relations become more flexible and safer (Kahn, 1990). As mentioned previously in subchapter 5.1, barriers like time and billability seem to always have consequences for juniors, and therefore I will argue that establishing high quality relations is important so that asking questions and sharing knowledge will happen despite these barriers. Creating a safe space to speak up about how it is going at work seem to be appreciated among the participants, supported by prior research (Edmondson, 2003; Carmeli & Gittell, 2009; Schei et al., 2020). By displaying accessibility, availability, and expertise, seniors can be a part of building a psychological safe environment that enables knowledge sharing, as suggested by Mornata & Cassar (2018).

To sum up, relations play an important role when discussing psychological safety and knowledge sharing, both when discussing the work environment and sharing knowledge in the daily life as an engineer. Relations are especially important when it comes to learner safety and contributor safety, as Clark (2020) suggests. While there are employees who claim that this is not important to them, for those who think it is, they seem to be aware of how important it is to them and are more interested in the organizational life in general compared to those who are less focused on relations. Developing high-quality relations is important because it changes the employees focus to something more long-term oriented (Hu et al., 2018).

5.3 The role of expectations

As discussed in the previous section, relations have a significant impact on speaking up and sharing knowledge. Relations are also important in the formalization of expectations regarding appropriate behavior (Edmondson, 2004). Expectations were something every participant talked about in one way or another. They talked about expectations about their leader, but also their expectations about their coworkers. In addition to this, they reflected on what others maybe expect of them. This theme is the one that is most connected to the observation I conducted where they discussed last year's employee survey results, as several of the questions during the interview were about their expectations related to the meeting. Helene (HD) expected the meeting to be as they always are, not expecting them to prepare even if she asked them to do so, and even if she characterizes a good meeting as a meeting with a lot of engagement.

The employee Lise (E) expected that expressing disagreement in such a meeting would create discussion, and she did not expect others to be interested in what she had to say, contrary to a work meeting. What is worth noting is the difference in psychological safety in relation to technical and factual knowledge versus soft parameters. A few employees seemed to challenge the current situation without hesitation, yet other employees, who were quiet during the meeting, felt their competence lies in technical and factual knowledge and therefore did not want to express themselves. Maybe planning such meetings must account for employees knowing that the topic is not their field of expertise, and therefore, if the unequal dynamics will lead to only some employees express their thoughts (Schei et al., 2020).

Research has shown that creating discussion and "rocking the boat" is something many employees try to avoid (Milliken et al., 2003), in line with what Lise (E) explained. However, it seems like some employees do not want to create discussion in a meeting even if discussing is the main agenda, which for someone coming from the outside seems odd. Yet research supports that this is a common concern for many employees (Milliken et al., 2003). From my point of view, the employees seem to have no problem accepting those who speak up during such meetings, strengthening my perception that they think it is comfortable having a spokesperson who can voice their unspoken concerns.

When analyzing the data material, I got a perception that there exists a shared opinion that how safe it is to express your reflections, depends on how similar they are to the other people's reflections. The participants in my study emphasized that those who see themselves as silent people, expect others to speak up. They also expect that those who usually speak up feel more pressure to do so, especially when it gets quiet during meetings. This is contrary to what Gächter & Renner (2018) found, suggesting that those who expect others to contribute, are more likely to contribute themselves. According to both leaders and employees in my case study, the dynamics seem to be quite consistent and is influenced by the different personalities within the group. It is possible to imagine that the personalities who tend to speak up often, keep on doing it because that is just the way it is. What is important to note, is that there is less research on personality and psychological safety compared to leader's behavior and psychological safety.

5.3.1 Norms and conformity

The expectations we have of others behavior is also a matter of norms, as they shape what we expect of ourselves as well as others. As human beings we have an innate need to conform to the group and match others' behaviors to survive (Cialdini & Goldstein, 2004; Coultas & van Leeuwen, 2015). Sticking out, as one participant emphasized, is not comfortable in the first place. Norms shape behavior (Kahn, 1990; Schein & Schein, 2016), and thus, they shape what people expect when it comes to the behavior of coworkers in meetings. If someone breaks with the norm, people will notice it. Even if norms are strongly influencing our behavior, research suggest that it is possible to go from a socialized mindset to a self-authoring mindset (Reams & Reams, 2015).

As a student at NTNU, I have noticed the cultural differences between the two main campuses in Trondheim: Gløshaugen and Dragvoll. Engineers are educated at Gløshaugen, while social science belongs at Dragvoll. During a 5-year education you will adapt to the culture, and I can imagine that this is among the things students bring into their workplace after graduating, meaning that the organizational norms will be affected by that. That is also the reason I imagine that soft parameters are harder to discuss among engineers in a consulting company compared to a company consisting of people educated in social sciences. If the cultural norm is "we are not good at soft parameters so we do not discuss it", sticking out and discussing it might create a fear of sticking out in a field you are not an expert in. As Edmondson (personal communication, May 9th, 2022) reflected on, the *Law of Jante* is likely a strong influence on behavior in such situations.

My findings seem to be somewhat opposite to Gächter & Renner (2018), suggesting that those who expect that others are more likely to contribute themselves, which apparently is not the case here. What is interesting to discuss is the perception some of the participants had, that others do not expect any statements from them when it comes to organizational topics. It is relevant to consider the role of expectations in such situations, because why does someone feel that they don't need to tell their opinion? Do they feel released from the responsibility or expectations to contribute, and if so, why? From my point of view as a researcher it might seem like they are released as soon as work environment and "organizational stuff" is on the agenda, and that a few people feel responsible for taking the floor. They also might not feel competent to speak up on this, as it is not based on factual knowledge which they have expertise in. If we see this as low knowledge competence, it works a barrier to psychological safety (Siemsen et al., 2009; Remtulla et al., 2021).

Agreeing with the group and not sticking out seemed to be important, supporting research literature on organizational norms (Schein & Schein, 2016; Milliken et al., 2003; Morrison & Milliken, 2000). In the meeting I observed, results were presented on the screen, making the norms very visible and clear. This made Lise (E) think of how visible it would have been if deciding to speak up and disagree about the statistics. I also imagine it would be both uncomfortable and norm challenging as well. If no one raised their voice and say that they agree or disagree, that becomes a part of your cognitive map of what is and what is not appropriate to speak up about (Milliken et al., 2003). This is important to take into consideration in terms of socializing the juniors, because they learn to be silent by observing others (Milliken et al., 2003; Kahn, 1990), demonstrating the risk of letting unequal dynamics continue. Yet there are juniors who do not follow the norms, as Ingrid (E) told me.

As cognitive maps guide behavior within the organization (Milliken et al., 2003; Morrison & Milliken, 2000), breaking them may cause surprise among coworkers, as Ingrid (E) pointed out when talking about a newly hired employee. She remembered being surprised by a newly hired employee "asking a lot of questions already". This shows how norms work when they are violated. Given that she felt surprised about that, I can imagine that her cognitive map was telling her that newly hired employees are not to speak up and question how things are done. As Mornata & Cassar (2018) highlight, there is a need for more research that focuses on the regulation of employees' proactive behaviors, and why someone perceives a context as safe while others don't. The influence these individual differences have on psychological safety were recognized already back in 1990 (Kahn, 1990). From my perspective as an observer, there were great variations when it came to challenging the current situation in the organization. According to Clark (2020), these variations can show that only a few people in the meeting seemed to have reached challenger safety (Clark, 2020). The other employees might have reached the stage of challenger safety as well, but when observing it was hard to tell.

5.3.2 Expectations of the leader role

Organizational norms also affect the leadership role, as they have a central role in shaping beliefs and contributions among the employees (Schein & Schein, 2016), meaning that they have the power to influence the dynamics of a meeting. Dealing with other people's expectations seems to be a part of being a leader, for example by taking the word if no one else does, it is almost like the employees expect them to take responsibility for the silence. The meeting I observed was the annual review of the employee survey report, which makes it an unusual meeting compared to weekly meetings dealing with project portfolios, for example. Despite this unusual meeting agenda, people perceived the meeting as quite normal in terms of social dynamics, compared to these weekly meetings. What seemed to be not so normal compared to weekly meetings, was that the head of department did not seem to have any expectations about preparation and contribution. At the same time employees seemed to have the exact same expectations to the leader in this meeting.

From my perspective, it looks like if the goal is to benefit as much as possible from such meetings where the work environment is to be discussed, one has to accept that soft parameters don't have a right or wrong answer and that it is totally different from discussing project portfolio for example. Also, due to the unusual topic of these meetings compared to their usual ones, perhaps even higher demands are placed on the leader in terms of preparation and sticking to the plan. The leader has an important role in motivating employees to use effort to speak up, and as Edmondson (2003) points out, new practices can be an important consequence of that. As Schei et al. (2020) suggest, the leader role involves creating norms for the team's social interaction and it might be useful to involve the employees in this process, and my research shows that they do have many thoughts how things can be improved when it comes to dialogue.

5.3.3 Expectations of the employee role

Just as there are expectations of the leader role, there are also expectations of the employee role. The participants pointed to various reasons for remaining silent during meetings, both organizational and personal, consistent with prior research on remaining silent in organizations (Milliken et al., 2003). One of the reasons were that soft parameters are not something they usually discuss, and that hard science, calculated answers, is much easier. The topic discussed during a meeting seems to have significant influence on how the participants consider speaking up during meetings. It also increases the fear of saying something incorrect, which again leads to silence. Soft parameters were highlighted by one of the participants as the reason why she was silent. Speaking up about your opinion involves a greater personal risk than telling facts (Clark, 2020). In this case, soft parameters involve what the employees think about their work environment. One of the participants, Lise (E), emphasized that it was a significant difference between speaking up about something she had calculated in an analysis compared to speaking up about how what she named soft parameters.

Cultural differences like these became noticeable in my conversation with the participants. The use of the term soft parameters gave me a clue about these cultural differences. Soft parameters are hard to discuss and argue about because there is no definitive answer to it. The same participant explained that the problem occurs if you disagree, because then you create a discussion where you must argue for your opinions. Not speaking up unless having solid data to back up with, is something Edmondson (2019) highlights as one of the "implicit theories of voice" (p. 32). This leads me to think about the consequence of lacking knowledge about the specific discussion topic, which Remtulla et al. (2021) highlight as a factor increasing your feeling of being the only one without this knowledge. It is also suggested that establishing small groups can have a counteracting effect on this knowledge confidence (Remtulla et al., 2021). However, this cultural norm of soft versus hard science is probably deeply bound to both the individual as well as the organizational culture. Schein & Schein (2016) emphasize that these assumptions are stable and hard to change. The distinction between soft and hard parameters are therefore likely to be present in the future, but as the participant highlights, becoming aware of it is a step in right direction.

Expectations also shape what the employees think their coworkers want to hear about. If you expect them to think that it is not important, it is less likely that you will share it, in line what Edmondson (1999) suggested. I imagine that it is useful to be able to have an awareness of what the people who listen to you think is important, however, it seems like this awareness, or insight, sometimes becomes a barrier to speaking up, as with Lise (E). She did not want to "take up people's time", wasting their time was something she really did not want to. It is obvious that no one wants to waste people's time. However, here I refer to what the *feeling* of wasting other's time might imply. Since dynamics within the group are so unequal, it is clear not everyone in the group thinks they waste other people's time by speaking up. If you believe that your contribution is necessary and useful, you most likely perceive what Clark (2020) calls contributor safety. What is interesting in this stage of psychological safety, is that the entire group expects you to perform in your role and contribute, which again makes you think that what you say is useful to them.

Several factors influence the decision whether to speak up or not, and observing others is among those factors. Silence is a collective phenomenon, so if most of the people are not speaking up then, it can cause a vicious circle (Milliken et al., 2003). Yet in the meeting I observed, one person did not follow this collective phenomenon. There was especially one person questioning why things are done the way they are, how things can be improved, how other departments do things etc. According to Clark (2020) this fits into the 4th stage of psychological safety, challenger safety, where the need to conform no longer is present. When you feel able and safe to challenge the current situation, one can say that you have reached the stage of challenger safety. What makes it hard to reach this stage, is that speaking up about your opinion is seen as riskier than telling facts (Clark, 2020). Lise (E) also illustrated this by explaining how facts were easier to speak up about.

To sum up, there are indications that system barriers like billing and time pressure work against employees who will share knowledge and express psychological safety. This is especially relevant considering juniors/newly hired employees. The billing and time pressure influences employee's behavior, forcing them to make different choices which again may have consequences for knowledge sharing, as the process becomes telling instead of teaching. This is especially relevant to those seniors who feel more responsibility towards juniors. By including juniors on projects together with seniors they are socialized into the organization in an effective way, but it also involves a pressure. However, there are individual differences when it comes to how important the perception of safety is, as supported by research (Erdogan & Bauer, 2015). As opposite to barriers, relations were found to work as a driver to enable psychological safety and knowledge sharing for some employees (Erdogan & Bauer, 2015; Frazier et al., 2017; Carmeli & Gittell, 2009). Having a spokesperson in the team seemed to be accepted by several employees. Making expectations and considerations explicit by discussing them, may increase the team's ability to cooperate also when it comes to soft parameters. The cultural norms work as a barrier to speaking up about soft parameters, there is a shared belief that it is not their field of expertise.

5.4 The case study as a step to action

So far, important topics emerging throughout the analysis process have been discussed in relation to theory. In this section I want to discuss how this case study can be a step to action, in terms of increased awareness and levels of reflection among the participants.

As leader Helene (HD) told me in the end of our conversation, she was now convinced that my observation and our talk would have significant impact on changing status quo. She told me that she wanted to try changing the structure in future meetings, and that asking reflecting questions in the beginning of such meetings will have important effects. This is in line with what Tight (2017a) suggests as one of the benefits with case studies, that they can provide useful insights which can lead to action. From my point of view, there seemed to be a willingness to learn from this project and adapt to become a better leader. Helene (HD) also reflected upon whether she was doing them a disservice or not, by giving a PowerPoint presentation instead of trying to establish discussion. Another leader, Marie (SL), told me that having me there observing them with fresh eyes reveals a pattern they have always been stuck to, which is difficult for them to discover. She is convinced that you will not get anywhere if you do not talk about things. This is also part of the mandate I was given by the HR department who gave me access. It was part of their agenda to get insights about how this employee survey process works and what it might lead to.

Ingrid (E) also had some reflections considering how this project had led to action. She felt that she had become more aware in general about the things we talked about. She told me that she thinks everyone in the department should have a conversation like we had, so that everyone could experience increased awareness leading to improved work environment. Lise (E) ended our conversation telling me that it was interesting to reflect upon their development potential, because she had just noticed through our conversation that the potential was quite big.

The statements above demonstrate what Tight (2017a) emphasizes as one of the benefits of case studies, that they challenge the social truths within organizations, by recognizing their complexity and can lead to action. In the process of collecting data material for this master's thesis, I got clues that I have been scaffolding the participants' reflective performance and initiated thought processes that may foster further development, both for the department but also on a personal level. In our conversations they got to reflect on things they normally do not think about during a workday, and it seemed to me like they are not used to perform these kinds of reflections. So, there might be something about the type of questions I asked, the implications of the things I was drawing their attention to, that leads them to want to make change and think of things they usually do not think about. Increased self-awareness is beneficial in several ways, including higher levels of commitment and job satisfaction (Atwater & Yammarino, 1992;1997)

6 Conclusions

The aim of this case study was to gain a better understanding of drivers and barriers to psychological safety and knowledge sharing in the workplace, and how leaders and employees might affect this perception, by observing and interviewing members of the case organization. This chapter is a summarize of the answer to my research question:

What are the possible drivers and barriers of psychological safety among employees in a knowledge intensive Norwegian company?

1) *How do leaders and employees influence these drivers and barriers?*
2) *What organizational characteristics appear to promote or inhibit psychological safety?*
3) *What are possible effects of psychological safety on knowledge sharing?*

The findings show that when discussing topics that differ from daily work, like employee survey results and soft parameters, higher demands are placed on the leader in terms of preparation and sticking to the plan and thus, the leader can be a driver. Employees' expectations seemed to cause some of them to not speak up, because they expected the one person talking the most to do it. Becoming aware of these implicit theories seems to be the first step towards a more equal dynamic within the group, which again can provide new insights. The feeling of sticking out was found to be a barrier, and both leaders and employees can influence this barrier by gaining increased awareness of its consequences which can lead to change in practice.

Psychological safety is necessary for enabling discussion about work environment and soft parameters and topics that touch on themes aside from the organizations' field of expertise at work. However, there are indications that psychological safety alone is not enough. The topic itself requires organizational characteristics like cultural norms that encourage employees and leaders to engage and speak up about these soft parameters, meaning that cultural norms may promote sharing more than calculated answers. There are also indications that system constraints like time and billing pressure inhibit employees to share knowledge and contribute to psychological safety.

When looking at possible effects of psychological safety on knowledge sharing, the findings point to the importance of working for a safe climate in the everyday work life characterized by pressure both in time and billing rate. Knowledge sharing may be hindered by these system barriers. Developing high-quality relations between coworkers is also something that influences employee's motivation to share and contribute to the organization.

To conclude, the findings highlight that these participants, in the field of engineering, feel psychologically safe to share knowledge when they have numbers and facts to back up what they say, but when discussing soft parameters and work environment, they are no longer standing on expertise. There is more psychological safety around facts and numbers for the employees I interviewed and observed, and less around soft parameters. This can show that psychological safety is moderated by the felt sense of competence for calculations, while not feeling competent around soft parameters. Also, it points to that such meetings might require even more facilitation from the leaders. The employees emphasize that facilitating conditions include small groups consisting of two or three people, creating a community behind the utterances when they are to be presented to the whole group afterwards.

6.1 Limitations

To ensure transparency throughout the thesis, I find addressing potential limitations to be important. One limitation of this case study is the fact that the conclusion is based on a relatively small sample. On the other hand, choosing a case study allowed me to have a small sample, and it also made the project more feasible considering the time perspective within the master's program. However, it will be important for future research to include a bigger sample of both leaders and employees.

Another potential limitation is that asking for retrospective recollections can make it hard for participants to remember, which can influence their answers. Social desirability bias causes participants to portray themselves so that they are perceived in a positive way. Despite this, I argue that conducting observation in addition to the interviews strengthens the study because I actually attended the meeting I asked them questions about.

6.2 Implications for further research

When looking at questions I think would be interesting to go deeper into in the future, I imagine that personality differences in perception of psychological safety is something interesting to investigate further. The participants in this study expressed different focus, and someone stated that it is natural that those employees who are interested in such organizational topics also comment on it. However, I question this because from my point of view, in an ideal organization, it is every employees' responsibility to contribute to a psychologically safe climate where knowledge sharing is in everyone's interest.

Another interesting perspective would have been what motivates and characterizes those who contribute to the organizational life and the psychological safety of others. I also imagine that following up this case study would have been interesting, to study the implications of it and looking for further development. Studying psychological safety and knowledge sharing using different theoretical framework is also possible, for example looking at the role of for example self-awareness, since there is a clear link between awareness, development, and desired leadership competencies (Reams & Reams, 2015).

Regarding implications for the organization, I got clues that this case study in different ways scaffolded the participants reflective performance, which may foster further development both on a personal and organizational level. Both the observation and interviews started a thought process for some, which may lead to increased awareness in everyday work and be a part of the developmental process. As Amy Edmondson puts it (about achieving psychological safety): "It is a never-ending dynamic journey" (2019, p. 103).

Going outside the world of counseling and getting a glimpse of the consulting world has been interesting, and a process filled with learning and reflection. However, interviewing people working with hard science about soft parameters is both demanding and provides nuanced insight in the lifeworld of others. For me as a master's student it has been interesting to see how this project has led to increased self-awareness among the participants, as well as in myself. I will continue being curious about how people and workplaces can improve, and I think it is valuable to bring that curiosity into future positions no matter what I am working with.

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Appendices

Appendix A: Information letter

NTNU – Trondheim
Norwegian University of
Science and Technology

Are you interested in taking part in the research project "Leader's impact on psychological safety in teams"?

This is an inquiry about participation in a research project where the main purpose is to investigate what impact leaders have on psychological safety in teams. In this letter we will give you information about the purpose of the project and what your participation will involve.

Purpose of the project
This master´s thesis purpose is to conduct research on how leaders impact psychological safety in teams, in a Norwegian context. Related factors to be examined will be team performance and knowledge sharing.

Who is responsible for the research project?
NTNU, Department of Pedagogy and Lifelong Learning.

Why are you being asked to participate?
You have been asked to participate because in the project because you are either employed or have a leader position in XXX.

What does participation involve for you?
If you choose to participate, it will involve:

- being observed in a department meeting
  and/or
- an interview with me (Fride Vaagland) with a duration of approximately 1 hour.

Participation is voluntary
Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data
We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

- It will be the reasearcher; master's student Fride Vaagland and supervisor Associate Professor Jonathan Reams from NTNU, who will have access at the responsible institution.
- I will replace your name and contact details with a code. The list of names, contact details and respective codes will be stored separately from the rest of the collected data.
- The data used as empirical evidence in the master´s thesis will be anonymized so that information cannot be returned to you as a person or your firm.

What will happen to your personal data at the end of the research project?
The project is scheduled to end within June 2022. All data will be anonymized immediately and deleted at the end of the project.

Your rights
So long as you can be identified in the collected data, you have the right to:
- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?
We will process your personal data based on your consent.

Based on an agreement with NTNU, NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?
If you have questions about the project, or want to exercise your rights, contact:

- NTNU, Department of Pedagogy and Lifelong Learning via Supervisor Jonathan Reams, email: [redacted]

- NSD – The Norwegian Centre for Research Data AS, by email: (personverntjenester@nsd.no) or by telephone: +47 55 58 21 17

Yours sincerely,

Jonathan Reams	*Fride Vaagland*
Associate Professor/supervisor	*Master's student*

Consent form

I have received and understood information about the project *"Leaders impact on psychological safety in teams"* and have been given the opportunity to ask questions. I give consent:

☐ being observed in a department meeting
☐ to participate in an interview

I give consent for my personal data to be processed until the end date of the project, approx. *June 1st, 2022*

(Signed by participant, date)

Appendix B: NSD approval

NORSK SENTER FOR FORSKNINGSDATA

NSD sin vurdering

Prosjekttittel

Master thesis about leadership and psychological safety

Referansenummer

600852

Registrert

26.10.2021 av Fride Thorsdatter Vaagland [redacted]

Behandlingsansvarlig institusjon

Norges teknisk-naturvitenskapelige universitet NTNU / Fakultet for samfunns- og utdanningsvitenskap (SU) / Institutt for pedagogikk og livslang læring

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Jonathan Reams [redacted]

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Fride Thorsdatter Vaagland [redacted]

Prosjektperiode

01.11.2021 - 30.06.2022

Status

29.10.2021 - Vurdert

Vurdering (1)

29.10.2021 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 29.10.2021 med vedlegg. Behandlingen kan starte.

TYPE OPPLYSNINGER OG VARIGHET
Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 30.06.2022.

LOVLIG GRUNNLAG FOR UTVALG 1
Prosjektet vil innhente samtykke fra foresatte til behandlingen av personopplysninger om barna. Vår

vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte/foresatte kan trekke tilbake.

Lovlig grunnlag for behandlingen vil dermed være foresattes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

LOVLIG GRUNNLAG FOR UTVALG 2
Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 nr. 11 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse, som kan dokumenteres, og som den registrerte kan trekke tilbake.

For alminnelige personopplysninger vil lovlig grunnlag for behandlingen være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 a.

PERSONVERNPRINSIPPER
NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:
• lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at foresatte får tilfredsstillende informasjon om og samtykker til behandlingen
• formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
• dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
• lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER
NSD vurderer at informasjonen om behandlingen som de registrerte og deres foresatte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER
NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

MELD VESENTLIGE ENDRINGER
Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde:
https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema. Du må vente på svar fra NSD før endringen gjennomføres.

OPPFØLGING AV PROSJEKTET
NSD vil følge opp ved planlagt avslutning, samt underveis (annet hvert år), for å avklare om behandlingen av personopplysningene er avsluttet.

Kontaktperson hos NSD: Olav Rosness, rådgiver.

Appendix C: Interview guides

Interview guide (head of department):

Takk for at du deltar. Dette intervjuet vil bli tatt opp og slettet etter transkripsjon. Svarene vil bli anonymisert, men det kan henvises til sitater. Du har rett til å avbryte intervjuet når som helst og trekke deg fra prosjektet. Varigheten er beregnet til ca. 1 time.

Det overordnede temaet for mitt prosjekt er psykologisk trygghet i team. En vanlig definisjon på psykologisk trygghet er at det er en felles opplevelse av at det er trygt å ta mellommenneskelig risiko i gruppa, og at man ikke vil ydmyke, avvise eller straffe hverandre for å uttrykke ens meninger eller tanker. Det handler om å kunne si hva en mener, komme med innspill og forslag, dele sin kompetanse og være seg selv uten å frykte represalier eller andre sosiale sanksjoner.

Oppstart

1) Fortell meg litt om jobben din her på avdelingen!

Hoveddel

2) Som du kanskje husker så observerte jeg avdelingsmøtet 1. des hvor du gikk gjennom årets medarbeiderundersøkelse. Tenk over din opplevelse av møtet. Var din generelle følelse positiv, negativ eller begge?
   a) Hva gjorde opplevelsen positiv/negativ?
   b) Hvis begge; hva gjorde den positiv og hva gjorde den negativ?

3) I møteinnkallingen du sendte ut, oppfordret du medarbeiderne til å lese gjennom rapporten og reflektere over noen punkter.
   a) Ble forventningene dine møtt eller ikke?
   b) Hvordan/hvordan ikke?

4) Da jeg observerte møtet la jeg merke til at du sa at du har planlagt å gjøre en gruppeøvelse, men ikke gjorde det. Hva fikk deg til å ta den avgjørelsen?
   a) Hva gjorde det (f.eks. "en god diskusjon")
   b) Tenk på andre møter med denne avdelingen. Kan du fortelle meg en historie fra et møte der det ***ikke*** var en god diskusjon? (evt: et møte som ikke var så bra som dette?)

5) Hvordan ville du opplevd å starte møtet med å spørre hva de har reflektert over (som du skrev i møteinnkallingen)?

6) Når temaet «planlegger å forbli i organisasjonen de neste 2 årene» kom opp, hva begynte du å tenke på da?
   a) Hadde du noen andre tanker enn det som ble sagt i gruppa?

7) Jeg observerte en samtale om *informasjonsplattform* og et savn angående info om hva de andre kontorene driver med. Hva får du ut av plattformer som *informasjonsplattform?
   a) Hvilke andre typer informasjon kan være verdifull?

b) Hvilken betydning har uformelle samtaler for «uoffisiell» info som er relevant og viktig?

8) Jeg la merke til at noen snakket mer enn andre, er det normalt?
   a) Er du glad for det, eller skulle du ønske det var annerledes?
   b) (Hvis normalt): Hvis jeg kaller dette et mønster, hvordan tror du dette mønsteret påvirker hvordan folk deler kunnskap i avdelingen?
   c) Hvordan ser du for deg at du som leder kan påvirke dette mønsteret?

9) Føler du at du kan påvirke i hvilken grad folk sier det de mener?
   - Isåfall hvordan?

Avslutning

10) Er det noe vi ikke har snakket om som du kunne tenke deg å dele?
11) Er det noe mer du tenker jeg bør vite om?
12) Hvordan opplevde du dette?

Tusen takk for at du stilte opp!

Interview guide (sub leader)

Takk for at du deltar. Lyden fra intervjuet vil bli tatt opp og slettet etter transkribering. Alle personer anonymiseres, men sitat kan bli referert til. Du har rett til å avslutte intervjuet og trekke deg fra prosjektet når som helst. Varighet på intervjuet er estimert til ca. 1 time.

Det overordnede temaet for mitt prosjekt er psykologisk trygghet i team. En vanlig definisjon på psykologisk trygghet er at det er en felles opplevelse av at det er trygt å ta mellommenneskelig risiko i gruppa, og at man ikke vil ydmyke, avvise eller straffe hverandre for å uttrykke ens meninger eller tanker. Det handler om å kunne si hva en mener, komme med innspill og forslag, dele sin kompetanse og være seg selv uten å frykte represalier eller andre sosiale sanksjoner.

Oppstart

1) Fortell meg litt om jobben din her på avdelingen.

Hoveddel

2) Som du sikkert husker, observerte jeg avdelingsmøtet *dato og måned* hvor avd.leder gikk gjennom årets medarbeiderundersøkelse. Nå ønsker jeg at du tenker over møtet din opplevelse av det møtet.
   a) Fra ditt perspektiv; i hvilken grad var dette møtet et vanlig møte?
   b) Hva gjorde det vanlig/hva gjorde det uvanlig?

3) Når du tenker på møtet, er din generelle følelse positiv, negativ eller begge deler?
   a) Hva gjorde at du opplevde det positivt/negativt?
   b) Hvis begge; hva gjorde at du opplevde det positivt, og hva gjorde det negativt?

4) I møteinnkallingen som du mottok på mail fra avd.leder ble du oppfordret til å lese gjennom rapporten og reflektere på noen punkter.
   a) Fikk du en sjanse til å lese gjennom rapporten før møtet?
   b) Hva tenker du om din egen forberedelse?

5) Hvordan ville det vært for deg å bli delt inn i mindre grupper for å diskutere de ulike temaene som kom opp i gjennomgangen av undersøkelsen?

6) Nå ønsker jeg at du tenker over et annet møte i avdelingen som du opplevde som bedre eller verre.
   a) Hva gjorde det bedre/verre?

7) Tenk på møteinnkallingen du mottok fra avd.leder hvor du ble bedt om å reflektere over noen punkter. Hvordan ville det vært for deg om møtet startet med at dere ble spurt om hva dere har reflektert over?

8) I løpet av møtet, hendte det at du tenkte på noe som du ikke fortalte til gruppa?
   a) Hvis ja; hva tror du er årsaken til at du ikke sa det?
   b) Hva kunne ha fått deg til å si det?

9) Ved gjennomgang av undersøkelsen kom temaet «planlegger å bli i organisasjonen de 2 neste årene» opp. Hva dukket opp i tankene dine da?
   a) Hadde du noen andre tanker i hodet enn de som ble sagt?
   b) Sa du det du tenkte på? Hvis ikke, hvorfor?

10) Jeg observerte en samtale om *infoplattform* og savn av info om hva de andre kontorene driver med. Hva får du ut av plattformer som *infoplattform*?
   a) Hvilke andre typer info hadde vært nyttig?
   b) Hvor mye baserer du deg på uformelle samtaler for «uoffisiell» info som er relevant og viktig?
   c) Opplever du å ha en oversikt over kompetansen som finnes i *bedriften* innenfor ditt fagområde?

11) I det daglige, opplever du at andre på avdelingen, både kolleger og ledere, har tid til å svare på det du lurer på?
   a) Hva tenker du kan være årsaken til at det er sånn?

12) Jeg observerte at noen snakket mer enn andre i løpet av møtet, er dette normalt? Er du glad for det, eller skulle du ønske det var annerledes?
   a) Vi er alle forskjellige, men hvordan tenker du dette påvirker hvordan tanker og kunnskap deles?
   b) Hva tenker du kunne vært gjort annerledes på møtet fra avd.leder sin side for å flere til å dele?

13) Flere var stille ila. møtet. Tenker du at noen av de hadde tanker de ikke delte? I så fall, hva tenker du kan være grunnen til dette?
   a) Ikke tenker deres mening forandrer noe?
   b) At andre har noe viktigere å si?

Avslutning

14) Er det noe vi ikke har snakket om som du ønsker å dele?
15) Er det noe mer du tenker jeg bør vite om?
16) Hvordan opplevde du denne samtalen?

Interview guide (employee)

Takk for at du deltar. Lyden fra intervjuet vil bli tatt opp og slettet etter transkribering. Alle personer anonymiseres, men sitat kan bli referert til. Du har rett til å avslutte intervjuet og trekke deg fra prosjektet når som helst. Varighet på intervjuet er estimert til ca. 1 time.

Det overordnede temaet for mitt prosjekt er psykologisk trygghet i team. En vanlig definisjon på psykologisk trygghet er at det er en felles opplevelse av at det er trygt å ta mellommenneskelig risiko i gruppa, og at man ikke vil ydmyke, avvise eller straffe hverandre for å uttrykke ens meninger eller tanker. Det handler om å kunne si hva en mener, komme med innspill og forslag, dele sin kompetanse og være seg selv uten å frykte represalier eller andre sosiale sanksjoner.

1) Har du noen spørsmål før vi starter?

Oppstart

2) Start gjerne med å fortelle meg litt om jobben din her på avdelingen.

Hoveddel

3) Som du sikkert husker, observerte jeg avdelingsmøtet *dato og måned* hvor avd.leder gikk gjennom årets medarbeiderundersøkelse. Nå ønsker jeg at du tenker over møtet din opplevelse av det møtet.
   a) Var dette et vanlig eller uvanlig møte?
   b) Hva gjorde det vanlig/hva gjorde det uvanlig?

4) Når du tenker på møtet, er din generelle følelse positiv, negativ eller begge deler? Hva gjorde at du opplevde det positivt/negativt?
   a) Hvis begge; hva gjorde at du opplevde det positivt, og hva gjorde det negativt?
   b) Hvordan kunne møtet blitt en mer positiv opplevelse for deg?

5) I møteinnkallingen som du mottok på mail fra avd.leder ble du oppfordret til å lese gjennom rapporten og reflektere på noen punkter.
   a) Fikk du en sjanse til å lese gjennom rapporten før møtet?
   b) Hva tenker du om din egen forberedelse?
   c) Dersom rapporten ikke hadde blitt gjennomgått på møtet, hadde forberedelsen din vært annerledes?

6) Se for deg at dere hadde blitt delt inn i mindre grupper for å diskutere resultatene for så å presentere tankene deres etterpå. Hvordan ville det vært for deg?

7) Nå ønsker jeg at du tenker over et annet møte i avdelingen som du opplevde som bedre eller verre.
   a) Hva gjorde det bedre/verre?

8) I møteinnkallingen du mottok fra avd.leder ble du bedt om å reflektere over noen punkter. Hvordan ville det vært for deg om møtet startet med at dere ble spurt om hva dere har reflektert over?
    a) Hvis ikke det hadde fungert, hva tror du er grunnen til det?
    b) Hva skal til for at det hadde fungert?

9) I løpet av møtet, hendte det at du tenkte på noe som du ikke fortalte til gruppa?
    a) Hvis ja; hva tror du er årsaken til at du ikke sa det?
    b) Hva kunne ha fått deg til å si det?

10) Ved gjennomgang av undersøkelsen kom temaet «planlegger å bli i organisasjonen de 2 neste årene» opp. Hva dukket opp i tankene dine da?
    a) Hadde du noen andre tanker i hodet enn de som ble sagt?
    b) Sa du det du tenkte på? Hvis ikke, hvorfor?

11) Jeg observerte at noen snakket mer enn andre i løpet av møtet, er dette normalt?
    a) Er du glad for at det var sånn, eller skulle du ønske det var annerledes?
    b) Hvordan tenker du dette påvirker hvordan tanker, ideer og kunnskap deles?

12) Hva mener du er viktig for at dere skal føle dere trygge på hverandre
    a) Hva har du som ansatt gjort for å bidra til etablering av trygghet?

13) Hvordan deler dere informasjon om situasjoner hvor noen har gjort noe feil, f.eks. gjort feil utregning i en rapport e.l.?

14) Hvordan opplever du å ytre dine meninger?
    a) Hva tenker du har bidratt til at du opplever det slik?

15) I det daglige, føler du at andre på avdelingen har tid til å svare på det du lurer på?
    a) Hva tenker du kan være årsaken til at det er sånn?
    b) Hvordan avgjør du hvem du spør om hjelp om når du gjør det?

16) Hvordan tenker du at gjennomgangen av medarbeiderundersøkelsen kunne vært forbedret?
    a) Hva kunne den som holdt møtet gjort annerledes?
    b) Hva kunne du selv gjort for å få bedre utbytte?
    c) Opplever du at ledere prioriterer medarbeidundersøkelsen i hverdagen?

Avslutning

17) Er det noe vi ikke har snakket om som du ønsker å dele?

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