



Interaction and Communication Factors Shaping Psychological Safety in Teams

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Degree programme in Leading Business Transformation
Leadership and Human Resource Management
Master's Thesis
2025

Abstract

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<p>Degree Master of Business Administration</p>
<p>Report/thesis title Interaction and Communication Factors Shaping Psychological Safety in Teams</p>
<p>Number of pages and appendix pages 61 + 1</p>
<p>This thesis examines the interaction and communication factors that shape psychological safety in workplace teams. The study focuses on interpersonal dynamics, particularly individual-level communication behaviors such as voicing concerns and providing feedback, along with team-level relational qualities and leader behaviors that foster psychological safety. Structural or organizational elements, including role structures, team configurations, or formal policies, are excluded from the scope. This study is limited to team-level interactions within workplace settings.</p> <p>The theoretical framework draws from previous research on psychological safety related to high-quality relationships, interactional leader behavior, and communication. Emphasis is placed on how psychological safety is created, maintained, and expressed in everyday interactions. The study was conducted using qualitative methods, based on 20 semi-structured interviews with employees from two Finnish organizations—one in the health sector and the other in the media industry. All participants worked in collaborative team environments. The data were analyzed using qualitative content analysis to identify interactional and communication behaviors that either enhance or limit psychological safety in teams. Additionally, specific leader behaviors and relational qualities were identified to enhance team psychological safety.</p> <p>The findings indicate that psychological safety is shaped not by specific situations, but by how individuals engage and connect within those contexts. Practicing constructive communication, encouraging expression, and maintaining connection are identified as key factors influencing psychological safety in teams. Fostering supportive relationships, leading with humanity, and establishing supportive practices are recognized as essential leader behaviors. Familiarity and certain personality traits enhance high-quality peer relationships, which are also crucial for promoting psychological safety within teams. Finally, limiting factors for psychological safety are unproductive communication style, avoidance and silence, and communication breakdowns.</p> <p>The study emphasizes the cyclical nature of psychological safety: it is both shaped by and reinforces everyday interactions. As team members become more courageous in taking interpersonal risks, such as participating in challenging conversations, their influence on team psychological safety increases. Based on the findings, practical recommendations are provided to help organizations promote and maintain psychological safety in collaborative team environments.</p> <p>This research enriches the literature by highlighting the quality of communication, interactions, and interpersonal relationships in fostering psychological safety within teams.</p>
<p>Keywords Psychological safety, team psychological safety, communication, interaction, relationships</p>

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1 Introduction

The significance of psychological safety in the modern workplace is closely tied to the various challenges facing the contemporary workforce. As “today’s organizations encounter greater uncertainty and complexity than ever before” (Edmondson & Bransby 2023, 56), and as the work environment continues to evolve at an accelerating pace, employees' ability to adapt, learn, and collaborate is essential for effective teamwork and high performance. Psychological safety, which facilitates knowledge sharing, learning, innovation, and performance in dynamic environments, is central to the demands of modern work life (Edmondson & Bransby 2023; Edmondson & Lei 2014).

The concept of psychological safety refers to a work environment where employees feel comfortable taking interpersonal risks (Edmondson 1999, 350). Interpersonal risk-taking encompasses a range of actions we undertake at work that may compromise our social reputation. These actions include sharing ideas and concerns, asking for help, providing feedback, and addressing conflicts. Hence, Psychological safety is a fundamental prerequisite for effective teamwork, particularly due to the interdependent and collaborative nature of modern work (Edmondson & Bransby 2023, 56).

Over the past decade, psychological safety has gained significant prominence across industries worldwide, and research in this field has experienced substantial growth. The global COVID-19 pandemic from 2020 to 2023 intensified interest in this subject as organizations recognized the necessity of ensuring a safe work environment, both physically and mentally, while confronting new challenges amid the turmoil. Moreover, the mental health issues currently affecting the global workforce are increasing and require solutions, with employee well-being declining, engagement stagnating, and corresponding metrics hitting or approaching record highs (State of the Global Workplace: 2024 Report).

Psychological safety provides a practical approach to addressing the complex challenges of today’s work environment. According to the 2024 Work in America Survey, individuals who experienced higher levels of psychological safety reported greater work engagement and overall job satisfaction, as well as increased satisfaction in their relationships with coworkers and managers. They also noted lower levels of workplace stress and negative emotions, as well as higher levels of overall mental health (American Psychological Association 2024). Numerous other studies have highlighted the positive effects of psychological safety on work experience and well-being (Edmondson & Bransby, 2023) and its negative correlation with burnout (Edwards et al. 2021; Kerrissey et al., 2022; Lisser et al., 2024).

To tackle workforce challenges, particularly among younger generations, leadership has shifted over the last few decades from hierarchical structures and controlling styles to more collaborative

approaches. While modern leaders must be tech-savvy, manage hybrid work environments, and adapt to continuous disruption, they also need to humanize their leadership by connecting with team members and caring for their needs (Global Leadership Development Study 2023). More than anything, employees today require a sense of hope, trust, compassion, and psychological safety from their leaders, and “these needs are also linked to wellbeing: The more needs leaders meet, the more suffering is reduced” (Gallup Global Leadership Report 2025). Therefore, psychological safety should be a prerequisite in every leader’s toolkit. But how do we use this tool, and how do we create psychological safety in practice?

Previous research on psychological safety has effectively examined the concept’s antecedents and outcomes at the individual, team, and organizational levels. Regarding the antecedents, considerable emphasis has been placed on leadership and work design characteristics, such as role clarity and autonomy. However, the research has overlooked interactional and conversational behaviors as antecedents (Akan, Jack & Mehta 2020, 30)—specifically, what must be said and done to cultivate psychological safety (Edmondson & Bransby 2023, 72).

This is somewhat surprising, considering that psychological safety is an interpersonal concept that “is tied to the way people feel and act in relationships with one another” (Carmeli, Brueller & Dutton 2009, 92). Edmondson and Morgelof (2004, 24) emphasize the significance of positive interpersonal relationships as a key predictor of psychological safety and suggest that “teams would do well to place a consistent focus on the nature of their interactions, not just early on but at all stages of their work.” Therefore, to foster and enhance psychological safety within teams and organizations, it is essential to clarify the specific interaction qualities and behaviors that are central to this phenomenon.

My interest in psychological safety stems from my background as a mental health therapist, organizational coach, and consultant, where I help work communities improve their well-being and performance. In pursuit of these goals, enhancing psychological safety is essential. Over the last decade in the field, I have observed that the way employees communicate and interact with one another is fundamental to the work climate. However, modern work arrangements, such as remote and hybrid work, present challenges to these interactions, making it more difficult to build and strengthen psychological safety. Edmondson and Bransby (2023, 72) also advocate for qualitative research in remote and hybrid teams to grasp the dynamics of psychological safety in contemporary work arrangements.

1.1 Objective and research questions

The title 'Interaction and Communication Factors Shaping Team Psychological Safety' reflects the scope of this study, which examines the interpersonal dynamics that influence the emergence and maintenance of psychological safety within teams. In this context, interaction and communication factors encompass not only direct communicative behaviors among team members but also the relational and leadership dynamics through which psychological safety is expressed and fostered. These factors include individual-level behaviors, team-level relational qualities, and leadership behaviors. However, the primary focus of this research is on individual-level communication behaviors, such as voicing concerns and offering feedback. Therefore, they are analyzed from the perspective of both enhancing factors and barriers to team psychological safety. When addressing team-level relational qualities, such as familiarity and trust, and leadership behaviors, including being available and modeling vulnerability, the study focuses on their role as enhancing factors.

The scope of this study excludes structural elements, such as work design characteristics (e.g., role clarity and autonomy), as well as formal leadership systems and policies, and broader organizational factors. Additionally, external influences such as economic conditions are beyond the scope. This research is limited to team-level interactions within workplace settings.

The study involves gathering qualitative interview data from 20 employees working in teams at two prominent organizations in Finland. One of these companies operates in the health sector, while the other is in the media sector. Although the interviewees hold diverse roles, they all work in collaborative team environments. Both organizations aimed to collect data on team psychological safety to identify strengths and weaknesses in this area. One organization had previously recognized developmental needs related to this topic. Additionally, the other organization sought to systematically enhance psychological safety based on the provided results and development suggestions.

The organizations participating in this study aimed to maintain complete anonymity and ensure total confidentiality for their employees as well. Therefore, no additional information, such as demographic details, will be provided regarding the companies or their employees. Thus, the goal is not to produce broadly generalizable results, but to offer insights that could resonate in similar contexts, particularly in team settings characterized by collaborative work and high-performance demands.

In conclusion, the objective of this study is to explore how interaction and communication factors shape psychological safety in teams, focusing on individual behaviors that either support or hinder safety, as well as team relational qualities and leadership behaviors that cultivate a psychologically

safe team environment. This thesis contributes to the understanding of psychological safety by offering a more comprehensive and concrete perspective, emphasizing specific behavioral factors that influence it. By identifying these actionable behaviors, the study aims to guide organizations and teams in developing practical strategies to promote and sustain psychological safety in their work environments.

The research questions this thesis aims to answer are:

- 1) a) Which interactional and communication behaviors enhance psychological safety in teams?
b) Which interactional and communication behaviors limit psychological safety in teams?
- 2) Which leader behaviors enhance interaction and psychological safety in teams?
- 3) Which relational qualities enhance psychological safety in teams?

1.2 Structure of the thesis

This section outlines the thesis structure. Chapter Two presents the theoretical background and reviews the current academic literature related to psychological safety. Chapter Three introduces the methods used in this research project, including the selection of the research approach and explanations of the data collection and analysis processes. Chapter Four presents the research findings, while Chapter Five discusses their relevance and practical application. Additionally, Chapter Five addresses the reliability and validity of the study, as well as reflections on the personal learning process.

This thesis utilized the Grammarly application integrated into Microsoft Word to verify the grammar and fluency of the English language throughout the text. ChatGPT was used to assist with categorizing the data. The AI application was utilized with careful attention to data privacy regulations and ethical standards. Additionally, all relevant copyright considerations were respected throughout its use.

2 Theoretical framework

A literature review was conducted to understand the overall concept of psychological safety, its relationship to team environments, and its various antecedents. Several electronic databases, including Google Scholar, ResearchGate, DOAJ, Sage Journals, EBSCOhost, Emerald, ProQuest One Business, and Elsevier, were utilized to find relevant academic articles using the keywords “psychological safety,” “relationships,” “interaction,” “communication,” “conversation,” and “leadership”.

2.1 Psychological safety concept

The concept of psychological safety was introduced as early as 1965 by American organizational scientists Edgar Schein and Warren Bennis in their book, "Personal and Organizational Change Through Group Methods: The Laboratory Approach", where they proposed that psychological safety is crucial for enabling individuals to change by reducing perceived threats (Franzier, Fainshmidt, Klinger, Pezeshkan & Vracheva 2017). Later, Schein (1993, in Edmondson & Lei 2014, 25) stressed that with psychological safety, “individuals are free to focus on collective goals and problem prevention rather than on self-protection”.

A few decades later, in 1990, William Kahn, a professor of organizational behavior, studied the impact of psychological safety at work on employee engagement in his renowned article. During his research on summer camp counselors and members of an architecture firm, he noted that “people felt safe in situations in which they trusted that they would not suffer for their personal engagement”. Therefore, he defined psychological safety as a “sense of being able to show and employ one's self without fear of negative consequences to self-image, status, or career”. (Kahn 1990, 708.)

Harvard researcher Amy Edmondson was the first to introduce the concept of psychological safety as a group construct. In her 1996 study on error reporting within healthcare teams, Edmondson discovered that teams reporting the most errors were not necessarily those making the most mistakes, but rather those holding a “shared belief that making a mistake will not be held against you”. She concluded that shared perceptions contribute to a climate of fear or openness and further influence the willingness to address issues. (Edmondson 1996, 19–24) In her influential 1999 article, Edmondson referred to this climate as psychological safety and defined it as a “shared belief held by members of a team that the team is safe for interpersonal risk-taking” (Edmondson 1999, 360). Later, she added that “psychological safety refers to a climate in which people are comfortable being (and expressing) themselves” (Edmondson 2003, 1).

While Edmondson (1999, 2003, 2014, 2023) has emphasized that psychological safety is fundamentally a group-level construct, much of the research conducted over the last two decades has examined the relationship between individual experiences of psychological safety and its impacts on individual and organizational levels.

Baer and Frese (2003) studied the relationship between psychological safety climate and company performance in mid-sized companies in Germany. They expanded the concept of team psychological safety to encompass a broader framework of an organizational climate that fosters psychological safety. This climate refers to “formal and informal organizational practices and procedures guiding and supporting open and trusting interactions within the work environment” (Baer & Frese 2003, 50). In their research, Baer and Frese demonstrated that the organizational climate for psychological safety predicted company goal achievement and return on assets. Therefore, they concluded that psychological safety is not only a group-level construct but also an organizational-level phenomenon. (Baer & Frese 2003, 50–57.)

Building on that foundation, Carmeli (2007) investigated the connection between organizational-level psychological safety and its impact on failure-based learning behaviors, verifying this relationship. Carmeli and Zisu (2009) again demonstrated in their study that organizational trust and perceived organizational support are positively related to psychological safety. Subsequently, Edmondson and Bransby (2023, 63) confirmed the moderating role of psychological safety on organizational performance, including financial performance, innovation, and organizational resilience.

Similarities in different levels of analysis

While psychological safety has been studied at the individual, team, and organizational levels, the findings have been surprisingly consistent, demonstrating that psychological safety produces reliable and generalizable outcomes across various levels of analysis (Edmondson & Lei 2014; Franzier et al. 2017) as well as across industries and countries (Edmondson & Bransby 2023, 69). Two of the most reliable cross-level outcomes of psychological safety are learning and performance (Edmondson & Bransby 2023; Edmondson & Lei 2014; Newman, Donohue & Eva 2017). Performance, as an outcome of psychological safety, is particularly strong in contexts characterized by uncertainty, collaboration, and creativity (Edmondson & Lei 2014, 36). At all levels of analysis, psychological safety has been shown to promote interpersonal risk-taking, such as sharing ideas, failures, and feedback (Edmondson & Bransby 2023, 69; Edmondson & Lei 2014, 36), which is crucial for both learning and performance.

In a meta-analytic review of psychological safety, Franzier and colleagues (2017) analyzed 117 studies. They found that in addition to task performance and learning behaviors, outcomes such as

engagement, information sharing, creativity, and satisfaction were also linked to both individual and group levels, although the degree of the effect varied (Franzier et al. 2017). Edmondson and Bransby (2023) summarized the primary outcomes of psychological safety in their literature review of 185 academic papers: getting things done, fostering learning behavior, and improving the work experience. They concluded that psychological safety is an essential factor that operates on all levels, enabling teamwork and mitigating potential obstacles to it (Edmondson & Bransby 2023, 61).

Related to the antecedents of psychological safety, Franzier and colleagues (2017) demonstrated that positive leader relations, supportive work context, work design characteristics (including autonomy, interdependence, and role clarity), and learning orientation as a personality variable were antecedents to psychological safety at both individual and group levels (Table 1). Edmondson and Bransby (2023, 67–68) identified leadership and leader behaviors, such as listening, competence, and transparency, as the most powerful antecedents related to psychological safety.

	Individual antecedents	Team antecedents	Organizational antecedents	Leadership antecedents	Work design characteristics
Individual-level psychological safety	Positive personality traits: - Proactive personality - Emotional stability - Learning orientation	Supportive work context: - Peer support		Positive leader relations: - Inclusive leadership - LMX - Transformational leadership - Trust in leadership	- Autonomy - Interdependence - Role clarity
Group-level psychological safety	Positive personality traits: - Learning orientation	Supportive work context: - Peer support	Supportive work context: - Organizational support	Positive leader relations: - Transformational leadership - Trust in leadership	- Autonomy - Interdependence - Role clarity

Table 1. Psychological safety antecedents on different levels of analyses (based on Franzier et al. 2017, 130–131)

As noted above, the various psychological safety antecedents and outcomes are consistent across analysis levels, whether individual, group, or organizational. However, multiple authors question whether this concept can be generalized to organizational settings (Edmondson & Lei 2014; Newman et al. 2017). Newman and colleagues concluded in their literature review that for a climate of psychological safety to exist, employee perceptions of this climate must be closely aligned, which is unlikely in large corporations, and thus, psychological safety is likely strongest and most meaningful at a group level (2017, 524–528). Likewise, Edmondson and Bransby (2023, 69) stress that

psychological safety arises from personal encounters and interactions and is, therefore, likely to be strongest within small groups where people regularly interact with each other and work closely together.

Although psychological safety is suggested to be strongest in small groups, certain boundary conditions play a role. For instance, it appears that psychological safety promotes performance and learning primarily in work environments that involve interdependence and necessitate learning due to their challenging nature (Edmondson & Lei 2014, 35), which encompasses aspects such as complexity, creativity, and sensemaking (Sanner & Bunderson 2015, 224). Therefore, psychological safety should not be considered a goal in itself, but rather an enabler of the desired results for teams working in challenging environments (Edmondson & Bransby 2023, 73).

2.2 Interpersonal dynamics of psychological safety

Psychological safety in teams does not arise in a vacuum—the quality of interactions and communication among team members and leaders shapes it. This section examines the interactional and communicative antecedents of psychological safety, drawing on research in relational dynamics, leadership behavior, and communication practices. By examining the contributions of interpersonal relationships, interactional leader behaviors, and everyday communication to perceptions of safety, the aim is to establish a theoretical foundation for understanding the interpersonal processes that either foster or hinder psychological safety in team settings.

As mentioned in the previous chapter, research over the past two decades has revealed several antecedents to psychological safety. However, regardless of whether these antecedents pertain to individual, team, or organizational levels—as qualities, characteristics, or behaviors—they likely require human interactions to be realized. As noted in the introduction of this research, psychological safety is an interpersonal concept that “is tied to the way people feel and act in relationships with one another” (Carmeli et al., 2009, 92). Therefore, one could argue that interaction and communication behaviors of individuals and teams form the foundational layer of psychological safety.

In their review article, Edmondson and Bransby reviewed 185 papers published between 2013 and 2021, finding that relationships, communication, and voice behavior were among the nine most researched topics related to psychological safety. However, most of that research concentrated on these aspects as outcomes of psychological safety. “By creating an environment where candor is expected and possible, psychological safety helps to encourage open and authentic interpersonal behaviors”, which further facilitates other outcomes such as performance and learning. (Edmondson & Bransby 2023, 66–72.)

Because research on communication and conversational behaviors as antecedents to psychological safety is limited, Edmondson and Bransby emphasize the need for a greater understanding and evidence regarding the interpersonal factors associated with psychological safety. More specifically, what are the microdynamics of conversation—what should be said and done in concrete terms—to foster psychological safety? (Edmondson & Bransby 2023, 71–72.)

This chapter reviews literature on high-quality relationships, interactional leadership behavior, and, more specifically, communication behaviors within those relationships as potential antecedents to psychological safety. The order of the themes differs from that of the research questions, as it is more logical to begin with the broadest category—high-quality relationships—and then move progressively toward more specific topics, concluding with high-quality listening.

2.2.1 High-quality relationships and psychological safety

Since psychological safety is an interpersonal concept, it is natural for the quality of relationships to play a critical role as an antecedent. As early as 1990, Kahn discovered that interpersonal relationships were one of the four factors that most influenced the psychological safety of individuals. Following Kahn's work, several researchers have provided evidence of the importance of high-quality relationships as highlighted in the systematic review of psychological safety literature by Newman and colleagues (2017). They examined 83 articles published between 1990 and 2015 and concluded that co-worker relationships and relationship networks were among the key antecedents of psychological safety (Newman et al. 2017). Additionally, Edmondson and Mogelof (2004) studied project teams in three different project phases and demonstrated that positive team interactions were crucial for creating and maintaining psychological safety throughout all stages of work.

Specific factors that affect relationship quality have also been researched. Kahn (1990, 708) indicated that relationships that enhance psychological safety are supportive and trusting, allowing individuals to avoid fearing the negative consequences of their actions. Edmondson (2004, 17–18) noted that “if relationships within a group are characterized by trust and respect, individuals are likely to believe they will be given the benefit of the doubt—a defining characteristic of psychological safety”. Similarly, May and colleagues found that peer support, mutual respect, and appreciation for work contributions foster psychological safety (May, Gilson & Harter 2004, 16–17).

Carmeli and Gittel (2009) examined high-quality relationships from the perspective of shared goals, shared knowledge, and mutual respect, discovering that these elements promote psychological safety, which in turn facilitates learning from failures.

When employees who work together have shared goals that transcend their specific roles, when they are connected by shared knowledge of the overall work process and how their

roles interrelate, and when they are connected by mutual respect that enables them to carry out their roles in an atmosphere of openness, they are less likely to blame each other for failures and therefore are more likely to experience the psychological safety needed to embrace failure as an occasion for learning. (Carmeli & Gittel 2009, 713.)

In their study on high-quality relationships as precursors to psychological safety, Carmeli and colleagues (2009, 92) argued that “both the functional capacities of high-quality relationships (the carrying capacity, tensility and connectivity), as well as how individuals experience these bonds (mutuality and positive regard) are associated uniquely with a sense of interpersonal safety”. Emotional carrying capacity refers to the ability to express and endure both positive and negative emotions, while tensility signifies that the relationship can withstand tension, such as conflicts. These qualities enable relationship partners to take more interpersonal risks without fearing negative reactions. Connectivity involves being open to new information in a non-defensive manner. The experiential aspects of high-quality relationships include mutuality, which means active participation and empathy that benefit both parties, and positive regard, which refers to respectful engagement.

Carmeli and colleagues noted that high-quality relationships help team members face diverse challenges related to collaboration because they foster feelings of connection and appreciation (Carmeli et al. 2009, 83–85). Later, Kwang-Ho and colleagues confirmed Carmeli and colleagues' findings, concluding that high-quality relationship capacities — namely, carrying capacity, tensility, and connectivity — enhance psychological safety in the hospitality industry, including airline firms, where the study was conducted (Kwang-Ho, Sunghyup, Haeik & Kwangyong 2020).

In a concept analysis of psychological safety in health care, Ito and colleagues (Ito, Sato, Yumoto, Sasaki & Ogata 2021) defined one of the three psychological safety antecedents as “interpersonal factors”. These factors include trust, respect, support, high-quality communication, effective relationships, and leader behavior (e.g., inclusiveness). Support refers to the assistance provided by the leader, team members, and peers. Effective relationships include, for example, familiarity between team members. Likewise, Remtulla and colleagues, as well as O'Donovan and colleagues in their studies on healthcare teams, found that strong interpersonal relationships promoted psychological safety and speaking-up behavior (O'Donovan, Brún & McAuliffe 2021; Remtulla, Hagana & Houbby 2021). In particular, individual perceptions of being valued were a significant factor in interpersonal relationships (O'Donovan et al. 2021).

Although high-quality relationships are effective in enhancing psychological safety, which in turn fosters numerous workplace benefits, Edmondson warns that psychological safety may also encourage individuals to express themselves too openly, sometimes leading to unproductive conversations or conflicts that they lack the skills or capacity to navigate effectively (Edmondson 2004, 36). Therefore, Argyris (1993, in Edmondson 2004, 36) emphasizes that interpersonal competence

is crucial for navigating these challenges. Consequently, it is essential to understand how to communicate and translate into action the different factors, such as support and respect, that encompass high-quality relationships. Thus, in future chapters, we will take a closer look at the concrete ways of communicating psychological safety to followers and peers.

2.2.2 Interpersonal leader behavior and psychological safety

Leader behavior is one of the most researched factors impacting team psychological safety. In fact, in their recent literature review on psychological safety (2023), Edmondson and Bransby identified leadership and leader behavior as the most significant contributors to psychological safety. To align with the scope of this research, this chapter focuses on attributes related to leader interactions and leader-follower relationships, excluding structural leader behaviors such as defining roles and responsibilities and setting goals.

A prominent theme relating to psychological safety antecedents is leader support. Kahn (1990, 711) has concluded that management style is one of the most significant factors influencing psychological safety, and he stresses that managers should show support and trust by loosening control and allowing employees to try, experiment, and fail without fear of negative consequences. Likewise, Edmondson (1999, 356) noted that supportive, coaching-oriented leaders enhance safety. Additionally, numerous other studies have highlighted supportive leadership as a key antecedent of psychological safety (May et al. 2004; Newman et al. 2017; O'Donovan & McAuliffe 2020a).

A specific aspect of supportive leadership is leader inclusiveness, defined as “words and deeds by a leader or leaders that indicate an invitation and appreciation for others’ contributions” (Nembhard & Edmondson 2006, 947). While Nembhard and Edmondson (2006) highlight the importance of inviting and appreciating contributions, Carmeli and colleagues (Carmeli, Reiter-Palmon & Ziv 2010, 16) emphasize the traits of openness, accessibility, and availability as inclusive leader behaviors. Despite their different focuses, leader inclusiveness has been proven to promote psychological safety in diverse work environments (Bienefeld & Grote, 2014; Carmeli et al. 2010; Hirak, Peng, Carmeli & Schaubroeck 2012; Nembhard & Edmondson 2006; O'Donovan & McAuliffe 2020a; Remtulla et al. 2021).

Edmondson (2004) suggests three inclusive leader behaviors for fostering psychological safety: being available and approachable, explicitly inviting input and feedback, and modeling openness and fallibility. In her 1996 research on hospital teams, Edmondson demonstrated that surgeons who were accessible, invited input, and admitted their own mistakes enhanced psychological safety.

One challenging aspect of inviting employee input is that some leaders struggle to respond to this input in a positive and productive manner. In his 1990 study, Kahn found that when management sent mixed signals about welcoming feedback but then reacted negatively, it reduced feelings of safety. Additionally, Tynan (2005) observed that the fear of repercussions when expressing concerns reflects psychologically unsafe work environments. Therefore, behavioral integrity, which refers to the consistency between words and actions, is a crucial managerial behavior that enhances psychological safety (Ito et al. 2021; Palanski & Vogelgesang 2011).

Edmondson and Lei (2014, 38) emphasize that “psychological safety takes time to build, through familiarity and positive responses to displays of vulnerability and other interpersonally risky actions, but can be destroyed in an instant through a negative response to an act of vulnerability. ” Similarly, Yanchus and colleagues discovered that employees in psychologically unsafe workplaces experience negative reactions to their input and wrong tone in communications between employees and managers (Yanchus, Derickson, Moore, Bologna & Osatuke 2014). Notably, the negative response may not only concern the content of the input from employees, but also the manner in which they present it. Garon found that expressing intense emotions, such as passion or aggression, during communication was often met with rejection, possibly because it was perceived as threatening (2010, 367–369). Therefore, she emphasized that being available, listening well, and responding positively to input are essential managerial behaviors (2010, 367). Similarly, Yanchus and colleagues note that supervisor approachability and a lack of fear of retaliation are crucial factors that enable psychologically safe workplaces (Yanchus et al. 2014).

Thompson and Klotz (2022) demonstrated that leaders’ displays of curiosity enhance followers’ psychological safety by reducing the perceived threat related to voice behavior. Likewise, when employees feel respected and valued, their fears of rejection and not belonging lessen, thus enabling psychological safety (Rogers & Ashforth 2017). O’Donovan and colleagues (2021) found that employees who feel valued are more likely to voice their thoughts. However, while leader support, inclusiveness, and approachability foster feelings of being valued, other limiting factors may also play a role, such as negative past experiences, lower-hierarchy roles, and specific personality traits (O’Donovan et al., 2021).

Leader humility, “characterized by being open to admitting one’s limitations, shortcomings, and mistakes, and showing appreciation and giving credit to followers” (Hu, Erdogan, Jiang, Bauer & Liu 2017, 313), has been shown to promote psychological safety (Hu et al. 2017; Rego, Melo, Bluhm, Cunha & Júnior 2021; Zou & Chen 2022). Coutifaris and Grant (2021) specifically demonstrated that by openly discussing the feedback they received, including any criticism, leaders demonstrated vulnerability, which contributed to long-term improvements in psychological safety.

Binyamin and colleagues (2018) illustrated that caring relationships, where leaders and employees engage by showing concern for each other's inner needs, create a "holding environment" that enhances psychological safety. More specifically, Castro and colleagues found that team psychological safety significantly improved when managers conducted regular one-on-one meetings with team members, focusing on the individual needs of employees (Castro, Englmaier & Guadalupe 2022). The practices of inviting voice and demonstrating respect and care can also be conveyed through transformational leaders who support and acknowledge the unique needs and strengths of their followers and signal to them that the workplace values diversity, enabling individuals to express their thoughts openly without fear of negative consequences (Yin, Ma, Yu, Jia & Liao 2019).

Psychological safety also improves through empathetic leaders (Bani-Melhem, Mohd. Shamsudin, Mazen Abukhait & Quratulain 2021), who "have an understanding of a follower's emotional state, express this understanding, and support their follower's handling of these emotions" (Kock, Mayfield, Mayfield, Sexton & De La Garza 2019, 218). In addition to behavior, empathy can be conveyed through a leader's language, which has been shown to influence the psychological safety of followers (Mayfield & Mayfield 2021; Thelen, Yue & Verghese 2022). The effective and empathic communication of leaders has been examined particularly through the motivating language theory, which includes three categories of leader-to-follower communication:

Direction-giving language (giving specifics of how and when tasks need to be accomplished), empathetic language (language that supports emotional bonds in the workplace and creates emotional ties), and meaning-making language (language that links personal goals of a follower to the larger organizational culture) - - These communications signal expectations, cultural norms, and provide emotional support for dealing with daily workplace issues. (Mayfield & Mayfield 2017, 212–213.)

When leaders use motivating language, it promotes psychological safety through three mechanisms: by enhancing followers' trust in the leader, followers' sense of leader inclusiveness, and followers' role clarity (Mayfield and Mayfield 2021).

Finally, Frazier and Tupper (2018) demonstrated that supervisor perceptions of psychological safety influence employee perceptions of psychological safety, suggesting that if a leader does not perceive the work environment as safe, it becomes more challenging for them to convey and communicate safety to their followers as well.

2.2.3 Communication and psychological safety

Communication can be defined as "a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior" (Merriam-Webster s.a.). It also refers to the act of transferring meanings and understanding of those meanings (Robbins & Judge, 2018, 167). Therefore, in team environments, communication is essential for coordinating actions,

achieving goals, and fostering a shared understanding among team members. Additionally, communication alone is not sufficient; attention must also be paid to its quality. Ito and colleagues (2021, 470) emphasize the importance of high-quality communication, characterized by frequent, honest, and open exchanges, in fostering psychological safety at work.

Although research on the specifics of communication as an antecedent to psychological safety is limited, a few exceptions exist. Yanchus and colleagues interviewed clinical providers and compared the perceptions of work-related communication in groups with high versus low psychological safety. They effectively captured the connection by stating that “psychological safety and communication are inextricably linked, as communication, or lack thereof, is the primary means by which psychological safety is manifested and observed.” (Yanchus et al. 2014, 755.)

In their study, Yanchus and colleagues identified several communication characteristics related to psychological safety. They concluded that workplaces with high psychological safety had better quality communication, and employees showed each other trust and respect. When psychological safety was low, the amount of communication was low, and the tone was perceived as negative. However, they did not examine whether, for instance, the amount and quality of communication acted as antecedents or outcomes of psychological safety. (Yanchus et al. 2014, 763–764.)

In line with Yanchus and colleagues, Siemsen and colleagues also found that communication frequency impacts psychological safety (Siemsen, Roth, Balasubramanian & Anand 2009). As frequency increases, it fosters feelings of familiarity among employees and provides certainty about how communication partners will respond in various situations, thereby enhancing psychological safety (Siemsen et al., 2009, p. 434).

Akan and colleagues (Akan, Jack, & Mehta, 2020) demonstrated that psychological safety can be enhanced through verbal behaviors, such as disclosing, questioning, and steering, associated with a concrescent conversation environment (CCE).

When members engage in disclosing behaviors such as being present at meetings, sharing personal information and providing feedback, they likely develop a sense of emotional safety and mutual respect. Similarly, when members pose relevant questions in a friendly manner and show appreciation for the information shared (questioning behaviors), they would be more likely to develop trust and feelings of safety. Team members’ steering of the group toward common goal in a helpful manner would also contribute to mutual respect and emotional bonding. (Akan et al. 2020, 33.)

Leader inclusiveness, discussed in the previous chapter, models the essential behavior of inviting input. Similarly, Senge, a pioneer in organizational learning, emphasizes the importance of balancing advocacy (making one's thinking and viewpoints clear to others) and inquiry (asking others to clarify their thoughts and viewpoints) in communication, as this enhances vulnerability

and safety, and reduces defensiveness (Senge 2006, 93–95). These skills — especially the ability to use inquiry — are also crucial for facilitating dialogue, where group members practice suspending their assumptions and stepping into collective thinking (Senge 2006). Schein (1993, 34), a prominent organizational theorist, notes that dialogue is essential in creating psychological safety and enabling individuals and groups to change.

Dialogue is likely to enhance psychological safety because it flattens hierarchical differences and signals respect. Another concept relating to respectful communication is civility. Nelson (2019) studied civility and candor as antecedents to psychological safety and found a significant correlation. According to Nelson, civility means demonstrating “good manners and regard for others,” while candor refers to genuine and sincere behavior. In her research, Nelson identified five profiles of work communication. In the first profile of *low candor and low civility*, employees are likely to have passive-aggressive behavior, which “typically implies that the communicator has hostile intentions and is being insincere”. In the second profile of *low candor and high civility*, “high civility without candor may simply serve as the pretense of respect, masking deeper issues like cynicism and distrust”. The fourth profile of *high candor and high civility* reflects neutral perceptions of the communicators, whereas the fifth profile of *very high candor and very high civility* is the only one that reflects positive workplace communication. (Nelson 2019, 20–21.)

In her study, Nelson concluded that high and very high levels of civility and candor were found only in work environments of high psychological safety, indicating that a respectful and honest communication style fosters psychological safety (Nelson 2019). Thus, Nelson’s research demonstrates that psychological safety is not established not only by the content of the message but also by the manner in which it is delivered. Therefore, it is essential to understand the nonverbal cues we signal when communicating. As mentioned previously, Yanchus and colleagues (2014) found that the negative tone of communication was one of the primary indicators of psychologically unsafe workplaces. Likewise, Tannen (2000, p. 139) notes that linguistic style, comprising elements such as tone of voice, rate of speech, and degree of loudness, significantly affects how the message is received. “Linguistic style is a set of culturally learned signals by which we not only communicate what we mean but also interpret others’ meaning and evaluate one another as people” (Tannen 2000, 139).

Due to individual differences in backgrounds and linguistic styles, a particular way of speaking may signal psychological safety to one person and cause distress in another. Therefore, those who aim to establish psychological safety should evaluate their linguistic choices and deliberately modify them to fit the situation, conveying trust and respect while considering potential cultural differences and the styles and needs of their communication partners.

Talk is the lifeblood of managerial work, and understanding that different people have different ways of saying what they mean will make it possible to take advantage of the talents of people with a broad range of linguistic styles. As the workplace becomes more culturally diverse and business becomes more global, managers will need to become even better at reading interactions and more flexible in adjusting their own styles to the people with whom they interact. (Tannen 2000, 148)

In addition to being considerate about what and how to communicate to promote psychological safety, another essential aspect is knowing when to speak and when to refrain from using one's voice. Edmondson and Besieux emphasize the importance of voice behavior and contribution type as a foundation for productive conversations and psychological safety (Figure 1).

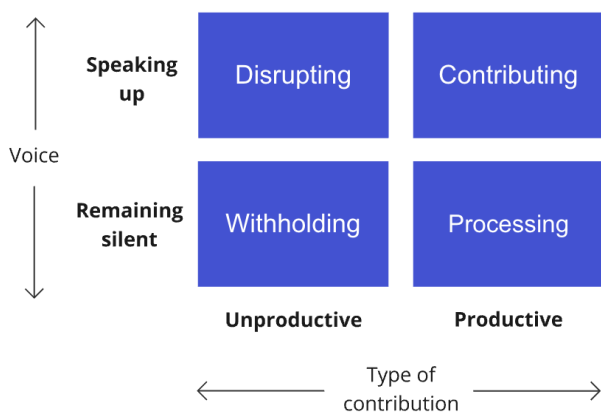


Figure 1. The productive conversation matrix (adapted from Edmondson & Besieux 2021, 272)

The authors note that psychological safety acts as an enabler of productive conversations, and similarly, the processing and contributing aspects of conversation enhance psychological safety. “Processing means active listening with a primary aim of understanding what is being said,” while contributing is a form of productive voice “that occurs when people make comments and give reactions in a way that reinforces the norm that candor is welcome” (Edmondson & Besieux 2021, 279). On the negative side, disrupting can significantly diminish psychological safety. Disrupting means not considering how one’s voice behavior negatively affects others. (Edmondson & Besieux 2021, 276–281.)

On a concrete level, to encourage contributing and diminish withholding, Edmondson and Besieux (2021, 276) suggest, for example

- making it clear that you don’t have all the answers
- modeling curiosity
- asking open-ended questions
- appreciating others’ comments

In their latest article, Edmondson and Kerrissey (2025, 58) summarize that “the best way to strengthen psychological safety is to lead conversations in a way that encourages information to be

shared candidly and processed thoughtfully. That entails asking good questions, listening intently, and pushing for closure.” This statement closely aligns with the focus of this thesis, as they further emphasize that “high-quality conversations are both an outcome and a driver of psychological safety” (Edmondson & Kerrissey 2025, 58). In the following section, we will explore how high-quality listening, specifically, can impact psychological safety.

High-Quality listening and psychological safety

Early on, humanistic psychologist Carl Rogers (1951, 193), a pioneer of client-centered therapy, referred to an “atmosphere of safety” that emerges between a therapist and a patient through quality listening, which reduces the speaker’s sense of threat to the self and helps them tolerate contradictory perceptions. Later, Rogers emphasized the significance of concentrated, empathic, and nonjudgmental listening (1980, 12–14). He also highlighted that unconditional acceptance and empathic understanding—both of which can be expressed through high-quality listening—are essential behaviors for fostering psychological safety (Rogers 1970, 357–358).

Since Rogers, research has shown that psychological safety improves through high-quality listening (Kluger & Itzchakov 2022), particularly through aspects such as nonjudgmental listening (Itzchakov, Castro & Kluger 2016) and empathic listening (Fenniman 2010). In high-quality listening, the “listener provides space and the willingness to understand the speaker’s views, and conveys caring or valuing for the speaker without pressuring or judging” (Weinstein, Itzchakov & Legate 2022, 5). Itzchakov and colleagues specify that “listeners convey these perceptions through observable behaviors such as gaze, facial expressions, follow-up questions, and reflections” (Itzchakov, Reis & Weinstein 2022, 3).

High-quality listening boosts speakers’ self-esteem, reduces their defensiveness, and helps them feel understood and cared for (Itzchakov et al. 2022), thereby fostering a sense of psychological safety. Additionally, high-quality listening and the sense of acceptance provided by the listener, as Rogers referred to, have been shown to help the speaker reflect on their thoughts, accept conflicting views, and even change their attitudes (Itzchakov & DeMarree 2022, 5).

Castro and colleagues demonstrated specific listening behaviors of supervisors that enhance psychological safety, including being attentive, ignoring distractions, asking questions to understand, and waiting patiently for the employee to speak (Castro, Anseel, Kluger, Lloyd & Turje-man-Levi 2018). Likewise, Itzchakov and colleagues (2022) reviewed verbal and non-verbal factors that promote high-quality listening. Verbal factors include using reflections, open questions, validation, utterances, and the speaker’s name; non-verbal factors consist of facial expressions, head nodding, body posture, gaze, and silence (Itzchakov et al. 2022, 7).

Interestingly, Itzchakov and colleagues (2016, 120) found that psychological safety can also be positively affected and enhanced for those who practice active listening, not just for those who receive it. Thus, the relationship between high-quality listening and psychological safety creates a positive loop. Zhou and Fredrickson (2023, 4) demonstrated that good listening shows acceptance towards the speaker and, therefore, increases their psychological safety, which may, in turn, promote even better listening. Additionally, a communicator can simultaneously provide and receive psychological safety from the audience. Itzchakov and DeMarree (2022, 5–7) noted that communicators who acknowledge their audience’s autonomy by being receptive to their viewpoints and attitudes reduce the recipients’ perceived threat of rejection, thereby promoting psychological safety. Receiving psychological safety occurs, for example, through high-quality listening and perspective-taking (Itzchakov & DeMarree 2022, 5–7).

Chen and colleagues studied, more specifically, the effect of showing interest toward the communication partner by asking elaboration questions while listening. Showing interest in the viewpoints of the communication partner by asking elaboration questions made both parties see the counterpart and their perspective more positively. Surprisingly, expressing interest toward the partner seemed to be more effective in creating positive attitudes than receiving an expression of interest. (Chen, Minson & Tormala 2019, 852) This suggests that practicing high-quality listening may create psychological safety more effectively than merely receiving it.

Summary

Taken together, the theories presented in this section emphasize that psychological safety is not an isolated phenomenon but is deeply embedded in the quality of interpersonal dynamics within a team or organization. High-quality relationships, characterized by mutual trust, respect, and care, provide a foundation for psychological safety to emerge and be sustained. Leader behaviors play a pivotal role in shaping these conditions, particularly through communication practices that invite openness, encourage participation, and model vulnerability. Among these, high-quality listening stands out as a critical mechanism through which individuals feel heard, valued, and safe to contribute. These theoretical insights inform the central premise of this thesis: that the nature and quality of workplace conversations—especially those led by leaders—are integral to the experience and development of psychological safety.

Building on these theoretical foundations, the following chapter outlines the methodological approach used to explore how psychological safety is experienced and fostered in practice, with a particular focus on the role of communication behavior and team interactions.

3 Research methodology

This chapter presents the research methodology utilized in this study. It outlines the research approach, along with the methodological choices, data collection process, and analysis procedures. The aim is to ensure transparency and rigor in the research process while demonstrating how the selected methods align with the research objectives.

3.1 Research approach

The goal of this study was to identify factors related to interaction and communication as antecedents to psychological safety, aiming to offer concrete and actionable solutions to organizational challenges associated with psychological safety. Another objective was to provide the two participating organizations with team psychological safety assessments and recommend development strategies based on the results. Given that the overall project was development-oriented and grounded in real-life challenges, the philosophical orientation of this research is pragmatic. Pragmatism emphasizes making a difference in organizational practices by offering practical solutions to known problems; therefore, the research problem and research questions were central in guiding the research design and strategy. (Saunders, Lewis & Thornhill 2019, 153.)

The research questions this thesis seeks to answer are:

- 1) a) Which interactional and communication behaviors enhance psychological safety in teams?
b) Which interactional and communication behaviors limit psychological safety in teams?
- 2) Which leader behaviors enhance interaction and psychological safety in teams?
- 3) Which relational qualities enhance psychological safety in teams?

To answer these research questions, it was necessary to understand the individual experiences of employees regarding psychological safety. Therefore, another philosophical orientation in this study is interpretivism. Interpretivist researchers emphasize the meanings that humans create about social experiences (Eriksson & Kovalainen 2008, Chapter 2). This approach acknowledges the complexities of the modern organizational environment, where employees' experiences and interpretations are inevitably diverse and do not fit into a single category (Saunders et al. 2019, 150).

This study employs a qualitative method, selected to align with interpretivist and pragmatic orientations. At the core of the qualitative method is the question, "How can I understand the other person," which refers to the researcher grasping the perspectives of the interviewee, as well as the reader comprehending the research report created by the researcher (Sarajärvi & Tuomi 2018, 2.4). Hence, qualitative research aims to understand phenomena and the individual experiences associated with them. This aligns with the goal of this research project, which is to gain a deeper

understanding of the interaction and communication factors that serve as antecedents to psychological safety. As with qualitative research more broadly, the focus here is not on generalization but on generating understanding.

3.2 Data collection process

This section details the procedures used to collect the research data, including the sampling process, which refers to participant selection, the development of the interview guide, and the practical implementation of the interviews.

3.2.1 The sampling process

This research project collected data through interviews with employees from two Finnish organizations. One company operates in the healthcare industry, while the other is in the media sector. Despite holding various positions, all interviewees worked in collaborative team environments and served as supervisees; thus, no team leaders participated in this study. Both organizations aimed to gain valuable insights into the status of psychological safety within the teams involved in the study.

According to Patton, the sample size in qualitative research should be guided by the study's purpose and the desired variation in perspectives. In instances where participants are relatively homogeneous, fewer interviews may suffice, whereas heterogeneous samples require a larger number to capture diverse viewpoints. (Patton, 2015, pp. 264–270.) Given that the employees in this study represent a variety of roles and teams, it was deemed necessary to select a sample size of 20 employees, 10 from each organization.

The employees for the interviews were chosen using two methods based on the preferences of the participating organizations. Participants in Organization A were recruited through *maximum variation sampling*, a purposeful sampling method that aims to capture diverse perspectives. Team leaders were asked to identify participants who varied in their behaviors, personalities, and team roles, ensuring broad representation of experiences within the team. Participants in Organization B were selected through *purposeful random sampling*, where individuals were randomly drawn from the eligible pool. (Patton, 2015, 272.)

After the participants were selected, the contact persons in both organizations provided me with their email addresses. The participants were then contacted via email, where I provided them with a research information sheet and a consent form. We then set up the individual interview times. The interviewees could inquire about the interview and study both before and during the interviews, but the questions themselves were not provided beforehand.

3.2.2 Semi-structured interviews

Interviews were utilized to gain deeper insights into the employee experience related to psychological safety. I selected this method because the topic is somewhat sensitive, and a one-on-one interview setting fosters a safe space for interviewees to discuss the subject. Sarajärvi and Tuomi also emphasize that a significant advantage of interviews is their flexibility, as the interviewer can adapt the process if necessary by changing the order of questions, asking for clarifications, and addressing any misunderstandings (Sarajärvi & Tuomi 2018, 3.1).

I chose to conduct thematic semi-structured interviews, incorporating key themes selected beforehand along with related probing questions to guide the process (Sarajärvi & Tuomi 2018, 3.1). One benefit of semi-structured interviews is that they combine a systematic approach with the flexibility of informal conversation (Eriksson & Kovalainen 2008, Chapter 7). Eriksson and Kovalainen note that this combination of being systematic and covering all relevant topics, while also being prepared to inquire more deeply, may also be the most challenging aspect of semi-structured interviews (2008, Chapter 7).

The interview questions were formulated in accordance with the research objective. Patton emphasizes that interview questions must align with the purpose and context, while being articulated skillfully to improve the quality of responses (Patton, 2015, 445). The approach chosen was not to inquire directly about specific topics, such as communication, leadership, and team relationships, but rather to pose more general questions. This approach allowed the employees to speak more freely, facilitating a thorough understanding of the psychological safety factors within the teams where the participant worked.

Patton stresses that "in qualitative inquiry, 'good' questions should, at a minimum, be open-ended, neutral, singular, and clear" (Patton, 2015, 445). These factors were taken into consideration when formulating the interview questions. The final list of seven questions is available in Appendix 1. Question number seven was added to the list later in the interview process, as the topic arose during one of the early interviews and provided a valid perspective regarding the research objective. During the interviews, additional questions were asked to clarify and deepen the understanding of the research topics and the employees' related experiences.

To facilitate the interview process, an interview guide (Appendix 1) was created as suggested by Saunders and colleagues (2019, 444). That includes an overview and the objectives of the research project, as well as a definition of the psychological safety concept derived from the theory presented in Chapter 2 of this thesis. The guide also contains the interview questions discussed in the previous paragraph. Each interview adhered to the information in the interview guide.

During the interviews, I concentrated on establishing rapport with the interviewees. Rapport involves showing appreciation for the interviewees and their experiences rather than being judgmental (Patton, 2015, 457). Given that the discussions focused on the sensitive topic of psychological safety, it would have been challenging to address it unless the interviewees felt entirely accepted and comfortable discussing complex subjects with me.

Comprehensive notes were taken during the interviews to provide an early overview of the emerging themes and to assist with coding later. The interviews, which lasted approximately 45 minutes, were conducted via Microsoft Teams from December 2023 to March 2024. Each interview was recorded, and an automated transcript was produced afterward. Only one interviewee declined to have their interview recorded.

3.3 Data analysis process

The research data was analyzed using a content analysis method. This method helps to concentrate the analysis on particular data elements, guided by the research questions, rather than providing a comprehensive overview of the material. Schreier (2012, Chapter 1) summarizes that “the aim of QCA (qualitative content analysis) is to systematically describe the meaning of your material”. She refers to the idea that data has no inherent meaning until a researcher gives it meaning by constructing it in a certain way (Schreier 2012, Chapter 1).

The strength of content analysis lies in its ability to organize and structure data, allowing phenomena and research findings to be presented clearly and precisely. This is achieved by reducing the data, breaking it into pieces, and then restructuring it again using logical reasoning. (Sarajärvi & Tuomi, 4.4.2.) Thus, content analysis is a relatively straightforward method that is accessible enough for even a novice researcher to apply in practice (Sarajärvi & Tuomi, 4.6). Therefore, it was a practical choice for this study.

The chosen research approach was an inductive content analysis. In an inductive analysis, the data serves as the foundation for the analytical framework rather than relying on an established theory (Sarajärvi & Tuomi, 4.4.7). Therefore, instead of attempting to confirm pre-existing theories, this study aimed to identify emerging themes within the data. Additionally, as the focus also included the subjective experiences and interpretations of the interviewees, the interpretivist philosophy aligned well with the inductive approach. (Saunders et al. 2019, 4.5.)

The transcribed data consisted of 20 interviews, each lasting about 45 minutes. The data totaled 280 Microsoft Word pages (font Arial, size 11, line spacing 1.5).

During the data analysis, I followed the process of inductive content analysis as suggested by Sarajärvi & Tuomi (Sarajärvi & Tuomi, 4.4.2. Translation by Jenni Demus)

1. Listening to the interviews and writing the transcript of the interviews word-for-word
2. Reading the interviews and becoming familiar with the content
3. Finding and underlining reduced expressions
4. Listing reduced expressions
5. Looking for similarities and differences in reduced expressions
6. Grouping reduced expressions and creating subcategories
7. Combining subcategories and creating higher-order categories from them
8. Combining higher-order categories into main categories and creating a unifying concept

Before starting the analysis, I defined the 'meaning unit'. Meaning unit refers to a unit, such as a word, sentence, utterance, or longer sections, that will be the focus of the analyses (Sarajärvi & Tuomi, 4.4.3). The meaning unit in this study was a sentence or sentences conveying a topic related to communication, interaction, relationships, or leader behavior that pertains to psychological safety. With that focus, I began **the first** analysis phase, during which I listened to the interview videos and read the automated Microsoft Teams transcripts. When I noticed mistakes in the transcripts, I made the necessary changes.

I reread the transcripts in **the second** analysis phase to familiarize myself with the material, and in **the third** analysis phase, marked the original expressions with color codes based on the emerging themes. I created separate color codes for expressions reflecting factors that enhance psychological safety (green) and those that limit psychological safety (red). In **the fourth** phase, I created two lists of reduced expressions in Microsoft Excel sheets based on the original, color-coded expressions. This process resulted in more reduced expressions than the original ones, as many of the analysed meaning units consisted of multiple meanings to be coded, as is often the case (Sarajärvi & Tuomi, 4.4.3). Altogether, 256 reduced expressions were coded related to the enhancing factors of psychological safety and the research questions 1a, 2, and 3. Then again, 106 reduced expressions were identified for coding related to the limiting factors and the research question 1b.

In **the fifth** and **sixth** phases, I identified similar themes within the reduced expressions and grouped them into subcategories. These subcategories were then combined to create higher-order categories in the seventh phase. To facilitate categorization, I developed separate Microsoft Excel sheets to compile the categories. I then recorded the person-based and frequency-based counts of mentions for each category to assess their strength. At this stage, I utilized ChatGPT to assist me in organizing the data. This process involved several iterations and discussions with my colleagues and thesis supervisor to evaluate various options. Finally, the main categories were established

during **the eighth** phase of the analysis. An example of categorization is illustrated in Table 2. Please note that the reduced expressions are omitted from the table to save space.

Original expression	Subcategory	High-order category	Main category
Whether it's giving constructive feedback, or grievances or something else, it matters how someone reacts. Those small gestures and feedback like "good that you raised this", so that you feel that everyone thinks it's good that you brought it up or that it is an important matter. And I think it works really well in our team. I have never experienced, and hopefully not many others have either, that anyone is being rejected here.	Positive responses to Input	Practising constructive communication	Interactional and communication behaviors enhancing psychological safety in teams
We give everyone the space to express their views, so that not only the fastest person shares their thoughts before we move on to the next topic. Instead, we allow time for discussion and also ask for opinions from those who haven't spoken yet.	Invitations to input and dialogue	Encouraging expression	
It helps that there are individuals who are not afraid to open their mouths and say their own opinions. That also encourages others to express their views. And when those opinions are listened to, it becomes a fairly positive cycle.	Using one's voice courageously		

Table 2. An example of categorization

The entire analysis process resulted in the following structure: four main categories, 11 higher-order categories, and 29 subcategories. The findings were structured into the main categories based on the research questions. The final categories are presented in the tables below.

Table 3 answers the research question:

- 1) a) Which interactional and communication behaviors enhance psychological safety in teams?

Interactional and communication behaviors enhancing psychological safety in teams							
Practising constructive communication			Encouraging expression			Maintaining connection	
Positive tone	Positive responses to input	Active listening	Invitations to input and dialogue	Encouragement for critique and feedback	Using one's voice courageously	Frequent contact	Personal sharing

Table 3. Interactional and communication behaviors enhancing psychological safety in teams

The interactional and communication behaviors refer to the observable behaviors that shape psychological safety within a team, encompassing those of both team members and leaders. While several leadership communication behaviors are categorized here, broader leadership behaviors and practices related to fostering interaction are analyzed separately under the leader behaviors section.

Table 4 answers the research question:

1) b) Which interactional and communication behaviors limit psychological safety in teams?

Interactional and communication behaviors limiting psychological safety in teams							
Unproductive communication style			Avoidance and silence			Communication breakdown	
Overpowering communication	Negative tone	Insensitivity	Avoidance of critical and challenging topics	Avoidance of feedback	Suppression of voice	Not initiating interactions	Failing to apply skills

Table 4. Interactional and communication behaviors limiting psychological safety in teams

Table 5 answers the research question:

2) Which leader behaviors enhance interaction and psychological safety in teams?

Leader behaviors enhancing interaction and psychological safety in teams						
Fostering supportive relationships			Leading with humanity		Establishing supportive practices	
Recognizing everyone	Being available	Offering help and support	Modeling vulnerability and fallability	Showing empathy and caring	Holding regular one-on-one meetings	Educating themselves and the team

Table 5. Leader behaviors enhancing interaction and psychological safety in teams

Table 6 answers the research question:

3) Which relational qualities enhance psychological safety in teams?

Relational qualities enhancing psychological safety in teams					
Team characteristics		High-quality peer relationships			
Familiarity	Personality traits	Togetherness	Trust	Help and care	Respect

Table 6. Relational qualities enhancing psychological safety in teams

In this chapter, I have outlined the methodological choices and data analysis procedures employed in this study. Through careful content analysis, the data have been organized into meaningful patterns that reflect the participants' experiences and insights. The next chapter presents the findings, structured around the central themes identified during the analysis.

4 Findings and outcomes

This chapter presents the research findings and connects them to each of the research questions in separate subchapters. As detailed in the data analysis process, the findings are organized into four main categories, 11 higher-order categories, and 29 subcategories, based on the research questions. Although many overlapping themes exist between the main categories, the topics have been categorized differently depending on the context in which they occur. In this chapter, the logic of the categorization becomes clear as each subcategory is presented.

4.1 Interactional and communication behaviors enhancing psychological safety in teams

This chapter addresses the research question:

1) a) Which interactional and communication behaviors enhance psychological safety in teams?

The category of interactional and communication behaviors is presented first, as it is the primary focus of this study, and the themes of interaction and communication were mentioned most frequently by the employees during the interviews. This category comprises three high-order categories: ***practising constructive communication***, ***encouraging expression***, and ***maintaining connection*** (Figure 2).



Figure 2. Interactional and communication behaviors enhancing psychological safety in teams

Each of these themes will now be presented along with the related subcategories.

4.1.1 Practicing constructive communication

The first high-order category is *practicing constructive communication*, which encompasses topics of ***positive tone***, ***positive responses to input***, and ***active listening***.

In this research, a positive communication tone refers to one that is perceived as respectful, empathetic, direct, and/or encouraging. This tone can be used by either the communicator or the recipient of the message. When the interviewees discussed the tone of the communicator that

enhances psychological safety, some emphasized an honest and direct tone. Others stressed that even if the message is not pleasant, it is still conveyed in a kind and respectful manner.

At least in my experience, and it somehow suits my nature, we express things very frankly. And at the same time, because you feel safe in the team, you know that it is not meant in a negative way. Deep down, you know that you are seen as a valuable part of this particular team. – – Open communication, just talking directly and honestly (enhances psychological safety).

I believe we have a good habit within the team: if there is feedback about something, it is communicated nicely or in a way that it's actually good feedback.

When the message recipient employs a positive tone, their reactions to the communicator's input are likely perceived as positive by the communicator. Therefore, a positive tone and positive responses to input often go hand in hand. In the interviews, employees emphasized the importance of both supervisors and peers responding constructively to communication from team members.

It hasn't felt like anyone would look at you sideways for daring to raise issues. On the contrary, they say, "It's good that you said it, so we know to pay attention to it."

Whether it's giving constructive feedback, or grievances or something else, it matters how someone reacts: those small gestures and feedback like "good that you raised this". So you feel that everyone has thought that it's good that you brought it up or that this is an important matter. And I think it works really well in our team. I have never experienced, and hopefully not many others have either, that anyone is being rejected here.

Additionally, the constructive communication style encompasses active listening, which allows employees the space to express themselves and ensures they are genuinely heard. The interviewees appreciated this listening behavior during both dyadic interactions and group contexts, such as team meetings.

The supervisor listens to everyone's opinions and never overrides anyone's words.

There is a culture in the work community that values hearing everyone's opinions, and everyone gets to speak in any meeting. And that sometimes means that meetings can drag on; quite often, we go into overtime. So it may not be as structured, but I think it's extremely important for people's well-being.

4.1.2 Encouraging expression

The second high-order category is *encouraging expression*, which encompasses topics such as **invitations to input and dialogue**, **encouragement for critique and feedback**, and **using one's voice courageously**. The first subcategory, invitations to input and dialogue, refers to the vocal encouragement of expressing opinions, ideas, and questions, as well as open discussion. According to the interview data, this encouragement is as necessary from the team leader as from one's peers.

Everyone has the opportunity to ask questions and comment. In general, every topic discussed in the meeting is followed by the question, "Does anyone have anything to comment on or ask about this matter?" So, time is provided for that. – – Our team supervisor sometimes makes a round of comments so that everyone can have their say. I think it's excellent that everyone will then be heard for sure.

There is an open discussion about everything within the team, about collaboration and other topics. And the supervisor also supports bringing up issues and developing cooperation. Ultimately, it is not only the supervisor's responsibility; all team members are encouraged to support and assist in this effort.

To enhance psychological safety, the interviewees emphasized the routine and continuous nature of input invitations during interactions, particularly in team meetings. This could involve vocal invitations, more structured facilitation of conversations, or utilizing small-group discussions to ensure that everyone has a chance to be heard. It was also noted that encouragement should be extended to all team members to voice their opinions, not just to those who are naturally more outspoken, to enhance team psychological safety further.

The supervisor wants to keep all the people involved in the discussions. I'm not necessarily the first to express my opinions. However, he also acknowledges these slightly quieter people who are not immediately ready to raise their hand and speak up. The supervisor is the kind of person who asks, even after a meeting, if I would have liked to say something in case the others had been more vocal there.

The data from this research suggest that, in addition to inviting input, fostering psychological safety also requires encouraging constructive criticism and supporting the discussion of challenging issues that might otherwise remain unaddressed. Moreover, merely encouraging the expression of opinions, criticism, or problems is insufficient; it is also crucial to have the courage to step outside one's comfort zone by responding to those invitations. Several interviewees highlighted the positive impact on psychological safety when diverse and even conflicting opinions were welcomed, when colleagues courageously expressed opinions and challenging matters, and when ideas and problems were considered from different perspectives.

In our team, we are very open, so that if there is an issue, we can address it quite directly. And we can then discuss it and disagree. So it's excellent in that way. And then it often leads to a good conversation and may very well change the group's opinions after reviewing the justifications.

Everyone is allowed to voice their perspectives. And on the other hand, even if there is something critical or negative, you can bring it up without fear of being judged or that it will turn against you. I do feel that everyone is being heard. In fact, everyone is encouraged to express their thoughts.

Likewise, the courage shown by other team members in sharing their opinions and concerns can enhance psychological safety by demonstrating that challenging issues can be addressed within the team without resulting in negative consequences.

There are several individuals who challenge different people or teams in various ways. Of course, I'm not one of them, as I mainly try to avoid conflicts rather than instigate them.

Occasionally, I watch in awe and admire how some individuals dare to address issues that I wouldn't necessarily consider. It doesn't harm them at all if they challenge someone. Thus, they demonstrate that everything is fine, even if you dare to confront difficult and painful topics.

When individuals model brave voice behavior, it reduces the fear of consequences for the other team members, thereby enhancing perceptions of psychological safety. Therefore, brave voice behavior can create a positive cycle in which the entire team is encouraged to be more expressive and value each other's input.

It helps that there are individuals who are not afraid to open their mouths and say their own opinions. That also encourages others to express their views. And when those opinions are listened to, it becomes a fairly positive cycle.

One type of courageous voice behavior that enhances psychological safety, according to the interview data, is giving and receiving feedback. Some employees noted that providing honest and constructive feedback, as well as having the courage to accept it, are essential for psychological safety. When asked for the most critical factors enhancing psychological safety, few employees replied:

Constructive feedback, good interaction, and honest conversation. That you dare to tell your own opinions, and also dare to receive feedback from others.

I think we receive and give feedback really well. It is one of the factors that creates it (psychological safety).

Some interviewees noted that knowing your coworkers makes it easier to provide feedback, as you have learned to understand how different colleagues prefer to be addressed and how they react to feedback. A few employees noted that even a bad relationship with a colleague might stem from not knowing each other well enough to understand one another's communication styles, which can lead to misunderstandings.

4.1.3 Maintaining connection

The third high-order category is *maintaining connection*. This category encompasses the topics of **frequent contact** and **personal sharing**. As noted in the previous paragraph, a lack of connection can lead, for example, to misunderstandings in communication and should therefore be avoided. Several employees emphasized the importance of regular meetings and informal interactions where discussions can take place. Organizing a consistent environment for open communication and dialogue is, according to multiple interviewees, considered one of the most vital behaviors supervisors can demonstrate to promote psychological safety. Some employees mentioned that regular team meetings, where conversational culture is intentionally facilitated, are crucial. Others highlighted that spending informal time together with peers is essential.

People spend time together, which naturally makes it easier to discuss everything. And you dare to speak up. The more time you spend on team gatherings, kickoffs, or similar activities, the more it improves (psychological safety) as people get to know each other better.

We consistently hold joint meetings with the team. In my opinion, they support it (psychological safety) and create an atmosphere where you can and should ask questions and bring up issues.

Likewise, the regular practice of personal sharing among peers was reported to enhance an open communication culture and perceptions of psychological safety, regardless of whether the sharing concerned work or personal matters. However, an essential aspect of sharing is the help and support it offers.

We are open to discussing any issue. The best thing about our team is that you can talk to anyone about the challenging and demanding aspects of your life, as well as client work.

If there is a stressful situation, it often helps to talk to a team member, as the solution can usually be found by bouncing the matter off someone else. It (psychological safety) relies heavily on our discussion culture, which allows you to express your concerns rather than keeping them bottled up. This way, you can reach out and get the support you need.

The next section presents findings related to the interactional and communication behaviors that limit psychological safety in teams.

4.2 Interactional and communication behaviors limiting psychological safety in teams

This chapter addresses the research question:

- 1) b) Which interactional and communication behaviors limit psychological safety in teams?

This main category is divided into three high-order categories of ***unproductive communication style***, ***avoidance and silence***, and ***communication breakdown*** (Figure 3).



Figure 3. Interactional and communication behaviors limiting psychological safety in teams

In the next section, a detailed presentation of these categories will follow.

4.2.1 Unproductive communication style

According to the interviewees, an *unproductive communication style* was the most significant limiting factor for team psychological safety. This theme encompasses topics of ***overpowering communication***, ***negative tone***, and ***insensitivity***. Multiple employees reported negative perceptions of overpowering communication. They discussed dominant and loud personalities that overshadow conversations, leaving no space for input from others, especially when that input signals dissent.

There are people who are very direct and overpowering. In every team, there are people who strongly express their own opinions, and you can't necessarily disagree with them. — The style, the way you express yourself. There is a kind of persistence in one's own opinion.

Another limiting aspect discussed regarding team psychological safety was a negative tone of communication. Most employees perceived the tone as negative when it was dismissive, harsh, aggressive, defensive, or rejecting. This negative tone was expressed by the communicator or the receiving party either verbally or nonverbally through body language, gaze, or, for example, rolling one's eyes.

There are so many different ways of expressing things, and some people consistently employ a cutting style, while the majority seek a more conciliatory approach. — You must pay close attention to the fact that when a person learns a new job and new habits and then asks you something, even if you are in an intense moment or a difficult situation, it will not be reflected in the person who asks at that point. Because if you snap or roll your eyes, or are rude when answering, you can be pretty sure that you are not the person they will ask next time.

Even humor can be perceived as a negative tone if you don't know each other well enough to grasp the meaning behind it, and it becomes exclusionary, or if it is used sarcastically or passively-aggressively, as noted in the interviews. Additionally, according to a few employees, hybrid work and remote meetings pose a communication challenge, as people are not always visible to one another. Therefore, the tone of voice becomes a more significant influencer than in face-to-face meetings.

Some employees reported that there are team members who fail to recognize or adapt to others' emotional or social cues; they do not listen, show disinterest in understanding others' perspectives, and lack empathy. Instead, they pursue their agenda and might even humiliate others, as a few interviewees noted. These behaviors indicate a lack of social sensitivity, which can lead to communicating in a negative tone and responding poorly to feedback. Thus, according to several interviewees, this hinders team psychological safety.

4.2.2 Avoidance and silence

This high-order category includes the following subcategories: ***avoidance of critical and challenging topics***, ***avoidance of feedback***, and ***suppression of voice***. Although it was generally

agreed that positive communication enhances psychological safety, it was noted that even positivity can backfire when it prevents the acknowledgment of complex issues and emotions. A few interviewees reported that they did not feel recognized for their experiences and emotions but instead felt dismissed, which further intensified their negative feelings. Similarly, supervisors who were uncomfortable facing challenges and welcoming dissent and feedback were believed to create unsafe conditions.

Challenging others and giving constructive feedback is something I believe we are not very good at yet. Perhaps the positivity can sometimes grow so large that we don't dare to give feedback because we don't want to ruin the good, positive atmosphere.

Multiple employees mentioned that feedback giving was not generally supported; the supervisors didn't model it or create a culture or practices for it. Therefore, several employees felt that they didn't receive enough personal feedback, especially feedback that enables growth and development. Likewise, multiple interviewees found it difficult to give constructive feedback, as no one wanted to offend colleagues. Although feedback culture presented a significant challenge across various teams, several interviewees acknowledged its importance. Enhancing the processes of giving and receiving feedback was identified by the interviewees as a top priority for improving psychological safety.

This is a topic (giving feedback) we've discussed and it should be emphasized more. We should provide more feedback, both face-to-face and verbally, when we notice that someone has excelled in something. Alternatively, we should offer constructive feedback that suggests a different approach to achieve improved results. There's also been a conversation about the supervisor increasing the amount of feedback they provide. -- Of course, this (feedback giving) affects the feeling of safety.

One reason for the slow improvement in giving feedback was previous adverse reactions from peers. The negative tone discussed in the last subchapter was often cited as a response to feedback. Several interviewees shared experiences of colleagues who took dissent or criticism personally, responding with a defensive and rejecting tone. A few remarked on a sense of superiority toward newcomers, where feedback and new ideas were not understood and unwelcome.

Some people are quick to show a counter-protective reaction when any kind of change is suggested, or they may take it as a personal attack when a grievance is brought up. Especially if the issue pertains to someone's job description or involves matters of the heart that are close to them.

Several interviewees noted that past experiences with unconstructive reactions to input and feedback have impacted their motivation and courage to express opinions, offer feedback, or ask questions in the future. One employee shared the fear of asking questions and needing assistance when feeling dismissed in response. Another discussed a common group phenomenon where critical voices are exchanged among colleagues, but expressing concerns when necessary is feared.

Fear of backlash is undoubtedly one of the things that holds people back from raising issues. And it can be seen in a large work community like this one, where in a small group, individuals can complain about matters and discuss those issues, but when the time comes to address them, no one speaks up. It lacks the highest courage to intervene.

Sometimes, when someone asks a question, they may not receive an answer at all, and even if they do, it may take a considerable amount of time. So there is a lack of safety that instills fear about what can be asked and whether help will be provided. Suppose there are situations where I needed assistance with something and didn't receive it. In that case, it affects me for days or even weeks afterward, making it difficult to ask the following question or express an opinion.

Some interviewees emphasized that withholding one's voice can limit team psychological safety in itself. One expressed that silence creates frustration about unaddressed challenges, while another pointed out that a culture of silence around specific topics fosters a lack of safety. A few employees remarked that withholding contributes to a negative cycle, causing colleagues to gradually feel unfamiliar with each other, which in turn leads to increased fear of expressing themselves and further withholding.

Things should be brought up so that if there is an issue, it can be corrected. Sometimes you share your opinion, and you know that two other colleagues agree with you, but they just don't say anything. I believe that this hinders progress and development, whether it relates to personnel or any other aspect. It frustrates me.

Although there are many of us, only a few people are vocal, while most others almost never say anything at all. Despite this large group, some individuals make you feel as if you can't even remember the last time you heard anything about them.

4.2.3 Communication breakdown

This theme includes subcategories of *not initiating interaction* and *failing to apply skills*.

Besides withholding, the unfamiliarity of team members also results from a lack of encounters and interaction. Some interviewees reported remote work as one of the most significant factors limiting team psychological safety. Others noted that even in face-to-face teams, there may not be enough organized time to socialize together. Within official meetings, time for conversational interaction is not typically scheduled.

We all see each other very rarely. – – Also, when we are in the office, we're actually a bit like working remotely, so that everyone is at their own desk.

That's probably the biggest reason (for low psychological safety) that you don't see people face-to-face. – – It really feels like you don't even know people anymore because you see and hear so little of them. That alienates a bit, perhaps.

Even if employees do meet each other and take time for interaction, at least one limiting factor still plays a role: the lack of knowledge and skills to improve psychological safety. A few interviewees noted that their supervisor or peers either didn't have the know-how on psychological safety and

high-quality communication, or lacked the skills to transfer that knowledge into everyday behaviors within the team.

Our supervisor lacks the knowledge of how to improve team spirit and team psychological safety.

Communication skills are abilities that can be learned. When these skills are refined, they can be very beneficial. In our team, mastering these skills and even understanding that they can be learned is quite rare.

Next, we will move on to the main category of leader behaviors and present the findings related to the specific subcategories.

4.3 Leader behaviors enhancing psychological safety in teams

This chapter addresses the research question:

2) Which leader behaviors enhance interaction and psychological safety in teams?

Following interactional and communication behaviors, leader behaviors emerged as the second most frequently mentioned theme in the interviews. In this research, leader behaviors encompass the themes of **fostering supportive relationships**, **leading with humanity**, and **establishing supportive practices** (Figure 4).

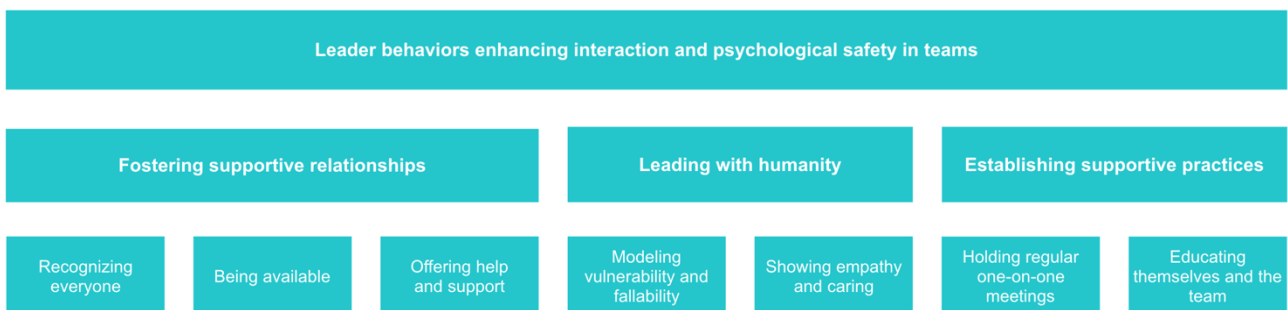


Figure 4. Leader behaviors enhancing interaction and psychological safety in teams

As noted in an earlier subchapter 4.1, several leader behaviors related to communication are essential for fostering psychological safety. However, to avoid repetition, this main category focuses on other leader behaviors fostering interactions and psychological safety in teams.

4.3.1 Fostering supportive relationships

During the interviews, employees underscored the significance of supportive leader-follower relationships, highlighting the importance of **recognizing everyone**, **being available**, and **offering help and support**. Regarding recognition, the interviewees emphasized the need for a supervisor who considers everyone on the team and acknowledges the unique needs and contributions of team members.

The supervisor knows how to consider everyone on the team. Yes, it does affect it (psychological safety).

The supervisor strives to involve everyone, shows appreciation for their expertise, and highlights each team member and their successes.

Availability was another essential theme related to the leader-follower relationship. During the interviews, availability was discussed from the perspective of a supervisor who is both physically and mentally present and easy to approach. Supervisors who were open and authentic, aiming to reduce hierarchies, were perceived as easily approachable.

We have a very present supervisor. You can easily approach them and send a message without hesitation.

The supervisor strongly supports it (psychological safety) through their actions by being open, approachable, and considerate of everyone on the team.

Supervisors perceived as enhancing psychological safety are also committed to helping and supporting their employees. Helping behavior and trust in the supervisor were perceived as intertwined by multiple employees; they noted that a trustworthy supervisor is on their side, maintains open lines of communication, offers help and support, and reacts promptly when needed.

The supervisor cultivates a strong culture within our team, where we support one another. Whenever I have asked them for advice or assistance, they have sat with me for so long that we have been able to accomplish those tasks. I feel strongly supported here.

It's been nice to feel that the supervisor is listening and reacting quickly if there are any concerns or if you need help. I notice that you always receive help, and if not from them, they still responds to it, and then we work on it together. We try to resolve these issues together so that we don't feel left alone with anything.

4.3.2 Leading with humanity

Leading with humanity is another crucial factor that enhances psychological safety. The topics in this category encompass **modeling vulnerability and fallibility**, as well as **showing empathy and care**. The interviewees spoke highly of supervisors who model vulnerability and fallibility; they don't try to act superior but position themselves on the same level as team members, acknowledge their shortcomings and mistakes, and ask for help from their team when needed. A few also mentioned leaders who seek feedback and identify areas for improvement.

The supervisor demonstrates through their behavior that they do not always know everything and that they also ask what might be considered silly questions, but it doesn't matter because you can always ask.

The supervisor is open and authentic, and also talks openly about their areas for development, encouraging them to be discussed.

Another aspect of leading with humanity is showing empathy and caring. It encompasses prioritizing the well-being of employees and acknowledging them as people, not just as employees. According to some interviewees, supervisors who demonstrate empathy towards the challenges of work-life and communicate care for their supervisees foster a sense of psychological safety. >

What supports our coping at work and our interactions is if you happen to get sick, for example, and you call to say you're ill and can't get to work, the response isn't "oh terrible, where am I going to get the workers and a substitute," but rather "oh no problem, just get better and everything will be ok." And "things will be done here, just rest, and everything will be fine." This way, you don't feel guilty about being sick.

The supervisor communicates clearly that the well-being of all of us is the most important thing. I've experienced several significant changes over the past six months, and my work performance has suffered. But it has always been made clear to me that the most important aspect is that I feel well. The work will be completed regardless. So, a caring culture has always been present within the team.

4.3.3 Establishing supportive practices

According to many interviewees, specific leadership structures and practices can also impact team psychological safety. The topics in this category suggest that supervisors can enhance team psychological safety by **holding regular one-on-one meetings** and by **educating themselves and the team**. Several employees emphasized the importance of one-on-one meetings with their supervisors. During these private encounters, employees valued the opportunity to share concerns, receive support, and ask for feedback, as well as offer feedback that might otherwise remain unspoken.

We have regular face-to-face meetings with the supervisor. During these meetings, we are always asked if there is something that weighs on our minds. Is there anything we would like to provide feedback on, or anything else? – In those situations, there is a safe environment. You are with your supervisor, and that is the ideal setting for giving feedback.

We have consistent one-on-one discussions, during which we try to discuss a little about what everyone is working on, and we attempt to assist each other with it. If there are any larger issues, the supervisor reviews them thoroughly each week. It's a good habit.

According to the interview data, effective supervisors are reported to possess essential leadership, people management, and communication skills that enhance team interactions and foster a sense of psychological safety. They are also committed to further developing these skills by educating themselves and their teams on these topics. Importantly, they recognize the significance of psychological safety in teamwork and choose to prioritize it.

The supervisor is well aware of the importance of psychological safety themes. She studies and acquires the skills necessary for effective people management. – She is eager to improve and develop her leadership abilities.

We will now proceed to the final section, which presents the enhancing factors related to the relational qualities.

4.4 Relational qualities enhancing psychological safety in teams

This chapter addresses the research question:

3) Which relational qualities enhance psychological safety in teams?

This final main category includes themes of **team characteristics** and **high-quality peer relationships** (Figure 5).

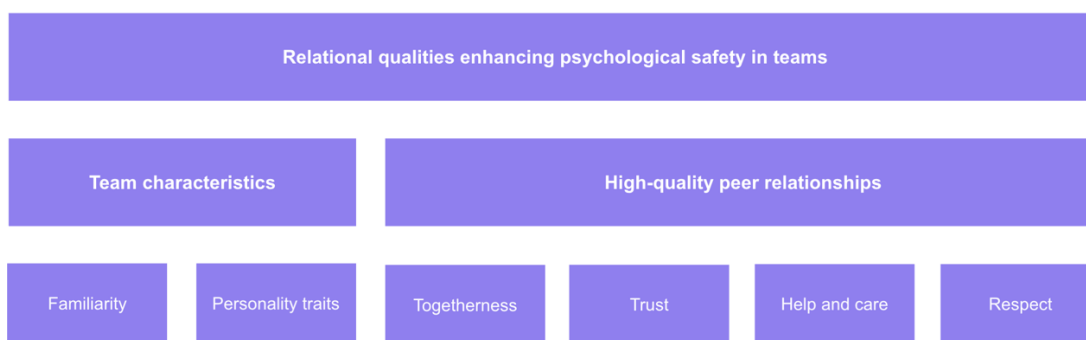


Figure 5. Relational qualities enhancing psychological safety in teams

The team characteristics discussed in this section are believed to have a positive influence on peer relationships, thereby enhancing psychological safety in teams.

4.4.1 Team characteristics

The team characteristics were discussed with the interviewees through topics of **familiarity** and **personality traits**. Employees in this research repeatedly mentioned familiarity as a means to foster psychological safety. They observed that this familiarity had developed over time, through working together, as well as through formal and informal meetings and gatherings, especially face-to-face interactions among team members.

We have all been working here for quite a long time, so we have earned trust and know each other well.

To foster familiarity, employees also discussed the importance of acknowledging and greeting one another at work and making an effort to include everyone in everyday activities, such as coffee and lunch breaks.

It's a consideration for people in general (that enhances psychological safety). Taking into account that the person is in the house, present, and greeted. We check in with each other and ask how things are going.

Besides familiarity, multiple employees noted that certain personality traits, such as openness, extraversion, adaptability, and emotional stability, also positively influenced team psychological safety and group cohesion. Some pointed out that the character of the job favored those personality traits. In contrast, others stated that personalities that fit specifically the team dynamics had been purposefully selected during the recruitment process.

We have very similar personalities in our team. And it's really beneficial in this situation, as we're all really open, talkative, and we joke around a lot. That alone has helped bring us together.

It is essential (for psychological safety) what kind of people come to work here. -- Maybe the adaptability and diversity are crucial. -- It's a specific type of person who seeks out to work in a place like this, where something is going on all the time. It creates a sense of togetherness, making you feel like you're among your own.

4.4.2 High-quality peer relationships

High-quality peer relationships is the second theme related to relational qualities. This theme encompasses topics of **togetherness**, **trust**, **help and care**, and **respect**. In this research, togetherness was discussed as a shared sense of belonging, connection, and team spirit. As mentioned in the previous quotes, togetherness can result, for example, from a personality fit or shared humor. Thus, humor, shared among peers and supervisors, was regarded by several interviewees as a key element in fostering a sense of belonging and team spirit. Besides fostering connections among team members, humor also helps navigate challenges and disagreements.

In our team, humor plays a really big and significant role. We share a similar sense of humor, allowing us not to take things personally, even when we disagree about something. We know how to take it exactly the way it's meant.

Some employees noted that togetherness and trust can arise from a supportive atmosphere and help behavior. Several interviewees experienced trust as the knowledge that they could easily reach out and receive help and support from their colleagues in times of need.

We have a strong team spirit and trust among the entire team. -- This has been achieved through openness and a warm approach to collaboration. Assistance is always available; you don't have to worry if you don't know something. If you make a mistake, you can count on support. We cultivate a supportive atmosphere.

Co-workers have an impact (on psychological safety) as you don't have to do anything alone here; you have colleagues to support you. If you don't know something, you can rely on experienced peers, and you won't be in trouble. (Interviewee 9)

Several interviewees discussed the importance of help behavior through caring relationships with peers, emphasizing how they want everyone to feel comfortable in the team. Some noted the importance of empathy and maintaining a positive outlook. Thus, when benevolence, care, and overall warmth are expressed in the team, it fosters feelings of safety.

The attitude towards others is such that there is a certain kind of empathy. We help one another; if we notice that someone is facing challenges or has too much to manage, we are ready to lend a hand.

Everyone has such goodwill towards others. – We strive for goodness and positivity with each other, so that if someone has a negative feeling or other concerns, we try to encourage and turn the situation around.

A few employees addressed the importance of seniors helping and supporting new co-workers to make them feel comfortable at work. Modeling vulnerability for colleagues, especially newcomers, was considered a way to enhance psychological safety. Thus, several interviewees complimented their supportive peer relationships, where you don't have to know everything, but you can ask questions and learn together.

When long-time employees say out loud, "Hey, now I don't remember how this works", they (new employees) see that even those who have been doing the job for a long time still have questions. This makes it much easier for them to feel comfortable asking.

According to the interview data, relationships that exemplify respect and acceptance foster psychological safety by enabling employees to display vulnerability and be their authentic selves at work.

What I appreciate is that here you can be yourself; you don't have to think, you don't have to pretend to be anything, to be smart. I'm allowed to throw out a little silly stuff sometimes.

Perhaps it's kind of like going home when you go there (work). It's good, easy, and I know that I can be myself there. Maybe what it is is that I am accepted for who I am.

A few interviewees noted that an accepting attitude enables the team to acknowledge and appreciate diverse opinions and perspectives. Additionally, multiple employees emphasized the importance of a sense of respect and appreciation for one's work contributions and accomplishments as a crucial factor that fosters psychological safety. Demonstrating this appreciation is essential from peers, for instance, through positive feedback, face-to-face appraisals, joint celebrations, or via digital communication channels, where positive emojis convey a sense of good energy.

I've received a lot of praise for even the smallest things I've accomplished. If I have created a slide that people find really useful or a template that others can use, I receive so much gratitude and praise. Like, "Wow, how great, this is really helpful to us." So there's an atmosphere of appreciation, and we thank each other when we work together.

Everyone encourages and uplifts others, offering emoji hearts and "great success" and the like. Yes, it (giving positive feedback) is at a really good level in our team, as you rarely see such joy in others regarding the successes of colleagues.

This chapter outlined the key behavioral and relational factors that shape psychological safety in teams. The results highlight specific communication practices, leader behaviors, and team dynamics that shape psychological safety in teams. The next chapter will connect these findings to existing research and discuss their implications for team and organizational development.

5 Discussion and conclusions

This research examines the factors that influence psychological safety, with a primary focus on interaction and communication behaviors. The findings provide a nuanced and practical understanding of how psychological safety can be fostered and sustained within team environments. This chapter discusses and summarizes the key conclusions derived from the research findings, followed by practical recommendations for development. Additionally, the reliability and validity of the research are evaluated and discussed. Finally, the reflection of the learning process is provided.

5.1 Discussion and conclusions of the results

In this chapter, the findings presented in the previous chapter are discussed, followed by the conclusions. Additionally, the findings are analyzed in relation to the theoretical background presented in Chapter 2. The findings are examined based on the research questions in three separate sub-chapters:

5.1.1 Interactional and communication behaviors enhancing or limiting psychological safety in teams

5.1.2 Leader behaviors enhancing interaction and psychological safety in teams

5.1.3 Relational qualities enhancing psychological safety in teams

5.1.4 Conclusions

5.1.1 Interactional and communication behaviors enhancing or limiting psychological safety in teams

This subchapter discusses the findings related to these two research questions:

- 1) a) Which interactional and communication behaviors enhance psychological safety in teams?
- b) Which interactional and communication behaviors limit psychological safety in teams?

The findings associated with both questions are discussed together here because they address the same topic; thus, comparing and combining the results offers more comprehensive perspectives. Psychological safety is significantly influenced by how team members interact and communicate on a daily basis. The choice of one's **communication style** and its usage is crucial, as it sets the tone for interactions. Other key factors include behaviors related to **expressing or withholding** one's voice and **connecting or disconnecting** with team members. These behaviors can either help foster an environment where team members feel heard, respected, and safe to contribute, or conversely, create an environment where people feel dismissed or rejected and fear expressing their voice.

Communication style

According to the results of this study, a key factor in fostering psychological safety is the communication style; it is not just what is said, but also *how* it is conveyed. A dismissive, harsh, aggressive, defensive, or rejecting tone limits psychological safety. The tone of communication, which refers to "the quality, positive or negative, of the communication between coworkers or between employees and manager," was identified as a crucial factor in the research by Yanchus and colleagues; a negative and wrong tone was reported to create a barrier to psychological safety (2014, 765). Additionally, Yanchus and colleagues noted that employees in psychologically unsafe workplaces reported negative responses from managers (2014, 765). In this study, harmful reactions were predominantly received from peers rather than supervisors, and the context of these unconstructive reactions was often feedback-giving or raising concerns. Furthermore, the negative communication was frequently perceived as a result of insensitivity to social cues.

An overpowering communication style, associated with dominating and loud personalities, was perceived as a negative factor. This communication style left no room for input from others, and responses to input were often characterized by a negative tone and were perceived as such. Notably, this study has discussed a vocal personality as both an asset to team psychological safety, due to the courageously voicing opinions and issues, and a hindrance, owing to an overpowering communication style. In line with this finding, Remtulla and colleagues (2021, 6–8) reported that dominant personalities hinder psychological safety "by causing unequal dynamics and participation within conversations," whereas the vocal personality trait "enables an individual to voice opinions confidently." These findings suggest that team members with a vocal personality, in particular, should consider their colleagues, be sensitive to social cues, and recognize their communication style; these actions can help support psychological safety rather than diminish it.

In comparison, a positive communication tone perceived as respectful, empathetic, direct, or encouraging was regarded as an enhancing factor for team psychological safety. Active listening was also reported to foster safety, which aligns with several prior studies (Itzchakov & DeMarree, 2022; Kluger & Itzchakov, 2022). Overall, the results related to the communication style support the argument that "psychological safety takes time to build, through familiarity and positive responses to displays of vulnerability and other interpersonally risky actions, but can be destroyed in an instant through a negative response to an act of vulnerability" (Edmondson and Lei 2014, 38). In alignment with that, the two enhancing factors regarding psychological safety that received the most mentions in this research were inviting input and responding positively to that input. These aspects were considered to enhance team psychological safety more effectively than any other factors.

Expressing or withholding

For team members to freely express themselves, inviting input is essential. When encouraging expression, key behaviors identified in this research include asking for opinions, creating space for discussions, and promoting questions. Previous studies (Bienefeld & Grote, 2014; Carmeli et al. 2010; Hirak et al. 2012; Lin 2018; Nembhard & Edmondson 2006; O'Donovan & McAuliffe 2020a; Remtulla et al. 2021) have also stressed the significance of soliciting input, particularly from leaders. Furthermore, some interviewees considered it crucial to welcome questions, ideas, and opinions that challenge the status quo, provide constructive criticism, or suggest alternative solutions.

The data from this research suggests that not only is encouraging voice behavior necessary, but also having the actual courage to use one's voice is crucial for fostering psychological safety. Voice behavior was said to contribute to psychological safety by fostering an open communication culture, by demonstrating that the team can handle challenges, dissent, and difficult conversations, and by modeling the absence of negative repercussions. It is known that individuals assess psychological safety in situations by observing their colleagues' interpersonal risk-taking behaviors and the consequences of those actions (Ito et al. 2021), which aligns with the significance of courageous voice behavior.

Previous research has shown that psychological safety promotes speaking up (Edmondson & Lei 2014) and "helps to encourage open and authentic interpersonal behaviors" (Edmondson & Bransby, 2023, 66). However, the role of voice behavior as a precursor to psychological safety remains to be supported by evidence. Based on the results of this study, supervisors and employees who choose to avoid challenging topics, criticism, and confrontation—and decide to remain silent—risk diminishing psychological safety and creating underlying tension. Similarly, the reluctance or inability to give and receive feedback was perceived as a limitation to psychological safety.

Although psychological safety should not be mistaken for being nice or feeling comfortable (Edmondson & Kerrissey, 2025), several interviewees in this research reported behaviors that indicated an avoidance of discomfort, which consequently diminished psychological safety. A lack of understanding regarding what psychological safety entails, a lack of courage to implement it, or a lack of skills to achieve it could all play a role. Itzhakov and DeMarree (2022) emphasize that "a threat can co-occur with psychological safety. In an atmosphere of safety, tough conversations can take place, including ones that challenge important views, thus often eliciting feelings of threat".

The significance of embracing discomfort in cultivating psychological safety might be an undervalued factor. Notably, Akan and colleagues (2020) showed in their research that disclosing behavior, such as providing feedback to team members and stepping outside one's comfort zone, is likely to

promote feelings of safety among peers. Yet, the positive impacts of embracing discomfort and the negative consequences of avoiding it have not been a central focus of research on psychological safety. Thus, this topic presents an interesting and important avenue for future research.

Connecting or disconnecting

Maintaining connections within teams is the third theme identified in this study as a key factor in promoting team psychological safety. According to the interviewees, the connection was maintained primarily through regular contacts and personal sharing. Similarly, previous research has indicated that communication frequency influences psychological safety (Yanchus et al., 2014; Siemsen et al., 2009). The employees in this study reported positive effects from both formal and informal interactions with colleagues and supervisors. Conversely, a lack of encounters and interactions was seen as diminishing feelings of safety, partly due to the unfamiliarity arising from insufficient contact.

Sharing and discussing both personal and work-related matters openly with peers and supervisors was said to offer support, foster an open communication culture, and enhance psychological safety. Similarly, Akan and colleagues (2020) demonstrated that sharing personal information is likely to improve trust and safety among team members. O'Donovan and McAuliffe (2020b, 14) found that allocating time to discuss personal issues and experiences in team meetings is crucial for building psychological safety. However, when team members or supervisors lack the skills to initiate high-quality communication and interactions, it can drastically affect psychological safety.

5.1.2 Leader behaviors enhancing interaction and psychological safety in teams

This subchapter discusses the findings related to this research question:

2) Which leader behaviors enhance interaction and psychological safety in teams?

The findings of this study suggest that leader behaviors play a crucial role in fostering team psychological safety. Specifically, behaviors such as recognizing everyone, being available, and offering help and support — all of which promote inclusive and supportive leader-follower relationships — are essential. This goes hand-in-hand with the substantial research on the positive effects of leader support (Edmondson 1999; Kahn 1990; May et al. 2004; Newman et al. 2017; O'Donovan & McAuliffe 2020a) and leader inclusiveness (Bienefeld & Grote, 2014; Carmeli et al. 2010; Hirak et al 2012; Lin 2018; Nembhard & Edmondson 2006; O'Donovan & McAuliffe 2020a; Remtulla et al. 2021).

Behaviors associated with leading with humanity, such as demonstrating vulnerability and acknowledging fallibility, as well as showing empathy and care towards supervisees, are also crucial for

enhancing team psychological safety. These findings align with research on leader humility; for instance, Coutifaris and Grant (2021) reported positive effects of leaders who demonstrate vulnerability. Binyamin and colleagues (2018) have emphasized that caring leader-follower relationships are essential to psychological safety. Additionally, Bani-Melhem and colleagues (2021) have stressed the importance of an empathetic leader in fostering psychological safety.

Two leadership practices were identified to support the above behaviors: one-on-one meetings with supervisees and education for supervisors and teams to acquire the necessary knowledge and skills for enhancing psychological safety. Similarly, Castro and colleagues (2022) have emphasized the impact of dyadic meetings between leaders and followers, particularly when these meetings address the individual needs of employees. Regarding education, the consulting firm McKinsey found in its research (2021, 7) that psychological safety is likely higher in those organizations that educate their leaders and invest in leadership development.

5.1.3 Relational qualities enhancing psychological safety in teams

This subchapter discusses the findings related to this research question:

3) Which relational qualities enhance psychological safety in teams?

High-quality team relationships rooted in trust, respect, and care are essential for psychological safety, as identified by several researchers in the past (e.g., Binyamin et al. 2018; Carmeli & Gittel 2009; Edmondson 1999; Edmondson 2004; Ito et al. 2021; Kahn 1990; May et al. 2004). Likewise, a sense of togetherness and belonging reported in this research has gained some evidence as enhancing team members' safety (Gregory & Biggart 2024). Yet, more evidence is required to demonstrate their full effect on team psychological safety.

The team's characteristics, including the familiarity gained through interactions and collaborative work, as well as the personality traits of its members, were found to influence peer relationships and team psychological safety. The positive impact of familiarity on psychological safety aligns with several previous studies (Ito et al. 2021; O'Donovan & McAuliffe 2020a; Newman et al. 2017; Edmondson & Lei 2014). Personality traits identified in this study as influencing team psychological safety include openness, extraversion, adaptability, and emotional stability. Similarly, Franzier and colleagues (2017) found that the personality variable of emotional stability has a positive influence on psychological safety. However, openness to experience did not correlate with psychological safety in their research. Additionally, the roles of extraversion and adaptability in fostering psychological safety remain unclear in research.

Finally, Remtulla and colleagues (2021, 2) remind us that although a significant amount of research emphasizes the importance of leader behavior in fostering psychological safety, all team

members can and should take responsibility for creating a supportive and inclusive work environment.

5.1.4 Conclusions

There is no single answer to what enhances or limits psychological safety in teams. "Multiple people may perceive the same moment, in the same context, as having different degrees of risk and thus have different needs for psychological safety. – – Individuals in the same moment and setting may also have different perceptions of psychological safety." (Wanless 2016, 3–5) However, the results of this study suggest that specific behaviors and qualities related to communication, leader behavior, and team relationships can impact psychological safety in teams and should be considered. Notably, how people communicate and interact, also what is conveyed beyond the literal words, is crucial. Furthermore, strong relationships and support from one's supervisor and peers can enable individuals to approach even challenging circumstances with greater flexibility.

This study's findings also indicate that promoting and sustaining team psychological safety is likely a cyclical process involving multiple positive feedback loops. For example, certain interpersonal and communication behaviors foster psychological safety, which, in turn, encourages more of these behaviors. Schulte and colleagues have demonstrated the reciprocal nature of psychological safety in their study, where they showed that individuals who feel high team psychological safety reach out to their peers for advice and friendship; these positive relationships, in turn, lead to more similar perceptions of team psychological safety, thus strengthening it (Schulte, Cohen & Klein 2012).

Psychological safety has been shown to encourage interpersonal risk-taking, such as sharing ideas, failures, and feedback (Edmondson & Lei 2014, 36; Edmondson & Bransby 2023, 69). Interestingly, this research included discussions indicating that interpersonal risk-taking also promotes psychological safety. Thus, the findings suggest that safety can be enhanced by expanding the space for safety, rather than by narrowing it. This means that if the team is willing to confront challenges, such as difficult conversations, and gain experience where momentary discomfort leads to long-term growth and resilience, then the space for safety can be broadened. In contrast, attempting to protect safety by avoiding emotional discomfort only leads to increasingly conditional safety, where the team must continually watch for potential triggers to avoid.

For the team to gain empowering rather than fear-inducing experiences from confronting challenges, they need to have the skills and willingness to practice constructive communication. In terms of psychological safety, individuals often assess the safety of a situation based on how people communicate, whether verbally or nonverbally. If the interaction implies resentment, rejection,

or any other attitude interpreted as hostile toward the communication partner, it likely leads to diminished psychological safety and a tendency to avoid similar situations in the future.

Hence, leading psychological safety is a complex challenge. The results of this study suggest that some supervisors and employees have a too narrow understanding of what psychological safety entails. If having safety means that everyone should feel good at all times, this likely results in implementing only selected elements of the whole concept. To fully enable psychological safety, in addition to positivity, empathy, support, and care, a form of tough love is also necessary. For example, there must be courage to set boundaries and filter out disruptive communication, such as overpowering or rejecting communication styles, as well as to provide space for confronting conflicts, and demand respectful interaction without exception. Thus, leaders are called to demonstrate clarity and assertiveness in establishing what behaviors are expected and accepted, and what are not, to create and sustain team psychological safety. Additionally, although supervisors play a vital role in setting expectations and boundaries and providing examples, psychological safety is ultimately a shared responsibility of the whole team; each member must hold themselves and one another accountable for their actions.

Edmondson and Kerrissey (2025, 58) remind us that "the quality of our conversations determines the quality of our results". This study contributes to the psychological safety literature by highlighting the importance of the quality of communication, interactions, and interpersonal relationships in fostering psychological safety within teams.

5.2 Development recommendations

Based on the research conclusions, the following practical recommendations are presented for organizations, team leaders, team members, and HR professionals.

When teams seek to develop psychological safety, the process should begin with a discussion and clarification of its essence. Otherwise, the team might establish complex processes that foster feel-good relationships while leaving the team stagnant; dissenting ideas and criticism may be dismissed, leading to a lack of growth. It is also crucial to evaluate the individual needs of team members regarding psychological safety. With this insight, the team can more effectively identify the behaviors and qualities that best promote psychological safety in their unique context.

Nevertheless, since daily interaction is the function through which psychological safety manifests, developing behaviors and processes related to interaction and communication is both highly effective and strategic. Essential skills for employees to cultivate, regardless of their role or status in the team or organization, include constructive communication and feedback skills. Additionally, regular contact and conversations among team members should be organized and even prioritized, both

formally and informally, especially if remote work or a lack of collaboration limits familiarity among team members.

To help employees navigate the challenges of teamwork and interpersonal relationships, leaders need to demonstrate supportive, inclusive, and empathetic behavior while also being assertive and demanding when necessary. Supervisors should avoid being overly cautious and instead be courageous in addressing interpersonal or other challenges that arise. Leadership and communication training, along with concrete practices such as one-on-one meetings, should be provided to facilitate these actions. In addition, team members can learn to endure momentary discomfort together, thereby supporting each other in building emotional resilience and, as a result, expanding the space of psychological safety.

5.3 Reliability and validity of the research

This section assesses the reliability and validity of the research. As noted in the *Qualitative Research & Evaluation Methods* book, "there can be no universal, generic, standardized, and all-encompassing criteria for judging the quality of qualitative studies because qualitative inquiry is not monolithic, uniform, or standardized" (Patton 2015, 678). The selection of the quality criteria should depend, for example, on the philosophical and methodological orientation. Lincoln and Guba's (1985, in Patton 2015, 685) trustworthiness framework is used to evaluate the credibility, transferability, dependability, and confirmability of the research. Although this framework was created within constructivist paradigms, it fits well with the interpretive goals of this study and enhances the clarity and rigor of our research quality evaluation. (Patton 2015, 684–697.)

Credibility refers to "the inquirer providing assurances of the fit between respondents' views of their life ways and the inquirer's reconstruction and representation of same" (Patton 2015, 685). Regarding the credibility of this study, throughout the research process, the emphasis was on understanding the interviewees and accurately conveying the meaning of their words in the presented results.

Some limiting factors related to credibility should be considered. Firstly, the participants' narratives and potential biases influenced the interpretations of their experiences and behaviors discussed during the interviews. Secondly, although the concept of psychological safety was explained to the participants at the beginning of the interviews, they may still have had an unclear or imprecise understanding of the concept and its implications, which may have affected their answers. Additionally, the credibility of the findings may also be compromised because the anonymity of the results was questioned during the interviews. All the interviews conducted were used as part of the teams' psychological safety assessments, which were reported to the participating teams and

organizations. It was communicated in the research information sheet and verbally at the beginning of each interview that the data would be reported at a level where individual respondents could not be identified. However, some participants may still have doubted the anonymity and potential negative repercussions associated with their input, which was reflected in their responses. To enhance credibility, findings were compared across participants throughout the process, and themes were grounded in multiple, consistent data points rather than isolated statements. This was possible due to the relatively high number of interviewees (20) who participated in the research.

Furthermore, while the interviewees were asked to reflect on factors related to team-level psychological safety, some may have instead evaluated and described their individual-level experiences. Team psychological safety is defined as a shared belief that the team environment supports interpersonal risk-taking. When team members have divergent experiences and views on the level of psychological safety, the consensus required to define it as a team-level construct is weakened. As this study did not explicitly measure team-level agreement, the findings should be interpreted with caution and regarded primarily as perceptions of psychological safety rather than definitive indicators of the team's overall climate.

Transferability refers to "the inquirer's responsibility for providing readers with sufficient information on the case studied such that readers could establish the degree of similarity between the case studied and the case to which findings might be transferred" (Patton 2015, 685). Regarding the applicability of the results, as a qualitative study, the findings presented are based on a limited sample within a specific context. The discussions with the interviewees reflected the diverse positions and functions of those individuals; therefore, the results cannot be generalized across all roles and industries. Furthermore, as noted in the introduction, the organizations involved in this study aimed to uphold total anonymity and guarantee the same for their employees. As a result, no further details about the companies or their staff have been shared. However, the objective was not to generate universally applicable findings but to offer insights that might be relevant in similar situations, especially in team environments marked by collaboration and high-performance expectations.

Dependability refers to "the process of the inquiry and the inquirer's responsibility for ensuring that the process was logical, traceable, and documented (Patton 2015, 685). To improve dependability, the research process—from data collection to analysis—was conducted systematically and transparently. Every step is thoroughly documented to guarantee review and consistency. Initial codes and interpretations were discussed multiple times with two peers to confirm the consistency and validity of interpretations, thereby enhancing the study's dependability.

Finally, the *confirmability* of research is about "the fact that the data and interpretations of an inquiry were not merely figments of the inquirer's imagination" (Patton 2015, 685). It also refers to

"linking findings and interpretations to the data in ways that can be easily understood by others" (Eriksson 2015, 307). This means ensuring that the interpretation process has been transparent, without being influenced by personal beliefs or assumptions. Given my professional background in organizational consulting and mental health therapy, I had certain preconceptions about the concept of psychological safety before conducting this research. To enhance confirmability, I employed reflexive practices throughout the research process, including critical reflection and peer debriefing, to identify and bracket these assumptions.

Furthermore, the research process has been described with maximum transparency. The methodology and coding logic are thoroughly documented, allowing others to trace the connection between raw data and final interpretations. An audit trail has been maintained in Microsoft Excel, detailing each step of the analysis, including theme development and categorization changes. Direct quotes from participants are included in the findings to illustrate the categories and themes clearly. This approach emphasizes that interpretations are grounded in the data rather than personal assumptions.

5.4 Reflection of the learning process

This research project has provided a full range of experiences, along with numerous challenges and learning opportunities. First, the original scope of the research was too broad and ambitious to manage, so it needed to be narrowed on multiple occasions. Then the theory and research literature captivated me for several, several (too many) months, as they were too interesting and inspiring to overlook. The entire process was lengthy, involving multiple phases, and including practical development work within the organizations, in addition to this written thesis. In the end, I nearly got lost in the endless Excel sheets and Miro visuals while trying to establish the exact right categories for my findings, only to learn that there are no rights and wrongs.

Nevertheless, or perhaps precisely because of these struggles, this turned out to be the most rewarding detour of my career. The learning curve has been steep, as expected. What I did not expect was to find research highly captivating and inspiring.

Most likely, I would still be struggling with this project if it weren't for my persistent supervisor, my two supportive colleagues, and my family, who allowed me to take time for this project. Thank you all!

I am likewise grateful to both organizations and every interviewee for participating in this research. Allowing someone to assess and discuss psychological safety with you is a highly sensitive matter. These individuals, teams, and organizations taking part in the study demonstrate courage by showing how to embrace discomfort and foster psychological safety in return.

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Appendices

Appendix 1. Interview guide

Interview guide for the research project

Overview of the research project

This research project aims to examine the various factors that influence the development of psychological safety within teams. I will conduct a psychological safety assessment for teams in two partner organizations, utilizing both surveys and interviews to explore how different elements of psychological safety are manifested. The qualitative data collected from the interviews will also be used in my master's thesis at Haaga-Helia University of Applied Sciences (Master's Degree Programme in Leading Business Transformation). However, the data will be reported in the team assessments and the master's thesis at a level where individual respondents cannot be identified. The goal of the research project is to identify concrete, actionable behaviors that can help teams and organizations strengthen psychological safety in practice.

Definition of psychological safety

Psychological safety refers to a climate in which employees feel they can be themselves and express themselves freely. It is the experience of knowing that bringing up ideas, questions, concerns, or mistakes will not lead to being ignored, punished, or humiliated in the work team. In a psychologically safe team, people dare to speak up instead of remaining silent. Such an environment is courageous and fosters a sense of belonging, learning, utilizing members' expertise, as well as the ability to face challenges and innovate.

Interview questions:

1. How would you describe the current level of psychological safety within your team?
2. What factors have influenced the development of this situation?
3. What factors enhance the psychological safety in your team?
4. What factors challenge the psychological safety in your team?
5. What behaviors or practices could further strengthen psychological safety in your team?
6. What prerequisites must a team have to enable psychological safety?
7. What do you need most from your team to experience psychological safety? (added)