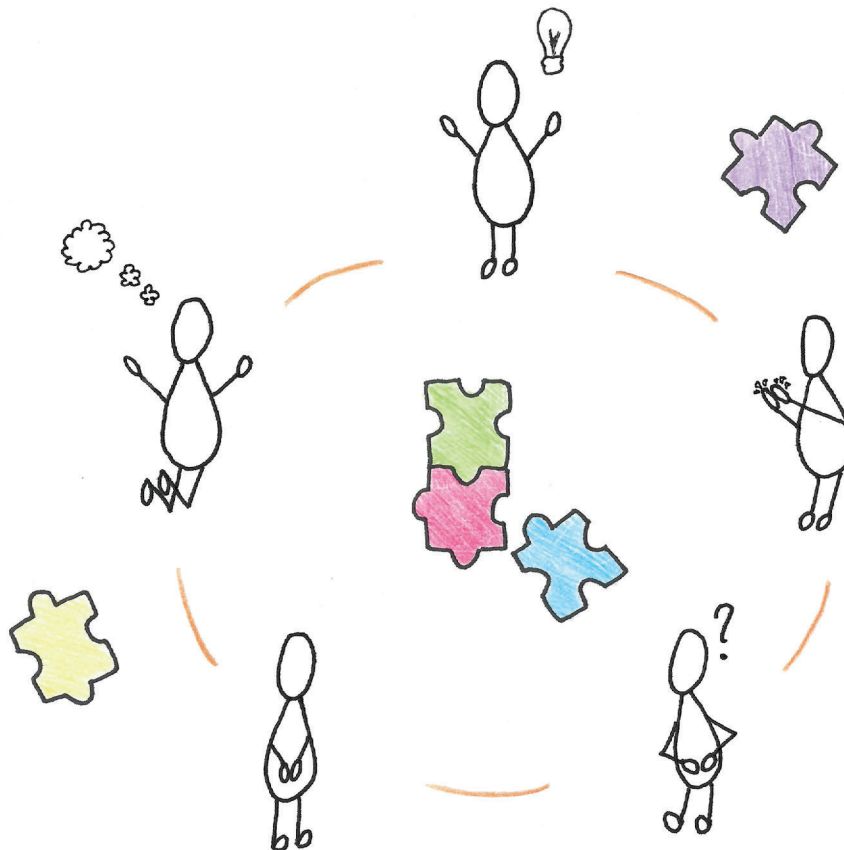


JYU DISSERTATIONS 1017

Sara Keronen

Toward Collective Self-Determination in Workplace Learning

A Qualitative Study Based on a Central
Hospital and a Technology Organization



UNIVERSITY OF JYVÄSKYLÄ
FACULTY OF EDUCATION AND
PSYCHOLOGY

JYU DISSERTATIONS 1017

Sara Keronen

Toward Collective Self-Determination in Workplace Learning

**A Qualitative Study Based on a Central
Hospital and a Technology Organization**

Esitetään Jyväskylän yliopiston kasvatustieteiden ja psykologian tiedekunnan suostumuksella
julkisesti tarkastettavaksi yliopiston vanhassa juhlasalissa S212
joulukuun 5. päivänä 2025 kello 12.

Academic dissertation to be publicly discussed, by permission of
the Faculty of Education and Psychology of the University of Jyväskylä,
in building Seminarium, Old Assembly Hall S212, on December 5, 2025, at 12 o'clock.



JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

JYVÄSKYLÄ 2025

Editors

Ari Tuhkala

Department of Education, University of Jyväskylä

Päivi Vuorio

Open Science Centre, University of Jyväskylä

Cover picture by Aada Ikonen.

Copyright © 2025, by the author and University of Jyväskylä

ISBN 978-952-86-1112-7

ISSN 2489-9003

Permanent link to this publication: <http://urn.fi/URN:ISBN:978-952-86-1112-7>

ABSTRACT

Keronen, Sara

Toward Collective Self-Determination in Workplace Learning - A Qualitative Study Based on a Central Hospital and a Technology Organization

Jyväskylä: University of Jyväskylä, 2025, 108 p. + original papers

(JYU Dissertations

ISSN 2489-9003; 1017)

ISBN 978-952-86-1112-7 (PDF)

This study explores collective self-determination (CSD) and its supportive actions in the context of workplace learning. The examination of CSD was guided by three research questions: How is collective self-determination described in workplace learning situations in a central hospital and in a technology organization? How does collective self-determination emerge as an interpersonal phenomenon in workplace learning situations in a central hospital and in a technology organization? What kinds of actions support collective self-determination in workplace learning situations in a central hospital and in a technology organization? A multiple-case study research strategy was utilized based on two Finnish workplaces - a central hospital and a technology organization. Data were collected from employees and supervisors through semi-structured individual interviews ($N = 56$), group discussions ($N = 180$ min), and diaries ($N = 29$). Qualitative content, interaction and phenomenographic analyses were employed as analysis methods. Based on the findings, CSD can be described as individuals' engagement and self-determination in group settings through social practices related to 1) autonomy and individual initiatives, 2) knowledge, sharing competencies and expertise, and 3) collaboration and relatedness. At the group-level, CSD is constructed through interpersonal interaction, fulfilling employees' basic psychological needs. Although CSD emphasises a group's capability, freedom, and responsibility to direct its own actions, supervisor's support is needed on a daily basis to motivate employees first on an individual level and then on a collective level to form and utilize collective learning situations, as they offer a context and premise to construct CSD. From a theoretical perspective, this study contributes to the understanding of self-determination toward collective-level phenomenon. In practice, the findings can be utilized by supervisors, managers, and human resource development specialists to enhance CSD when implementing autonomous and self-organized teams and overall work and learning practices based on self-determination. From a societal perspective, this study offers an understanding of CSD as an essential premise of work and learning to respond to continuous changes and future challenges in working life.

Keywords: collective self-determination, self-determination theory, workplace learning, collective learning, central hospital, technology organization

TIIVISTELMÄ

Keronen, Sara

Yhteisöohjautuvuus työssä oppimisessa - Laadullinen tutkimus keskussairaala-
lasta ja teknologia-alan organisaatiosta

Jyväskylä: Jyväskylän yliopisto, 2025, 108 s. + alkuperäiset julkaisut

(JYU Dissertations

ISSN 2489-9003; 1017)

ISBN 978-952-86-1112-7 (PDF)

Tässä väitöskirjatutkimuksessa tarkastellaan yhteisöohjautuvuutta työssä oppimisen kontekstissa. Tutkimuksen tavoitteena on lisätä ymmärrystä yhteisöohjautuvuudesta, sen ilmenemisestä ja rakentumisesta sekä sitä tukevista käytännöistä. Tähän pyritään kolmen tutkimuskysymyksen avulla: Miten yhteisöohjautuvuutta kuvataan kollektiivisissa oppimistilanteissa sairaalaorganisaatiossa ja teknologia-alan organisaatiossa? Miten yhteisöohjautuvuus ilmenee kollektiivisissa oppimistilanteissa sairaalaorganisaatiossa ja teknologia-alan organisaatiossa? Millaiset käytännöt tukevat yhteisöohjautuvuutta kollektiivisissa oppimistilanteissa sairaalaorganisaatiossa ja teknologia-alan organisaatiossa? Tutkimusstrategiana hyödynnettiin laadullista tapaustutkimusta ja tutkimuksen kohteena oli kaksi suomalaista työpaikkaa, sairaalaorganisaatio ja teknologia-alan organisaatio. Tutkimuksen aineisto kerättiin työntekijöiltä ja esihenkilöiltä ja koostuu puolistrukturoiduista teemahaastatteluista ($N = 56$), ryhmäkeskusteluista ($N = 180$ min) sekä päiväkirja-aineistosta ($N = 29$). Aineistot analysoitiin hyödyntäen laadullista sisällönanalyysiä, vuorovaikutuksen analyysiä ja fenomenografista analyysiä. Tulosten mukaan yhteisöohjautuvuus ilmenee sosiaalisten käytäntöjen, autonomian, aloitteellisuuden, osaamisen ja asiantuntijuuden jakamisen, yhteisöllisyyden ja yhteistyön, kautta. Yhteisöohjautuvuus rakentuu sosiaalisessa vuorovaikutuksessa ryhmän jäsenten psykologisten perustarpeiden täyttyminen myötä ja viittaa ryhmän kykyyn, vapauteen ja vastuuseen ohjata omaa toimintaa. Lähijohtamista tarvitaan kuitenkin tukemaan työntekijöiden motivoitumista ja oppimistilanteiden hyödyntämistä yhteisöllisesti yhteisöohjautuvuuden rakentamiseksi. Teoreettisesti tutkimus tarjoaa ymmärrystä itseohjautuvuudesta yhteisöllisenä ja kollektiivisena ilmiönä. Tuloksia voidaan hyödyntää työelämässä sovellettaessa yhteisöohjautuvuutta ja kehitettäessä työntekijöiden psykologiset perustarpeet huomioivia oppimisen ja johtamisen käytäntöjä. Yhteiskunnallisesti tutkimus lisää ymmärrystä yhteisöohjautuvuudesta yhtenä keskeisenä osana työtä ja oppimista.

Avainsanat: yhteisöohjautuvuus, itsemääräämisteoria, työssä oppiminen, kollektiivinen oppiminen, keskussairaala, teknologia-alan organisaatio

Author

Sara Keronen
Department of Education
University of Jyväskylä
sara.e.keronen@jyu.fi
ORCID <https://orcid.org/0000-0003-0994-2689>

Supervisors

Professor, Kaija Collin
Department of Education
University of Jyväskylä

Docent, Senior Researcher Soila Lemmetty
School of Educational Sciences and Psychology
University of Eastern Finland

Doctor of Education, Head of Human Resource
Development Tuija Hytönen
Finnish Security and Intelligence Service

Reviewers

Docent, Senior Lecturer Tiina Brandt
Entrepreneurship and Business Renewal
Haaga-Helia University of Applied Sciences

Professor, Maaïke Endedijk
Department of Learning, Data analytics and Technology
University of Twente

Opponent

Docent, Senior Lecturer Tiina Brandt
Entrepreneurship and Business Renewal
Haaga-Helia University of Applied Sciences

ACKNOWLEDGEMENTS

I never anticipated becoming a researcher or earning a doctoral degree. However, I have consistently followed what has sparked my curiosity and interest in working life. Naturally, the journey has included both unexpected opportunities and challenges to overcome. At this point, I feel I am on a path where I am genuinely engaging with and discovering my own thing in working life. For me, pursuing doctoral studies and research has never been solely about conducting research. Through writing and reading topics such as workplace learning, collectivity, motivation, and leadership, I have also been engaged in the process of personal exploration. During my doctoral studies, I have had the opportunity to engage in things that both excite and challenge me. Without a doubt, this has been a profound learning experience. And I am grateful that the journey continues. With curiosity, excitement, and sense of wonder, I want to continue exploring learning processes and social phenomena in working life.

I would like to express my sincere gratitude to the main supervisor of my dissertation, Professor Kaija Collin, for your invaluable support and guidance throughout these years in the academic world. With your strong expertise and calm presence, you have supported and encouraged me from the very beginning of my journey into research. Thank you for always trusting in my abilities and at the same time being patient with my growth. I am profoundly grateful for my supervisor Docent, Senior Researcher Soila Lemmetty. Thank you for your unwavering support, mentoring, and collegial guidance throughout my doctoral studies and in other research projects in which we have worked together. I have always felt that I could rely on your expertise, especially when facing challenges in both research and working life. It has truly been a privilege to learn from you. I would also like to thank my supervisor Doctor of Education, Tuija Hytönen, for the valuable feedback I received during the writing of my articles and this summary.

During my doctoral studies, I had the opportunity to work as project researcher in the JoKo research and development project. I would like to thank our research group Kaija Collin, Soila Lemmetty, Marianne Jaakkola, Panu Forsman, Justiina Pihlajamaa, Kaisu Hämäläinen, Annamaria Lumiala, and Marika Shemeikka for your support and creating safe and encouraging atmosphere for learning and personal development. Over the past few years, I have had the opportunity to be part of the Continuous Learning in Working Life (JATKOT) research group. Being a member of this group has truly demonstrated the essence of collegiality. I want to thank each one of you for your encouraging words, discussions we have shared, and creating a collaborative environment during my doctoral studies. My sincere thanks to Soila Lemmetty, Jasmiina Leskinen, Oana Velcu-Laitinen, Marianne Jaakkola, Emilia Väänänen, Teemu Ojala, Tuomo Kuivalainen, Maria Sarasti, Mia Ahonen, Antti Jauhiainen, and Katja Köykkä. It has truly been inspiring and meaningful to work with you. I believe that being part of diverse teams and communities has significantly contributed to my professional growth.

I would like to express my sincere thanks to Professor Maaïke Endedijk and Docent, Senior Lecturer Tiina Brandt, for pre-examining my dissertation. Their excellent reviews and constructive feedback helped me to make the final adjustments and improvements to my work. I also wish to thank Tiina for acting as my opponent.

I am grateful that my research and the related mobility have been funded by Faculty of Education and Psychology (University of Jyväskylä), Department of Education (University of Jyväskylä), Finnish Institute for Educational Research (University of Jyväskylä), The Finnish Work Environment Fund (200324, 240024), Finnish Cultural Foundation (00240776), Foundation for Economic Education, and The Finnish Concordia Fund.

A precious place to me is my little home village, Viuruniemi. It has always been the place where I can relax and detach from researcher life, its pressures and focus on the most important things in life. For me it is the place where I can simply be in the moment, sit on the pier and watch the sunset. Warm thanks go to my oldest friend, Helena, for always listening to my ideas and thoughts, and giving me the confidence to continue when I doubted myself the most. Ever since the first grade of primary school, I have felt you have had my back. I am grateful for my friend Emmi for offering advice when needed and for sharing thoughts about doctoral studies and academic life. It has truly been an advantage to have a friend going through the doctoral journey, with all its ups and downs, alongside me.

I would like to extend my heartfelt thanks to my childhood family. Without your support, I would not be the person I am today, writing these words. You are my roots. Thank you, Äiti and Isi, for teaching me persistence and courage from such a young age to follow my dreams and, indeed, to do things in my own way. These qualities have become valuable assets in professional life and have carried me far. Thank you Oskari and Jussi-Pekka for cheering me on at turning points in my career.

Finally, and most importantly, I want to thank you my partner in life Janne. You are my home, and with you I can truly be myself. Since day one, you have told me that you always foresaw this day would come, and most importantly foresaw the things I was meant to do in working life. Thank you for always being there for me when I have needed comfort the most. Your calmness and kindness are qualities I truly admire. Celebrating both the small and big moments of my doctoral studies with you has been the most rewarding, meaningful, and valuable experience for me. Now, it is time to have a big celebration together.

Viuruniemi, October 2025
Sara Keronen

LIST OF PUBLICATIONS

The present dissertation is based on the following three empirical publications. Copies of the three articles can be found as appendices at the end of this dissertation. The articles are reprinted with the kind permission of the publishers.

Article I Keronen, S., Lemmetty, S., & Collin, K. (2023). Employees' Self-Determination in Collegial Learning Situations at Work: A Comparative Study of a Finnish ICT Organization and a Central Hospital. *Scandinavian Journal of Work and Organizational Psychology*, 8(1): 13, 1-16. DOI: <https://doi.org/10.16993/sjwop.192>

Article II Keronen, S., Lemmetty, S., & Collin, K. M. (2024). Construction of collective self-determination in development-oriented group discussions. *Journal of Workplace Learning*, 36(9), 88-105. DOI: <https://doi.org/10.1108/JWL-05-2024-0110>

Article III Keronen, S., Lemmetty, S., & Collin, K. (2025). Conceptions of the Leading of Learning in Supervisory Work: A Qualitative Study Based on a Finnish Technology Organization and a Central Hospital. *International Journal of Training and Development*, 1-13. DOI: <https://doi.org/10.1111/ijtd.70009>

The author of this dissertation is the first author of all three articles. The author was responsible for developing the research questions, reviewing the literature, conducting the data analysis, and writing the research manuscripts. The co-authors advised on the research design of the publications, the data collection, and the analysis process. In addition, the co-authors provided comments on the three article manuscripts. During the preparation of this dissertation, the author used generative artificial intelligence Microsoft Copilot in the writing process to improve the readability and language of the dissertation. After using the tool, the author carefully reviewed and edited the content as needed to correct any incorrect, incomplete, or biased suggestions.

FIGURES

FIGURE 1	Summary of the theoretical approach of the study.....	32
FIGURE 2	Summary of the main findings of the three sub-studies	52
FIGURE 3	Synthesis of CSD and its supportive actions in the context of workplace learning.....	60

TABLES

TABLE 1	Relationships between the sub-studies and the overarching research questions	33
TABLE 2	Data of the study	41
TABLE 3	Participants of the study	41
TABLE 4	Overview of the analytical methods used	44
TABLE 5	Overview of the findings of the three sub-studies.....	50
TABLE 6	Summary of the main findings in relation to the overarching research questions	58

CONTENTS

ABSTRACT

TIIVISTELMÄ (ABSTRACT IN FINNISH)

ACKNOWLEDGEMENTS

ORIGINAL PUBLICATIONS

FIGURES AND TABLES

CONTENTS

1	INTRODUCTION	13
1.1	Exploring self-determination from a collective perspective.....	17
1.1.1	Basic psychological needs and self-determination theory	18
1.1.2	A collective approach to self-determination	20
1.2	Supporting self-determination in the context of workplace learning.....	24
1.2.1	Workplace learning.....	24
1.2.2	Collective workplace learning.....	26
1.2.3	Leadership supporting self-determination and workplace learning.....	28
1.2.4	Coaching leadership: Integrating individual and collective perspectives of self-determination	29
1.3	Summary of the theoretical approach, frameworks and perspectives of the study	31
1.4	Research aim, questions and sub-studies.....	32
2	METHODOLOGY	34
2.1	Multiple-case study research	34
2.2	Epistemology and ontology	36
2.3	A central hospital and a technology organization as contexts for the study.....	38
2.3.1	Self-determination and collective learning in a central hospital and a technology organization.....	38
2.3.2	The target organizations of the study	39
2.4	Data of the study.....	40
2.5	Analysis of the study.....	43
2.5.1	Content analysis	44
2.5.2	Interaction analysis	45
2.5.3	Phenomenographic analysis.....	47
3	FINDINGS.....	49
3.1	Sub-study I: Descriptions of employees' self-determination through collegial practices in workplace learning situations.....	53
3.2	Sub-study II: Construction of collective self-determination among employees in development-oriented group discussions	54

3.3	Sub-study III: Conceptions of leading of learning based on self-determination in supervisory work.....	56
3.4	Summary of the main findings: CSD in the context of workplace learning.....	57
4	DISCUSSION	62
4.1	Social and interactional nature of CSD: Individuals' self-determination and engagement in group settings	62
4.1.1	Fulfilment of individuals' basic psychological needs.....	63
4.1.2	CSD as a group-level phenomenon.....	65
4.1.3	Coaching leadership supporting CSD	66
4.2	Concluding remarks: Toward CSD in the context of workplace learning.....	69
5	CONCLUSION	71
5.1	Trustworthiness and ethical considerations	71
5.2	Theoretical, practical and societal implications	73
5.2.1	Theoretical implications	74
5.2.2	Practical and societal implications.....	75
5.3	Limitations and suggestions for future research.....	79
	YHTEENVETO.....	84
	REFERENCES.....	90
	ORIGINAL PAPERS	

1 INTRODUCTION

Especially the changes in working life toward a more individualized, autonomous, competitive, and increasingly technologized society challenge working-age adults to engage in continuous learning and to take more and more responsibility in their own work. To respond to these changes, employees are expected to be active, willing, able, and interested in learning – in other words, they should have intrinsic motivation to learn (Ryan & Deci, 2020). According to self-determination theory (SDT), enabling intrinsic motivation, proactivity, and engagement relies on the fulfilment of the three basic psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2000). Consequently, all three needs are essential for optimal growth, development, and learning at work (Harteis et al., 2005; Hetzner et al., 2012; Rigby & Ryan, 2018; Willems & Lewalter, 2012).

In recent years, organizations have increased employees' freedom, autonomy, and responsibility, through less hierarchical, team-based, and self-organized practices for structuring work (e.g. Bunderson & Boumgarden, 2010; Knapp, 2010; Laloux, 2014; Moe et al., 2008) which can produce autonomy, flexibility, and increase the motivation required to learn. However, prioritizing autonomy alone can also lead to unwanted outcomes, such as employees becoming too independent, isolated from others, or feeling unsupported if their own competence and knowledge are not sufficient to overcome challenging work tasks and situations (Collin et al., 2021; Gijbels et al., 2012). Therefore, employees' self-determination should not be approached only from an individually and autonomy-oriented perspective and activities (Rigby & Ryan, 2018). When employees are required to flexibly engage in various forms of teamwork and collective practices to perform efficiently (De Laat & Simons, 2002), it is essential to explore how individual self-determination and engagement emerge in group settings at work. Hence, this viewpoint suggests that not only is individual-level self-determination an important feature of knowledge-intensive work, but attention should also be paid to how employees engage and are motivated as individuals within larger groups. Additionally, when collaboration, expertise sharing, teamwork (Lemmetty, 2020), multiprofessionalism, and consulting (e.g.,

Pimmer et al., 2013; Stabel et al., 2022) are essential for accomplishing complex work tasks, teams have more responsibility, autonomy, and control over their own performance and development (Wallo et al., 2013). Therefore, it is suggested that the conceptualization of self-determination should also expand to the collective level, thus collective self-determination (CSD) with particular emphasis on the working group's ability to orientate its actions toward shared goals and common ground.

In addition, based on SDT, the fulfilment of basic psychological needs does not rely only on individuals' own activity, skills, and abilities but is influenced by the social, contextual, and supportive practices in the environment in which they are expected to occur (Deci et al., 2017; Rigby & Ryan, 2018; Ryan & Deci, 2000, 2020). This means also the importance to explore different kind of supportive actions enabling basic psychological needs (Deci et al., 2017; Rigby & Ryan, 2018). Leadership actions undertaken by supervisors are among the main ways to support both learning (e.g., Agarwal et al., 2009; Ellinger et al., 2008; E. Ellström & Ellström, 2018; Hughes, 2004; Wallo et al., 2022, 2024) and self-determination (e.g., Forner et al., 2020; Hocine & Zhang, 2014; Matsuo et al., 2019; Sarmah et al., 2022). Particularly, coaching leadership seems to offer a suitable perspective to examine the supportive actions of CSD (see Gabriel et al., 2014), as it considers both individual and team autonomy and self-determination (Matsuo, 2018; Ruiz-Palomino et al., 2021). When combined with SDT, coaching leadership can elucidate the underlying processes by which it enhances employees' motivation, performance (Gabriel et al., 2014), as well as learning and development when employees work in different group settings. Nevertheless, supervisors may encounter difficulties in recognizing their quite new role (Dawber, 2019; J. T. Huang & Hsieh, 2015) as facilitators, educators, and coaches of learning (e.g. Ellinger et al., 2003; Wallo et al., 2013). Furthermore, there is a need for deeper understanding on how supervisors' supportive actions are implemented in practice to facilitate the satisfaction of employees' basic psychological needs and support CSD (see Gabriel et al., 2014).

In various fields, including adult education, leadership and management, and sociology, researchers have explored employee autonomy and self-determination from multiple perspectives, such as individual autonomy (e.g., Noe & Ellingson, 2017), team autonomy and self-organization (e.g., Laloux, 2014), as well as self-determination as collective phenomenon at the group level (Thomas et al., 2017). However, studies utilizing SDT have primarily focused on individual-oriented self-determination and activity (Rigby & Ryan, 2018), and research exploring team autonomy and self-organization has not clearly articulated the underlying practices and processes through which teams achieve self-organization and autonomy, and thus establish common ground and shared orientation (Bunderson & Boumgarden, 2010). Therefore, previous research of the phenomenon of CSD appears fragmented. It seems that the understanding and construction of self-determination from a collective perspective in working life have not been adequately addressed especially in the field of adult education. Moreover, there seems to be lack of studies combining the above-mentioned

perspectives of self-determination, individual-level self-determination in group settings and collective-level self-determination at the group level. However, it would be appropriate to examine self-determination by combining different perspectives in order to understand its collective, social, and relational nature in working (Hetzner et al., 2012).

This study aims to fill the above-mentioned gaps by exploring CSD and the underlying basic psychological needs from three perspectives in the context of workplace learning: 1) as individual-level self-determination in group settings, 2) as collective-level self-determination at the group-level, and 3) from the perspective of supportive leadership actions. Specifically, the aim is to develop an understanding of CSD and its supportive actions in the context of workplace learning

SDT, with its roots in the field of psychology, is a broad theory of human development and well-being (Ryan & Deci, 2020; Määttä et al., 2023). It describes the individual motivational processes and perspectives underlying proactivity, engagement, growth, and learning (Ryan & Deci, 2000, 2020; Vansteenkiste et al., 2020). Self-determination can be approached as a perceived sense of autonomy and the possibility of choice; competence as having the necessary knowledge and the aspiration to develop expertise; and relatedness as the experience of support, the need to belong to a community, and a sense of meaningfulness (Rigby & Ryan, 2018). Understanding employees' self-determination is relevant in contemporary working life for the following reasons.

First, the increased shift of responsibility from organizations to employees and teams (Rigby & Ryan, 2018) has highlighted individual employees' and teams' responsibility for work tasks and learning (Harteis, 2018; Wallo et al., 2013) which requires increased autonomy, competence, and thus self-determination also in group settings. Second, self-determination has been explored mainly in terms of individually oriented perspectives and activities (Rigby & Ryan 2018). Although contemporary workplace learning requires collective practices and social interaction with other employees as resource for learning (e.g., Collin, 2006; Tynjälä, 2008). Third, utilization of SDT in exploring workplace learning can offer understanding of learning based on intrinsic motivation and engagement acknowledging optimal growth and well-being (Ryan & Deci, 2000, 2020). Understanding of self-determination and motivational processes is crucial for organizations as employees seek personal meaningfulness and fulfilment from work in addition to interesting work and a career (Lehtonen et al., 2022) which requires need satisfaction in work contexts (Gagné et al., 2022). If basic needs are not fulfilled at work, various negative outcomes may occur, such as employees' increased burnout and turnover (McAnally & Hagger, 2024), as well as short-term effects on performance and work engagement (Deci et al., 2017). Therefore question of how work and learning can support employees' basic needs to enhance performance and competitiveness (Gagné et al., 2022) in a sustainable way that promotes also well-being by intrinsically motivating employees is crucial (Rigby & Ryan, 2018).

In this study, CSD is explored in the context of collective learning among employees in the workplace. Learning based on shared activities, collective practices (Billett, 2014), and social interaction (Collin, 2008) is seen as opportunity to fulfill employees' basic psychological needs to construct CSD. Learning and self-determination are seen as interconnected (Cerasoli et al., 2018; Lehtonen et al., 2022), since a) basic needs are essential for optimal human growth (Rigby & Ryan, 2018) and are considered a crucial prerequisite for learning at work (Willems & Lewalter, 2012), b) motivation is essential for learning and development, and c) opportunities for learning and development at work also foster motivation (X. Huang & Lai, 2020). Therefore, exploring learning and self-determination together in the context of contemporary working life is appropriate (McAnally & Hagger, 2024).

Based on previous studies of SDT, basic psychological needs are enabled through the interpersonal support and relationships with others, either colleague or supervisor (Slomp et al., 2024). From supportive perspective, it is crucial to explore CSD in workplace learning through social interactional practices among employees in group settings as mutual support individuals offer each other has the highest effect on team effectiveness (Zaimovic et al., 2021). In the same way, the sense of relatedness has been identified as the most crucial need of SDT predicting learning outcomes (Beachboard et al., 2011). Previous research has addressed the call for exploring colleagues contributions on supporting individuals' ability to learn based on self-determination (Hein & Urban, 2025). Additionally, employees' experiences of their supervisor have been found to shape their sense of self-determination, motivation and engagement (Manganelli et al., 2018; Rigby & Ryan, 2018), which leads to focus on both leadership and intra-group actions supporting CSD.

SDT has been studied quite extensively in the context of working life, but its examination in the research on workplace learning has been very limited (Bauer & Mulder, 2006; Hetzner et al., 2012). Instead, SDT has been utilized to explore work-related stress (Olafsen et al., 2017), job satisfaction (Nie et al., 2015), and psychological well-being (Gomez-Baya & Lucia-Casademunt, 2018). In terms of learning, SDT has been utilized in studies to support students' learning in conventional education (e.g., Beachboard et al., 2011; Chambers et al., 2007; Chen & Jang, 2010; Hetzner et al., 2012) and online learning contexts (e.g., Chen & Jang, 2010; Hsu et al., 2019). In the studies which explore SDT and learning together (e.g., Bauer & Mulder, 2006; Beachboard et al., 2011; Hetzner et al., 2012), the focus has primarily been on learning as a positive consequence of self-determination and needs satisfaction (Hetzner et al., 2012). Studies have not focused on exploring basic psychological needs in the context of workplace learning, although self-determination arising from motivation is an integral starting point for workplace learning, emphasizing individual responsibility and autonomy (Noe & Ellingson, 2017). Hence, more research is needed on self-determination in different learning environments, especially in various organizations and work contexts (Gagné & Deci, 2005).

In the field of leadership, SDT is widely used in studies aimed at exploring leadership styles and practices supporting employees' self-determination at work in general (see, e.g., Forner et al., 2020; Gabriel et al., 2014; Hocine & Zhang, 2014; Kubiak, 2022; Manganelli et al., 2018; Sarmah et al., 2022), but not in the context of workplace learning. Moreover, only a few studies have examined how theoretical standpoints on SDT can be applied in practice in supervisory work (Forner et al., 2020). Overall, research on supporting learning in supervisory work has increased (e.g., Wallo et al., 2022, 2024), but research on the connections between coaching leadership, workplace learning (P.-E. Ellström & Kock, 2008) and self-determination is scarce.

Previously, studies on self-determination have mainly used quantitative methods (see, e.g., Bauer & Mulder, 2006; Beachboard et al., 2011; Chen & Jang, 2010; Hsu et al., 2019). Thus, there has been a call for qualitative research (Ryan & Deci, 2020) to deepen and expand understanding of SDT (Lynch et al., 2020), especially when exploring the phenomenon in different contexts. Employing qualitative research, this study describes the practices, construction, and supportive actions of CSD through employees' basic needs in the context of workplace learning. This study addresses the above-mentioned methodological gaps by utilizing a multiple-case research strategy and interviews, group discussions, and written diaries as data to produce an in-depth understanding of the phenomenon in two cases (Creswell & Poth, 2017), namely, a Finnish central hospital and a technology organization. Moreover, the aim is to produce a rich and deep understanding (Côté-Lecaldare et al., 2016; Vansteenkiste et al., 2020) of the phenomenon by placing greater emphasis on the collective perspective of self-determination in work contexts.

In this study CSD is explored through: 1) descriptions of practices of CSD, 2) construction of CSD through speech actions, and 3) conceptions of supportive actions for CSD. These approaches allow for viewing CSD from different perspectives and considering the different levels: a practical perspective at the individual level in group settings, constructed through social interaction at the group level, and integrated with a comprehensive supportive perspective. This study focuses on CSD in the context of collective workplace learning and combines the main motivational theory, SDT from the field of psychology, with an adult educational perspective on workplace learning. The focus of this study is on the social and interactional practices fulfilling employees' basic psychological needs to construct CSD in group settings. Overall, the CSD and its supportive actions are explored in two Finnish work organizations, a central hospital and a technology organization, to answer the research questions of this study.

1.1 Exploring self-determination from a collective perspective

Self-determination based on three fundamental psychological needs – autonomy, competence, and relatedness – is the foundation of this study. SDT, a

comprehensive theory of human development and well-being, (Deci & Ryan, 1985; Ryan & Deci, 2017, 2019, 2020) consists of six mini-theories aimed at explaining specific motivational phenomena that arise in practical settings, such as the workplace (Ryan & Deci, 2022). In this study, the focus is on basic psychological needs and their satisfaction (Vansteenkiste et al., 2020).

In the field of adult education, there are a few concepts closely related to self-determination, among which the concept of self-direction has typically been used in the context of workplace learning in recent years (e.g., Lemmetty, 2020; Knowles, 1975). Self-direction focuses on an individual's control over workplace learning but does not take into account, as strongly as SDT does, the factors that shape individuals' motivation to learn. Although self-determination and self-direction both include the perspective of autonomy to learning and development, SDT offers broader approach to exploring learning from a motivational perspective as it considers competence and relatedness in addition to autonomy (Willems & Lewalter, 2012).

1.1.1 Basic psychological needs and self-determination theory

In the heart of human motivation lies self-determination – the possibility to direct one's own activity – which is based on inherent growth tendencies and three innate psychological needs: autonomy, competence, and relatedness (Rigby & Ryan, 2018; Ryan et al., 2021; Ryan & Deci, 2000, 2020). The fundamental assumption of SDT is to view people as proactive, naturally motivated, active, and self-directed (Deci & Ryan, 1985; Ryan & Deci, 2000). This means that individuals have evolved tendencies toward learning, mastering challenges, integrating new experiences into the self, and connection with others (Ryan & Deci, 2020; Willems & Lewalter, 2012). Based on SDT, the most fulfilled human potential emerges through curiosity and vitality, striving to learn, and the development and utilization of competencies (Ryan et al., 2021; Ryan & Deci, 2000). However, the basic assumption of SDT is that natural developmental tendencies do not occur automatically (Willems & Lewalter, 2012; Ryan & Deci, 2020), but can either be supported or reduced by external practices and features of the social context (Deci et al., 2017; Ryan & Deci, 2000, 2020).

Autonomy refers to a sense of choice, initiative, and self-endorsement of one's own actions (Ryan & Deci, 2020; Vansteenkiste et al., 2020). It can be described as the freedom to decide what to do and how to do it (Willems & Lewalter, 2012). Although in their working life, employees do not always have the option to choose, as specific goals and tasks need to be achieved and accomplished (Rigby & Ryan, 2018). In this sense, autonomy as an ideal is not fully achieved in every work situation. However, a person can still feel a sense of autonomy when the reasons for certain behaviours have been explained and a clear purpose and rationale for actions are offered so that the reasons can be accepted (Martela et al., 2021; Rigby & Ryan, 2018). In addition, autonomy as volition can be accompanied by various actions, both individual and collective (Ryan & Deci, 2000).

In previous research, SDT and especially autonomy has been criticized from the perspective of universality across demographics, psychological characteristics, and cultural contexts (Vansteenkiste et al., 2020). However, critique of autonomy seems to be based on assumption of autonomy as total independency and freedom of choices (Määttä et al., 2023; Vansteenkiste et al., 2020). Instead, SDT implies autonomy as one's sense of volition, choice, endorsement, and authenticity of one's actions, thoughts, and feelings (Deci & Ryan, 2012; Vansteenkiste et al., 2020). Hence, the question is not solely of independent decision-making as such in every situation (Harteis et al., 2005), but more as subjective experience of volition and acting according to one's own will and choices (Määttä et al., 2023; Vansteenkiste et al., 2020). Additionally, studies have suggested similar benefits of autonomy despite the cultural background indicating autonomy as universal and fundamental need in SDT (Slemp et al., 2018; Vansteenkiste et al., 2020; Yu et al., 2018).

Competence refers to a sense of feeling effective and successful and having a sense of being developed (Vansteenkiste et al., 2020; Rigby & Ryan, 2018). Individuals in organizational contexts want to feel that they have all the resources, knowledge, and expertise to accomplish their daily work tasks (Rigby & Ryan, 2018). Therefore competence is also related to employees developing their abilities and skills. This requires optimal challenges and learning opportunities to extend skills, knowledge, and expertise (Ryan & Deci, 2020; Vansteenkiste et al., 2020). The result is employees having a sense that learning produces better outcomes and solutions (Harteis et al., 2005).

Relatedness is associated with a sense of belonging, meaning, and connection to others (Ryan & Deci, 2020). It emerges as valuing each other, feeling significant to others, being supported, and being able to support others in the community (Ryan & Deci, 2000). Especially in the workplace, relatedness is illustrated through valuing and respecting employees, and overall considering employees' perspectives at every organizational level (Rigby & Ryan, 2018).

According to SDT, when these three basic psychological needs have been satisfied, individuals are assumed to be self-motivated, active, inspired, learning oriented, and developing their competence and knowledge (Ryan & Deci, 2000). In other words, they have strong intrinsic motivation, utilizing their full human potential and experiencing well-being (Deci, et al., 2017). SDT has been a dominant motivational theory, with need satisfaction linked to psychological well-being and optimal functioning (Teixeira et al., 2020). However, there has been discussion about whether more than three psychological needs might exist, such as beneficence (Martela & Ryan, 2020) and novelty (González-Cutre et al., 2020). From a practical perspective, the value of SDT lies not only in promoting motivation and performance but also in supporting performance, learning, and development grounded in well-being, engagement, thriving, and proactivity (Ryan & Deci, 2020).

SDT distinguishes among different types of motivation in order to understand the quality rather than the degree of motivation (Gagné & Deci, 2005). Hence, individuals can be motivated to exhibit the same behaviour based on

different reasons (Ryan & Deci, 2020). Motivation is not a one-dimensional resource; instead, different drivers or forces underlie behaviour, resulting in different qualities of motivation (Rigby & Ryan, 2018). Intrinsic or autonomous motivation refers to expressing the active, integrative tendencies of human nature (Ryan & Deci, 2020). Intrinsic motivation focuses on the behaviour itself, and the individual is guided by experiences of interest and enjoyment instead of possible rewards (Deci et al., 2017). In contrast to intrinsic motivation, extrinsic motivation results from external rewards or punishments (Ryan et al., 2021) – in other words, actions are undertaken to achieve a certain consequence (Deci et al., 2017). However, in this study the focus is not on the quality of motivation, although it is understood as an essential precondition of adult learning in the workplace and results in the satisfaction of needs.

Intrinsic motivation with high motivational quality, has been associated with many positive outcomes (Baard et al., 2004; Bauer & Mulder, 2006). For example, the fulfilment of needs leads to taking more initiative, which manifests as better learning outcomes through increased reflection processes (Hetzner et al., 2012). Needs satisfaction is associated with employee satisfaction, engagement (McAnally & Hagger, 2024), flourishing, learning, the ability to control one's own actions (Deci et al., 2017), and perceived work meaningfulness (Kubiak, 2022). Additionally, fulfilment of three basic psychological needs is associated with better performance, reduced burnout, more organizational commitment, and reduced turnover intention (Van den Broeck et al., 2016). Utilizing intrinsic motivation is associated with high-quality performance and employee well-being, although employees cannot be assumed to be intrinsically motivated all the time (Deci et al., 2017). Overall, the fulfilment of basic needs relates to positive outcomes for both employees and organizations (Rigby & Ryan, 2018) especially from the perspective of learning.

In this study, fulfilment of employees' basic needs is understood to be enabled through social and interactional practices among employees in group settings. Heztner et al. (2012) have also suggested that instead of focusing on individual abilities in self-determination, reflective skills and social interaction should be emphasized. Overall, at the interpersonal level relationships with other employees are remarkable determinants of the satisfaction of needs (Slemp et al., 2024). As modern work is completed through collaboration and team-based practices, it is important to understand to what extent individuals are engaged and motivated in group processes related to learning (Beachboard et al., 2011). These perspectives lead to focus on self-determination as a collective phenomenon among employees in the work community.

1.1.2 A collective approach to self-determination

As mentioned above, SDT has mainly focused on exploring individual-based perspectives and motivational factors (Rigby & Ryan, 2018). Considering that basic psychological needs are fulfilled and supported in relation to the social environment and its supportive practices (Ryan & Deci, 2020), to date limited research has been conducted on approaching self-determination from collective

perspective emerging among individuals. Thus, social interaction among individuals plays a crucial role in the satisfaction of needs (Martela et al., 2021; Ryan & Deci, 2000; Slemp et al., 2024), which indicate on emphasizing the relational and collective nature of self-determination and satisfaction of needs.

A collective approach to self-determination can be understood through interpersonal interaction, which facilitate engagement in certain behaviours not only at the individual level but also as part of a larger group (Martela et al., 2021). Martela et al. (2021) have developed theoretical description of communication styles based on SDT to support self-initiative, volition, motivation, well-being, and engagement through social interaction when motivating individuals in common and shared activities.

Autonomy-supportive interaction involves explaining why limits are necessary and giving clear reasons (Martela et al., 2021; Rigby & Ryan, 2018). This means also avoiding controlling language, such as “must” and “should” (Slemp et al., 2024). Competence-supportive interaction offers structure, informational and positive feedback, and guidance on how to adhere to necessary rules (Martela et al., 2021; Slemp et al., 2024). Moreover enhancing competence and structure requires clarifying goals and expectations (Slemp, et al., 2024). Relatedness-supportive interaction focus on enhancing a sense of belonging, connection, mutual bonding, and trust (Martela et al., 2021; Rigby & Ryan, 2018). Overall, interpersonal interaction and support can be viewed as an umbrella term to influence the satisfaction of all three basic needs (Slemp et al., 2024), which supports the view that self-determination is constructed through collective interaction among employees in work contexts. Previous study of Douglas et al. (2006) has also emphasized that team communication positively influences team members’ participation and engagement, which in turn highlights the importance of approaching CSD through interpersonal interaction. Although previous research has identified various interpersonal actions and forms of support that facilitate each need, it is important to note that the three needs overlap. Consequently, support for one need can have positive effects on the others as well (Slemp et al., 2024). For instance, support for autonomy has been found to enhance all three needs (Ng et al., 2012; Slemp et al., 2018). Similarly, relatedness can be assumed to support learning and strengthen the sense of competence through close relationships with others (Slemp et al., 2024).

Previous studies have indeed described that SDT’s motivational processes may also operate at the group level, i.e., in various teams and groups in work contexts. In this case, motivation and engagement stem from group membership rather than individuals themselves. This means that from group-level perspective, CSD can be described as a group’s freedom to decide what actions it takes and why (Thomas et al., 2017). This refers to a group’s collective capability to enhance its freedom and well-being (Murphy, 2014). In the field of sociology, CSD is understood to emerge when people jointly control the institutions that structure their social world (Zuehl, 2016). When groups’ collective capability to enhance their freedom and well-being is emphasized (Murphy, 2014), the focus is on the group as a whole. In particular, this refers to

how the individuals that form the group behave flexibly and communally, and how the group participants regulate their actions.

Although CSD as a concept has not been studied in organizational contexts nor in relation to workplace learning, organizations have widely utilized the idea of CSD when implementing self-organized and autonomous teams. In this study, the terms 'self-organized teams' and 'autonomous teams' are seen as synonyms (Moe et al., 2008). Self-organized teams can be understood as manifestations of CSD because they have been described as groups that have a strong self-determination, autonomy (Wall et al., 1986), responsibility (Moe et al., 2008), and control over their daily work and projects (Auvinen et al., 2018; Laloux, 2014; Langfred, 2000). This means they can control their own action (Cohen & Ledford, 1994) by setting goals, analysing problems, making plans, and evaluating performance (Laloux, 2014). As the focus is on groups behaviour, the question of entitativity should be also considered. Assumption for group processes to occur is people experiencing certain level of entitativity in a group (Blanchard & Allen, 2023).

When teams have a high degree of independence, autonomy, dedication, and collation (Patanakul et al., 2012), these aspects require increased interaction among team members (Muthusamy et al., 2005; Zaimovic et al., 2021), as well as team reflexivity (Wijga et al., 2023). Moreover, coordination, mutual support, effort, cohesion (Zaimovic et al., 2021), and the ability to align a team's tasks, goals and strategies become central to the team's performance (Nederveen Pieterse et al., 2019). Engagement, participation, and involvement result in greater commitment, motivation to perform (Moe et al., 2008; Laloux, 2014), and more innovative behaviour (Muthusamy et al., 2005). A higher sense of autonomy among employees in teams is also associated with improved performance (Ganotice et al., 2022). Additionally, the emotional intelligence of team members predicts its performance in directing and co-ordinating collective efforts (Paik et al., 2019). It has been found that if team members spent most of their time planning their activities instead of evaluating their activities or performance, this might hinder the achievement of learning and performance in the long term (Wijga et al., 2023). Hence, team efficacy has been associated with positive consequences of team performance (Rapp et al., 2014). Team efficacy refers to shared perception of teams capability to perform certain tasks (Bandura, 1997; Katz-Navon & Erez, 2005). Moreover, the question concerns group members' ability to rely on one another when performing tasks, taking action as a team, and the level of effort and time invested in sustaining those efforts (Stajkovic et al., 2009).

Furthermore, decision-making processes are central in self-organized teams (Laloux, 2014), and can be approached from a plural perspective, so that decision-making is, collectively, everyone's responsibility and accomplished through social interaction (Salovaara & Bathurst, 2018). When the completion of work tasks relies on employees' own expertise, knowledge, autonomy, and problem-solving skills, decisions should be made at the level where the knowledge is, among team members (Pearce & Manz, 2005).

Understanding at the group level is crucial for a team's development (Geerts et al., 2021), since organizations today utilize more diverse and flatter organizational structures (Bligh et al., 2006). Overall, the previous research on self-organized teams can be understood to highlight the significance of individual engagement, motivation, and participation as central elements in enabling team's self-determination and directing its own actions. Although self-organized teams have shown positive outcomes, the role of SDT—more specifically, the interpersonal support and interaction fulfilling basic psychological needs underlying engagement, motivation, and participation—has not been fully explored (Bunderson & Boumgarden, 2010).

Although self-organized teams have strong self-determination and autonomy over their own work, the concept of self-organizing teams does not imply a lack of control (Takeuchi & Nonaka, 1986) or total freedom (Bunderson & Boumgarden, 2010). Effective and productive teamwork does not occur on its own and spontaneously (Laloux, 2014) and therefore effectiveness is not always guaranteed (Geerts et al., 2021). Nederveen Pieterse et al. (2019) propose that self-organizing teams require alignment of goals and tasks among all team members, suggesting that team members' engagement and motivation play a crucial role in goal orientation. Although, employees in autonomous teams actively learn how to accomplish work tasks and adjust their actions, a one challenge remains in establishing a clear direction and setting shared goals (Moe et al., 2021). In addition, lack of clear structures may result in unwanted outcomes such as unclear responsibilities and outsourcing or absence of responsibility, which may challenge employee learning and development (Bell, 2017; Collin et al., 2021), especially if employees' knowledge and competencies are not sufficiently strong (Ashton, 2004).

In knowledge work, requiring a high degree of technology adoption or radical innovation and creativity, autonomous teams can perform better than other teams since they have stronger capabilities, freedom and autonomy (Patanakul et al., 2012). However, clear structures have been found to promote learning and continuous performance by creating a safe and predictable team environment where information is freely shared, and conflict is reduced (Bunderson & Boumgarden, 2010). In terms of learning, autonomy and self-determination should not imply loneliness, working alone, or leaving teams without support to prevent individuals and organizations from suffering (Collin et al., 2018). Without support, learning can, at worst, be entirely an individual's own responsibility, which may become burdensome and problematic (Gijbels et al., 2012; Lemmetty, 2020).

In this study, the phenomenon of CSD is understood as individuals' self-determination in group settings, where interpersonal interaction aimed at fulfilling basic psychological needs construct CSD (see Martela et al., 2021, Slep et al., 2024). Accordingly, the focus is not on self-determination as individuals' internal phenomenon, but rather on the role of the social environment and interpersonal relationships. Through individuals' engagement and motivation in group settings, not only as individual, but as participants of larger group, CSD is

approached as a group-level phenomenon. Consistent with previous literature (Murphy, 2014; Thomas et al., 2017), CSD is understood as group's collective capability to decide and direct its own actions. Drawing on SDT, this study conceptualizes basic psychological needs as being supported through interpersonal interactions in social environment (Slemp et al., 2024) highlighting the importance of exploring the supportive actions for CSD in the context of workplace learning.

1.2 Supporting self-determination in the context of workplace learning

This study explores CSD in the context of learning in the workplace, and therefore workplace learning is the central framework of this study. Specifically, the focus is on workplace learning offering a context for employees' basic psychological needs to be fulfilled and CSD to be constructed. As self-determination is understood here as a collective phenomenon based on social interaction, relationships, and relationality among employees in the context of workplace learning, it is also important to focus on supportive actions in the social environment where the CSD is expected to emerge. In this study, support is examined from two perspectives: intra-group social support emerging in collective learning situations at work, and support enacted through leadership, which is approached using the framework of coaching leadership. In the next sections, I present the frameworks of workplace learning, collective learning, and coaching leadership.

1.2.1 Workplace learning

In previous research on SDT, three needs are essential to and associated with workplace learning for three reasons (e.g., Harteis et al., 2005; Willems & Lewalter, 2012). First, autonomy is a central part of work since employees have become responsible for their own work and learning (Noe & Ellingson, 2017; Rigby & Ryan, 2018). Second, competence is directly linked to learning, because it describes employees' need to gain new knowledge and develop themselves (Rigby & Ryan, 2018). However, competence does not refer to certain professional competencies required to complete work tasks (Mulder, 2014), but as ability acquired knowledge and learning-to-learn skills. Third, relatedness refers to the socially shared and collegial nature of workplace learning in the work community occurring through social interaction and participation to socially shared practices (e.g. Billett, 2014; Collin, 2006; Tynjälä, 2008).

The concept of workplace learning has been studied in the fields of organizational studies, adult education, human resource development (HRD) studies, and vocational education (Fenwick, 2008). Workplace learning derived from adult education focuses on citizenship in society and aims to promote individual learning and considering individual needs (Watkins & Marsick, 2014).

The overlapping idea of workplace learning in both fields, in workplace learning and in HRD (Hytönen, 2002), is associated with individuals' and groups' learning processes and how to support adults' learning in organizational contexts (Watkins & Marsick, 2014; Yang, 2004). Hence, the core part of HRD is adult education (Holton et al., 2009) as adult learning theories can explain what, how, and why adults learn at work (Holton et al., 2009; Yang, 2004).

Workplace learning can be approached as formal and informal learning (Collin, 2008; Malcolm et al., 2003). Formal learning refers to formal education, training and courses, usually led by a teacher (Tynjälä, 2008), while informal learning refers to learning occurring during employees' everyday work activities (Marsick & Watkins, 2001). However, both formal and informal learning are required to develop desirable and purposeful competencies from both the individual and organizational perspectives (Svensson et al., 2004). All learning situations in the workplace include elements of both formal and informal learning (Manuti et al., 2015), and thus they are considered as interrelated and existing on a continuum (Collin, 2008; Malcolm et al., 2003; Marsick, 2009), instead of being opposites of one another (Lemmetty & Collin, 2022). Mainly, workplace learning has been described as informal learning, related to nature of the work processes and activities (Poell, 2014), which is the focus of this study.

Workplace learning can be defined broadly as learning practices and activities for work and at work (Billett, 2008). This means that learning is seen as problem-based and closely integrated with daily work processes (Kyndt et al., 2016; Janssens et al., 2017). Learning is embedded in daily work practices and is therefore approached as work-related and practice-based in nature (Collin, 2006). The aim of workplace learning is to develop and enhance employees' competencies (Mulder, 2014) such as knowledge, skills and attitudes, helping them to perform at work at present and in the future (Janssens et al., 2017). In this sense, learning can be defined as changes in individuals' and groups' thinking or behaviour (Billett, 2004).

Workplace learning requires many individual and collective resources and antecedents in the workplace (Lemmetty & Collin, 2022). In general, workplaces can influence employees' learning potential (Ashton, 2004; Billett, 2001) by focusing on situational (Collin, 2005) and context-related possibilities and opportunities for learning (Ashton, 2004; Billett, 2001). Previous understanding, expertise, motivation, ability, and commitment are all premises for workplace learning (Tynjälä, 2013), as well as curiosity, orientation to learning, and engagement (Decius et al., 2021). In addition, in today's working life, employees are expected to be active in reflecting and guiding their own learning (Cuyvers et al., 2024; Fontana et al., 2015), thus considering their learning needs, setting strategies and goals for learning as well as evaluating the outcomes, not only individually but in collective settings as well (Cuyvers et al., 2024). Hence, preconditions for learning are individuals' motivation and goals (S. Jeong et al., 2018).

In addition, workplace learning is associated with the social and contextual environment, which either supports or hinders workplace learning. The

organizational culture, frames, structures, and practices give rise to learning possibilities (Lemmetty, 2020) as well as a supportive climate and atmosphere for learning (Schei & Nerbø, 2015). Other colleagues, collaboration, teamwork (Decius et al., 2021; Kyndt et al., 2016; Schei & Nerbø, 2015; Tynjälä, 2008), collectivity (Tynjälä, 2013), and shared practices (Collin, 2005; Collin & Paloniemi, 2008) are essential premises for workplace learning. These practices emphasize the interaction between novices and experienced employees, and overall interaction between employees in the work community (Tynjälä, 2013).

Workplaces are regarded as rich learning environments where individuals can participate in different social practices and opportunities for learning (Billett, 2000, 2001, 2014). In this sense, the work community can be seen as an important learning environment (Collin, 2008) from which learning needs arise (Billett, 2014). Employees have possibility to learn through participation in everyday activities at work (Billett, 2000; Manuti et al., 2015; Tynjälä, 2013). Hence, learning includes social interaction between colleagues (Collin, 2006, 2008) and the relationship between individual and social practices shapes the learning processes (Billett, 2014). Learning situations can be viewed as collective, shared, and relational in nature (Collin, 2005). Therefore, learning can be achieved through co-operation, dialogue, and interaction with other employees in the work community (Khandakar & Pangil, 2019; Kyndt et al., 2016; Riera Claret et al., 2020). However, this requires opportunities to share knowledge and understanding (Riera Claret et al., 2020) between employees and generally, with challenging work tasks offering opportunities to learn (Schei & Nerbø, 2015). Overall, learning and social interaction in the workplace can be regarded as intertwined elements (Billett, 2014; Collin, 2008). The shared and collective nature of learning is the central perspective in this study, as social communities and communal activities create a space for learning when these practices are shared through social interactions within employees in teams, groups, and networks (Collin, 2008).

1.2.2 Collective workplace learning

In this study, learning at the workplace is understood as collective learning. Hence, collective learning as the context for CSD is the important starting point of this study. In collective learning, work tasks are completed through collaboration and teamwork requiring social interaction among employees, which means that the learning processes are intertwined with the social context around the employees and the work community (Collin & Valleala, 2005). Learning as a collective activity emerges when employees speak, teach, instruct, demonstrate, or otherwise guide a colleague's learning (Billett, 2014). Concrete forms of learning in the workplace include asking for help, guiding others in work tasks (Collin, 2008; Smet et al., 2022), observing colleagues' actions (Bjørk & Sørensen, 2013; Smet et al., 2022), actively retrieving information (Kyndt et al., 2009), and learning through trial and error in collaboration with colleagues (Tynjälä, 2013). In such collective learning situations, more experienced or expert employees play a major role in guiding their colleagues (Billett, 2014; Tynjälä,

2013). However, learning does not occur only when employees guide or teach their colleagues. Instead, learning is part of everyday work situations and actions in the work community (Billett, 2014), whether these situations emerge intentionally or not, or whether they are guided or spontaneous (Billett, 2014; Janssens et al., 2017).

Collective learning occurs when employees work together interactively (I. Jeong & Shin, 2019) and the social context and collective activities in the workplace are linked to the construction of learning (De Laat & Simons, 2002). Accordingly, employees strive for common shared learning and work outcomes (De Laat & Simons, 2002). However, learning from others is not the only form of collective learning (Döös & Wilhelmson, 2011; Garavan & McCarthy, 2008). It is required that learners together develop a shared understanding of and meaning for the learning process (Döös & Wilhelmson, 2011; Garavan & McCarthy, 2008), resulting in new knowledge and understanding (Döös & Wilhelmson, 2011). In this way, collective learning processes are dynamic and cumulative (Garavan & McCarthy, 2008), emphasizing the social interaction between individuals (Garavan & McCarthy, 2008; Gubbins & MacCurtain, 2008).

In addition to social interaction, critical reflection highlights the nature of collective learning, that is, critiquing the social presuppositions on which understanding and beliefs are built (Knapp, 2010). Consequently, employees in teams should also reflect on their performance (I. Jeong & Shin, 2019; Prilla et al., 2012). In the work context, collective learning is accompanied by team learning (Knapp, 2010), since both collective learning and team learning refer to learning that takes place in teams and groups in the workplace (Gubbins & MacCurtain, 2008; Knapp, 2010).

In contemporary working life, collective learning among colleagues is critical for organizational success (De Laat & Simons, 2002; Knapp, 2010), as it refers to learning in teams required to complete work tasks. Teams possess understanding and knowledge that one individual employee alone cannot manage (Pearce & Manz, 2005). However, the different principles of collective learning in different environments and contexts have to be considered (Garavan & McCarthy, 2008), giving rise on how it can be supported (De Laat & Simons, 2002). While in collective learning employees take action, obtain and reflect feedback, and make changes to adapt or improve, these actions should be supported by resources for learning in the social and contextual environment (Knapp, 2010). When workplaces are considered as learning environments, they also contain guidance, structure, support and pedagogical practices (Billett, 2001, 2004, 2014). Although employees and teams themselves have more responsibility for work and learning (e.g., Noe & Ellingson, 2017), employees participating in everyday learning should be supported by leadership actions (e.g., Billett, 2014; Coetzer et al., 2019; E. Ellström & Ellström, 2018; Wallo et al., 2022, 2024). Support and guidance from management and supervisors are vital for enabling workplace learning (Coetzer et al., 2019; Ellinger, 2005; Eraut, 2004; Skule, 2004) on a daily basis by creating a climate and culture supportive of learning.

1.2.3 Leadership supporting self-determination and workplace learning

This study focuses on supervisors' actions supporting CSD through basic psychological needs in the context of collective workplace learning. In recent years, responsibility for supporting employees' learning and development has increasingly shifted from organizations to supervisors and middle managers (e.g., Ellinger et al., 2003; Noe & Ellingson, 2017; Torraco & Lundgren, 2020). Leaders perform a decisive role in developing and strengthening learning cultures and practices in organizations (E. Ellström & Ellström, 2018; Viitala, 2004) by offering learning opportunities (Billett, 2001). Although supervisors' roles as supporters of learning have increasingly been the focus of studies in recent years (e.g., Ellinger et al., 2008; E. Ellström & Ellström, 2018; Hughes, 2004; Wallo et al., 2022, 2024), studies have also pointed out their difficulty in recognizing (Dawber, 2019) this new role (J. T. Huang & Hsieh, 2015). Specifically, leaders might not be aware of the positive outcomes related to supporting the basic needs (Manganelli et al., 2018) behind learning and development in working life.

It has been argued that organizations should move from directive and controlling leadership actions to those that are developmental in nature, coaching-oriented and based on social interaction when supporting learning (Agarwal et al., 2009). However, changing from an authoritative role offering straight directions to employees to an empowering and developmental role might be challenging for supervisors (Ellinger et al., 2008). Developmental practices focus on creating circumstances conducive to openness, variation, and multifaceted thinking, as well as broadening employees' influence on their work instead of restricting their power (Döös & Wilhelmson, 2011; E. Ellström & Ellström, 2018). By contrast, if supervisors themselves are not engaged in learning and utilize an authoritative or controlling leadership style, employees' learning will be negatively affected (Ellinger, 2005).

Based on learning-oriented leadership studies, learning can be supported by creating a supportive climate (Viitala, 2004; Wallo et al., 2024), acquiring in resources (Wallo et al., 2024), and supporting innovative thinking and critical reflection (Wallo et al., 2013). Within a community, learning can be supported by helping to create a shared vision, helping with information seeking, sharing, and application, and by encouraging risk-taking and experimentation (Coetzer et al., 2019). Hence, individuals' and teams' learning can be supported by the supervisor serving as a role model (Hillberg Jarl, 2024; Viitala, 2004), offering relational support and negotiating meanings with employees (Hillberg Jarl, 2024). This type of leadership can be described as adaptive, hands-on leadership that includes participatory behaviour by a supervisor on a daily basis (Wallo et al., 2024, 2022). Overall, supervisors' supportive learning practices can be either direct or indirect (Coetzer et al., 2019), planned or spontaneous (S. Jeong et al., 2018), but should consider workplace learning at all levels: individual, group, and organizational (Lundqvist et al., 2023).

Previous leadership studies utilizing SDT have focused on, for example, the role of leadership in enhancing employees' performance (Manganelli et al., 2018), satisfaction, motivation (Autin et al., 2022; Tuin et al., 2021), meaningful work

(Autin et al., 2022; Matsuo et al., 2019; Kubiak, 2022), well-being (Sarmah et al., 2022), and innovative work behaviour (Messmann et al., 2022). Given the increasing emphasis on expertise and learning in the workplace, leadership should prioritize empowering employees and enhancing their self-determination through learning-oriented approach (e.g., Ellinger, 2005). Consequently, supervisors' should acknowledge the motivational processes behind employees' learning and behaviour (Deci et al., 2017; Manganeli et al., 2018).

Previous research has demonstrated that coaching leadership yields positive outcomes in employees' learning, performance, and well-being by supporting self-determination and fulfilment of basic psychological needs (Gabriel et al., 2014). Beyond individual-level outcomes, facilitative coaching leadership has also been linked to enhanced team effectiveness through increased commitment among team members (Weer et al., 2016), which constitutes an important premise of CSD. Accordingly, as this study aims to examine self-determination from a collective perspective, coaching leadership provides as a relevant framework by addressing both individual and group-level perspectives (Matsuo, 2018).

1.2.4 Coaching leadership: Integrating individual and collective perspectives of self-determination

As previous research has been recognized supervisors as coaches, educators, and facilitators of learning (e.g. Agarwal et al., 2009; Ellinger et al., 2003; Wallo et al., 2013), supervisors can utilize coaching leadership to promote learning in a sustainable way (Bond & Seneque, 2013). Coaching leadership has been viewed as a dominant approach over the last two decades for supporting employees' learning (e.g., Agarwal et al., 2009; Ellinger et al., 2003; Park et al., 2008), including at the group level (Hackman & Wagemann, 2005; Matsuo, 2018). However, it is important to note that the learning-oriented leadership framework, under which coaching leadership can be situated, has been developed from and combined with aspects of broader leadership theories, such as transformational leadership and instructional leadership (Lundqvist et al., 2023; Wallo et al., 2024). Transformational leadership (Bass & Riggio, 2006) has been described as a central leadership style related to employee learning outcomes in workplaces and is closely associated with learning-oriented leadership (Wallo et al., 2024). Since this study focuses on practical leadership actions on a daily basis, the coaching approach, based on a hands-on, adaptive, and participative perspective (Wallo et al., 2024), was considered as a suitable approach.

Coaching leadership can be specifically described as behaviour deemed facilitative of learning (Lundqvist et al., 2023). This means helping employees to develop themselves to improve their work performance (Park et al., 2008), grow, and utilize their full capacity in terms of work and learning (Pajuoja et al., 2025). As coaching leadership is based on a co-operative relationship between employees and their supervisor, it can be approached as a collaborative and shared process in the work community (Dawber, 2019). Coaching leadership concentrating on learning in terms of strategic action and cultural change

considers the developmental needs of individuals, teams, and organizations (Bond & Seneque, 2013). It therefore acknowledges both employee learning and the organization's performance (Berg & Karlsen, 2007). Consequently, coaching aims to support both individual and team autonomy (Ruiz-Palomino et al., 2021), while also facilitating learning at both the individual and group levels (Dawber, 2019; Hagen, 2012; X. Liu & Batt, 2010). In this way employees' learning in different levels can be integrated into an organizational learning-supportive culture, where everyday learning situations and opportunities for development and learning can be utilized through daily interactions (Park et al., 2008).

In practice, coaching includes clarifying common goals, evaluating performance, development, and learning needs (Beattie et al., 2014; Berg & Karlsen, 2007). It focuses reflecting on work and learning and strengthening employees' mutual relationships and co-operation in teams (Beattie et al., 2014; Berg & Karlsen, 2007). The focus is on helping employees with individual thinking and decision-making (McCarthy & Milner, 2013; Wageman, 2001), but also on structuring and implementing work in teams, such as offering resources, helping individuals to contribute to the team, and generally helping the team to use its collective resources (Hackman & Wageman, 2005). From group-level perspective, coaching focuses on enhancing the team's ability and performance in managing its own actions (C.-Y. Liu et al., 2009). Coaching is also associated with employees' innovative work behaviour (Pajuoja et al., 2025), in terms of which supervisors support innovative behaviour through employee engagement (Viitala et al., 2023) and self-determination. Moreover, if coaching leadership is integrated with SDT, organizations could achieve not only learning, development, and performance, but also motivation and well-being in sustainable way (Gabriel et al., 2014).

From the perspective of SDT, coaching leadership could support CSD through the fulfilment of basic psychological needs in three ways. First, to support autonomy, supervisors should offer a platform for employees to express their ideas and suggestions (Forner et al., 2020) by utilizing participative or consultative decision-making processes, minimizing control, and offering choices (Manganelli et al., 2018). Supervisors should have negotiations, and provide reasonable explanations for the decisions made, thereby enabling employees autonomously engage these decisions (Forner et al., 2020).

Second, competence can be supported by offering employees well-structured environments, which offer optimal challenges and opportunities for development (Rigby & Ryan, 2018; Manganelli et al., 2018) so that they can learn also autonomously by themselves (Dawber, 2019). Guiding and creating learning situations (Forner et al., 2020), as well as utilizing these situations, and providing positive and constructive feedback, support employees' sense of competence (Forner et al., 2020; Manganelli et al., 2018).

Third, a sense of relatedness can be supported by showing respect and valuing employees' work (Rigby & Ryan, 2018). Supporting social interactions, interpersonal relationships and collaboration among the work community facilitate relatedness (Forner et al., 2020; Manganelli et al., 2018). These strategies

are important because they create opportunities for employees to understand each other, develop common ground, and establish a shared direction at work (Forner et al., 2020).

Overall, supervisor's actions that foster employees' intrinsic motivation are positively associated with employees' need satisfaction, which in turn leads to well-being, engagement, and positive work behaviour (Slemp et al., 2018). When leaders supportive actions are addressed to basic needs, employees can have a greater sense of autonomy in their workplace learning, foster connections with colleagues around learning and demonstrate greater learning abilities also through self-initiated behaviour (Hein & Urban, 2025).

1.3 Summary of the theoretical approach, frameworks and perspectives of the study

In this study, I examine CSD in the context of learning as a phenomenon that can be supported through leadership. Accordingly, in addition to SDT, this study also applies the frameworks of workplace learning, collective learning, and coaching leadership. CSD is conceptualized in terms of fulfilment of three basic psychological needs, autonomy, competence, and relatedness (Rigby & Ryan, 2018). More specifically, CSD is approached in this study in two levels, as individual-level self-determination in group settings and as collective phenomenon constructed at the group level through social interaction. In addition, a supportive perspective on CSD is considered. CSD is explored in the context of workplace learning, and more specifically collective learning, which means that through shared practices and social interaction occurring in workplace learning (Billett, 2000, 2001, 2014) employees basic needs underlying CSD are fulfilled. Therefore, workplace learning and more specifically collective learning situations (e.g., Billett, 2014; Collin, 2006), are understood as a context for employees' to construct CSD at workplace.

Previous studies on self-determination have emphasized the role of interpersonal interactions among employees in facilitating the satisfaction of basic psychological needs (e.g., Slemp et al., 2024). Therefore, from a supportive perspective, this study considers both intra-group social support emerging between individuals (e.g., Hein & Urban, 2025) and supervisors' leadership actions (e.g., Forner et al., 2020; Pajuoja et al., 2025; Park et al., 2008). As this study explores self-determination from a collective perspective, coaching leadership is understood to address both individual-level developmental goals, motivation, and learning (Dawber, 2019; Matsuo, 2018; Ruiz-Palomino et al., 2021), alongside group-level autonomy, capabilities, and resources (Hackman & Wageman, 2005; X. Liu & Batt, 2010; C.-Y. Liu et al., 2009; Ruiz-Palomino et al., 2021). The main aim of supervisors is to coach employees in group settings to utilize work situations as collective learning situations (Dawber, 2019; Park et al., 2008). In both case organizations, supervisors are understood as persons who guide other

employees' work on daily basis or have an official supervisory role. In this study, coaching leadership is conceptualized as supporting both workplace learning and self-determination (see Figure 1). Consequently, the presented frameworks are considered suitable for exploring CSD, and may be approached as socially constructed phenomena within workplace context.

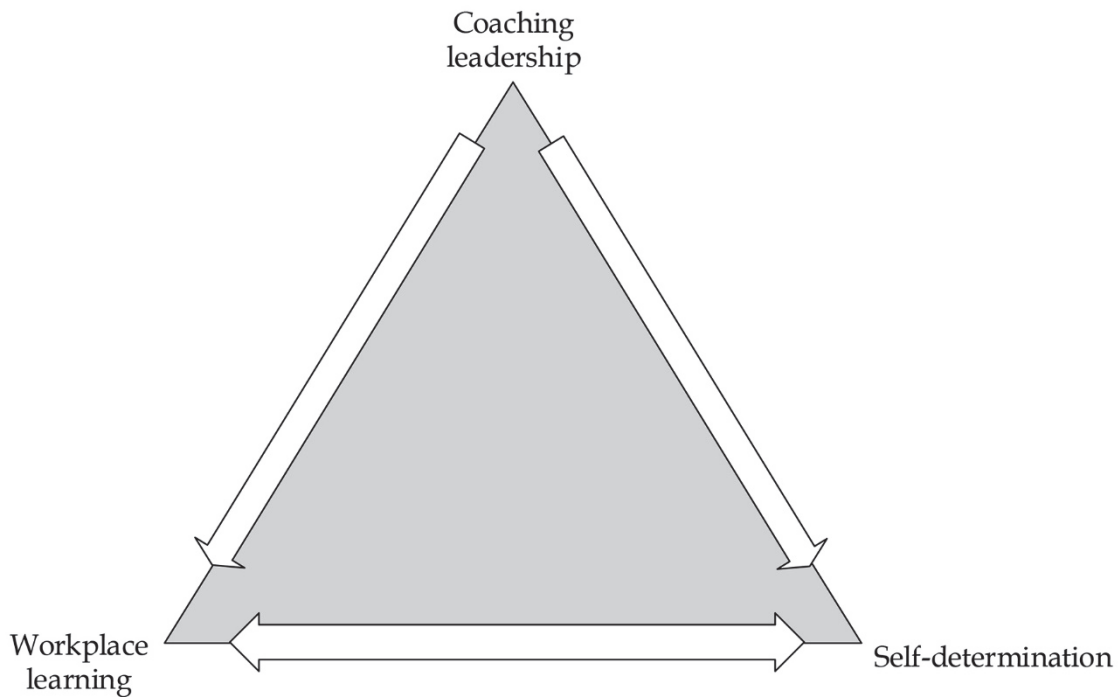


FIGURE 1 Summary of the theoretical approach of the study

1.4 Research aim, questions and sub-studies

The aim is to develop the understanding of CSD and its supportive actions in the context of workplace learning. This was done by exploring the CSD in two different work contexts, a central hospital and a technology organization. Thus, the study addresses the following three overarching research questions:

1. How is collective self-determination described in workplace learning situations in a central hospital and in a technology organization?
2. How does collective self-determination emerge as an interpersonal phenomenon in workplace learning situations in a central hospital and in a technology organization?
3. What kinds of actions support collective self-determination in workplace learning situations in a central hospital and in a technology organization?

In this study, CSD in workplace learning was explored on three examination levels: 1) descriptions (of self-determination through collegial practices), 2) speech actions (for self-determination as collective construction) and 3) conceptions (of supportive actions for self-determination). Beginning with the first sub-study, which focused on the practices of CSD as basis, the research progressed to the second sub-study, which explored more specifically the phenomenon at the interactional level by focusing on speech actions constructing CSD. Lastly, the supportive perspective offers a comprehensive and broad understanding of intra-group and leadership actions supporting CSD in workplace learning. The three sub-studies were conducted to answer the overarching research questions on three examination levels. Table 1 presents the relationships between the sub-studies and the overarching research questions.

TABLE 1 Relationships between the sub-studies and the overarching research questions

Empirical sub-studies		Overarching research questions
Descriptions of employees' self-determination through collegial practices in workplace learning situations (descriptions)		How is collective self-determination described in workplace learning situations in a central hospital and in a technology organization?
Construction of collective self-determination among employees in development-oriented group discussions (speech actions)		How does collective self-determination emerge as an interpersonal phenomenon in workplace learning situations in a central hospital and in a technology organization?
Conceptions of leading of learning based on self-determination in supervisory work (conceptions)		What kinds of actions support collective self-determination in workplace learning situations in a central hospital and in a technology organization?

Examining the collective nature of self-determination through descriptions, speech actions, and conceptions facilitated answering the overarching research questions. The three sub-studies were conducted to answer the overall aim of this study, that is, to develop the understanding of CSD and its supportive actions in the context of workplace learning.

2 METHODOLOGY

Previous researchers have called for more empirical and qualitative research on SDT (Ryan & Deci, 2020), especially in the organizational context (Gagné & Deci, 2005) and in different learning environments (Hsu et al., 2019). In this study, by utilizing a qualitative multiple-case study approach with two cases (Creswell & Poth, 2017), the CSD is explored in the context of workplace learning. The multiple-case study allows the development of comprehensive, in-depth, and systematic understanding of the phenomenon across cases, thereby revealing contextual differences between them (Patton, 2015). Therefore, context-related variations and similarities between the cases provide a better understanding of the phenomenon. First, I will describe the multiple-case study research strategy utilized in this study and its ontological and epistemological underpinnings. After this, I will present the research contexts, collected data, and utilized analytical methods.

2.1 Multiple-case study research

The case study research strategy focuses on understanding social phenomena by creating a description based on detailed examples (Bloor & Wood, 2006). Whether case study research uses one case or many cases, the aim is to develop an in-depth understanding of a particular phenomenon as it manifests in selected cases (Creswell & Poth, 2017) by describing and qualitatively interpreting social groups in specific settings (Bloor & Wood, 2006). Multiple-case approach has been described as particularly suitable for investigating under-explored yet significant phenomena (Eisenhardt, 2021). In this study, the multiple-case study approach was considered as a suitable approach as CSD has not previously been explored in the context of adult education or workplace learning. The utilization of multiple-case approach enables the development of a detailed and rich understanding (Eisenhardt & Graebner, 2007) of CSD and its supportive actions in the context of workplace learning. Hence, this means also capturing the

various nuances of CSD. Specifically, multiple-case study was adopted as a suitable research strategy as aim was to advance the understanding of SDT at a collective level within workplace context.

In this study, the cases under analysis are two Finnish work organizations, a central hospital and a technology organization. The selection of cases based on the assumption that these two organizations would be suitable for revealing the phenomenon under investigation (Eisenhardt & Graebner, 2007). It was anticipated that the phenomenon would be present in both cases (Eisenhardt, 2021). Specifically, the focus was on employees' everyday work and learning in these organizations. As this is a multiple-case study, two cases were purposefully selected to show different perspectives (Creswell & Poth, 2017) on the phenomenon of CSD. These purposefully selected cases differ in terms of the field of work, culture, history, and hierarchy of the settings. Although this is not a comparative study, the aim was to focus on both similarities and differences across the two cases (Miles et al., 2014) as it could improve the building understanding of the phenomenon (Eisenhardt, 2021). The selection of only two cases was deemed appropriate, as the focus in multiple-case study is not on the number of cases per se, but rather on the assumption that the chosen cases provide in-depth and rich insights into the phenomenon under investigation (Eisenhardt & Graebner, 2007). Accordingly, the use of two cases is common in multiple-case study designs (Eisenhardt, 2021). Moreover, compared to a single-case study, multiple-case studies offer the advantage of producing findings and definitions that are grounded in more than one context, thereby contributing to a more accurate and nuanced understanding of the phenomenon (Eisenhardt & Graebner, 2007).

The case study research strategy is often described as the exploration of a limited system; however, the challenge is to define the boundaries of the cases in terms of both time and space (Bloor & Wood, 2006). In this study, the boundaries are understood to refer to the organizations' boundaries, for example, in terms of social systems, place, and time. However, social systems are rarely limited, and although there were boundaries as in the case of organizations, these were constructed by the participants or for me as a researcher (Bloor & Wood, 2006). In this study, the boundaries of the cases are constructed by the personnel of the organizations, and I as the researcher defined the boundaries of the cases in terms of the organizations' operational, hierarchical, and social boundaries, and responsibilities. In the present study, the boundaries of the cases refer to organizational units employees are working on a daily basis.

Another challenge is identifying cases, thus the scope of a case, as the case itself, or the issue which the cases are selected to illustrate, can be explored (Creswell & Poth, 2017). This study explored CSD in the employees' work-related learning situations, as illustrated by the cases, a central hospital and a technology organization. Moreover, the targets in this multiple-case study are individuals and groups (Creswell & Poth, 2017; Patton, 2015) working in organizations. In this regard, this specific multiple-case study can be described as an instrumental case study where case study is a method to understand a phenomenon by

studying specific cases (Stake, 1995). Hence, a case such as the organization can be understood as a pathway to exploring the social phenomenon (Silverman, 2024). To gain a comprehensive, rich, and deep understanding of the phenomenon, I utilized data from multiple sources with multiple analytical methods, which is typical in case study research (Creswell & Poth, 2017; Bloor & Wood, 2006). Overall, in the multiple-case study approach, the findings are grounded in diverse empirical evidence, which supports the understanding produced (Eisenhardt & Graebner, 2007).

2.2 Epistemology and ontology

Case study research can be accompanied with multiple epistemological orientations; however, the approach should correlate with the choices of research methods (Takahashi & Araujo, 2020). In this study, the epistemological and ontological assumptions rely on a constructivist paradigm where knowledge and understanding of the world and reality are socially negotiated, and socially constructed (Berger & Luckmann, 1966; Burr, 2015) and maintained in interactions through linguistic practices (Cunliffe, 2008). Knowledge emerges and is constructed among people through social and communal processes and interchanges (Gergen, 2004; Slater, 2017) and is culturally and historically specific (Young & Collin, 2004). When knowledge is viewed as continuous, dynamic, and based on the developed and shared experiences of human communities, the construction of knowledge should be explored at the level of socially shared realities in the community (Slater, 2017). In this sense, the focus is not on the individual mental and cognitive processes of knowledge building (Young & Collin, 2004; Cunliffe, 2008), but on the social factors and features shaping people's interpretations of how the world is constructed by relational and social practices and processes (Young & Collin, 2004). This means that reality is closely linked to individual subjective experiences, linking constructivism to a relativist paradigm (Slater, 2017). Reality is constituted and maintained through language and conversation (Cunliffe, 2008) and thus made visible, tangible, and real in social situations (Slater, 2017). Consequently, language constitutes reality rather than reflecting reality (Young & Collin, 2004).

In the second sub-study of this dissertation (Keronen et al., 2024), the constructivist paradigm is particularly strong. In the second sub-study knowledge is regarded as being developed through social practices (Young & Collin, 2004) and constructed in discursive processes through linguistic practices (Cunliffe, 2008). Therefore, the construction of CSD is explored at the interactional and interpersonal level (see McLeod et al., 2010).

With respect to individual sub-studies of this dissertation, and the constructivist viewpoint, phenomenography as a qualitative research approach was utilized in the third sub-study (Keronen et al., 2025), as its analysis methods focused on investigating qualitatively different ways of experiencing or thinking about a certain phenomenon (Marton, 1986). The aim of the phenomenographic

approach is to explore participants' lived worlds, as well as their reflections, conceptions, descriptions, and awareness of a specific phenomenon in the way it appears to them (Hajar, 2021). Additionally, although phenomenography was not utilized as the analytical method in the first sub-study of this dissertation (Keronen et al., 2023), the focus in the first sub-study was on revealing individuals' different descriptions of the phenomenon.

Central to phenomenography is the Husserlian idea that the way humans experience things arises from phenomenology (Cibangu & Hepworth, 2016). Critical studies of phenomenography (e.g., Cibangu & Hepworth, 2016; Hajar, 2021) suggest that combining the assumptions and underpinnings of phenomenology with phenomenography (Cibangu & Hepworth, 2016) would strengthen the phenomenographical research approach (Stolz, 2020). Therefore, the roots of phenomenography can be approached from the epistemological underpinnings of phenomenology, emphasizing phenomena, experience, knowledge, and intentionality (Stolz, 2020). In phenomenography, the aim is to explore the essence of the experiences and perceptions of a phenomenon, as opposed to phenomenology, where the essence of the phenomenon itself is the focus (Cibangu & Hepworth, 2016). In addition to the difference between first- and second-order perspectives, phenomenography shares with phenomenology the idea of a non-dualistic perspective, experiences, contextuality, and qualitatively aspects (Marton, 1986, p. 31, 40). In this study, the focus is on various experiences in constructing conceptions and descriptions of the phenomenon aiming to produce a qualitative, relational, and context-related understanding of knowledge.

Ontological assumptions of phenomenography emphasize individuals' different ways of being aware of a phenomenon and how their understanding might change over time (Hajar, 2021). This non-dualist ontological perspective means that a person and the world are seen as inseparable in relation to each other (Marton, 2000). Hence, the world is simultaneously real and experienced (Marton & Booth, 1997), which means that the only world individuals can communicate is the one they are experiencing (Hajar, 2021). Consequently, knowledge and understanding are based on individuals' various and lived experiences in certain settings, whether utilizing either phenomenology or phenomenography (Stolz, 2020).

When constituting the conceptions and expressions of lived experiences (Stolz, 2020), language is used to express conceptions and understanding (Huusko & Paloniemi, 2006). Hence, these linguistic practices (Cunliffe, 2008) associate phenomenography with constructivism. From a larger paradigm, both phenomenography (Åkerlind, 2012) and constructivism rely on an interpretive paradigm (Slater, 2017). The interpretative tradition, or interpretability, emphasizes meaning instead of an objective truth to be found in the social world (Takahashi & Araujo, 2020). Thereby, knowledge and the social world are viewed as socially constructed (Takahashi & Araujo, 2020; Slater, 2017).

Based on the constructivist assumptions described above, this study constructs the reality and understanding of the phenomenon under exploration,

and thus findings presented in this study are constructed by me as the researcher. When studying CSD in workplace learning based on the above-mentioned frameworks, social practices at the community level (including shaping and enabling social actions) and interpersonal interaction, such as speech actions and how issues are expressed, were considered. Overall, knowledge and social actions are viewed as intertwined in this study (Young & Collin, 2004).

2.3 A central hospital and a technology organization as contexts for the study

In this study, CSD was explored in a central hospital and a technology organization in Finland. Many issues in both industries have been under general discussion recently. In the health-care sector, there have been many changes and challenges, such as finding committed and engaged employees and retaining employees already working in the field. The reasons behind these challenges are related mainly to working conditions, climate, salary, and workload. Moreover, the hierarchical structures and lack of workforce may challenge employees' flexibility, freedom, and overall ability to work and learn in meaningful ways, thus increasing the workload of employees currently in the field. At the same time, technological changes require employees to constantly learn new systems in addition to their primary work tasks, that is, taking care of patients.

The technology industry has been growing exponentially and continues to evolve. The challenges in the technology sector are related to difficulties finding competent and skilled employees, as organizations have been competing for employees in recent years. In this sector, change is inevitably part of work and organizations gain a competitive advantage by relying on employee competencies, expertise, and hence continuous learning and development.

2.3.1 Self-determination and collective learning in a central hospital and a technology organization

Organizations based on knowledge-intensive work, such as hospitals and technology organizations, can be considered places where learning and competence development are a necessary part of work on a daily basis. In terms of the hierarchy of traditional organizations, such as hospitals, top management often makes more significant decisions and directs employees. However, autonomy does not only depend on the structure of the organization. In hospitals, autonomy is an essential feature of the work of both physicians and nurses (Clarke, 2005). Nurses are independent in their daily work of caring for patients, although they are not responsible for administrative and organizational decisions and actions (Varjus et al., 2011). Likewise, physicians are trained during their studies to be independent and autonomous in a clinical learning environment (Liljedahl et al., 2019). Therefore, hospitals are multifaceted and

complex learning environments (Cronin, 2014), especially from a hierarchical point of view (Riera Claret et al., 2020).

Autonomy and self-determination together with communality are essential requirements of work for both nurses and physicians in their daily work (Clarke, 2005). Consequently, consulting with others and interprofessional teamwork are typical ways to complete everyday tasks and learn in hospitals (Pimmer et al., 2013). Organizational practices and cultural forms (Newton et al., 2015), work environment (Clarke, 2005), and recognizing everyday work tasks and situations as learning situations frame employees' learning possibilities (Cuyvers et al., 2024). Especially the nature of social interaction (Newton et al., 2015), sharing knowledge, and participation in shared practices should be considered in relation to learning in hospitals (Riera Claret et al., 2020). Moreover, learning might emerge as reactive and unexpected in hospitals (Cuyvers et al., 2024), which might create challenges for employees in terms of developing their competencies during daily work tasks. Learning requires sufficient support and pedagogical practices integrated into daily work.

In the technology industry, digitalization and the rapid development of technologies require employees to engage in learning in response to continuous performance demands in the field (Ha, 2015). Technology organizations often have a less hierarchical configuration (Lee & Edmondson, 2017) because they utilize agile developmental methods, requiring different teams and organizational structures (Moe et al., 2008). Employees' autonomy and flexibility are enhanced (Cerasoli et al., 2018) by minimizing hierarchy, creating independent and autonomous teams, and even allowing for nonleadership (Auvinen et al., 2018; Collin et al., 2018). Thus, power, responsibility, and the opportunities for decision-making by individuals and teams are greater (Moe et al., 2008; Rigby & Ryan, 2018), requiring strong self-determination also in a collective manner.

To summarize, in both hospital and the technology sector, autonomy and freedom have been found to be essential preconditions for completing complex work tasks (Saks & Leijen, 2014) and learning and development in knowledge-intensive work (Clarke, 2005; Lemmetty, 2020). Ensuring employees' self-determination is important because external control may negatively affect learning and creativity (Collin et al., 2018). Moreover, in both fields, work tasks cannot be accomplished solely through individual-oriented actions and behaviours. Instead, various collective work practices and team-based approaches are utilized on a daily basis.

2.3.2 The target organizations of the study

In this study, two target organizations were examined, a central hospital organization in Finland and a technology organization also operating in Finland. These two organizations differ from each other in terms of hierarchy, culture, history, and industry. Despite the differences, in both organizations learning, continuous development, autonomy, and self-determination are eminently included in daily work. The complex nature of learning, communality,

collaboration, and autonomy required to complete work tasks makes these contexts interesting setting for exploring CSD and its supportive actions in the context of workplace learning.

The participating central hospital organization is one the largest hospitals in Finland, employing approximately 2,500 employees. The study was conducted in the operational unit, in which personnel work as physicians, nurses, and head nurses. In their daily work, physicians and nurses are required to work flexibly together caring for patients. The participating technology organization is a midsize organization from Finland with over 550 employees. The company serves Finnish clients from other industries, the public sector and international organizations from over 30 countries. Personnel work as, for example, software developers, IT experts, salespersons, and project and line managers. In this organization, teamwork and leadership practices have been consciously developed as part of the work culture to support and enhance employees' continuous learning and development. The organization does not call itself a self-organized organization, but it utilizes low-hierarchy, flexible, and self-organized ways to conduct its everyday work flexibly. Moreover, employees utilize various webtools, digital communication tools, and remote and hybrid work on a daily basis.

2.4 Data of the study

The data utilized in this study (see Table 2) was collected using semi-structured interviews (Patton, 2015; Tracy, 2010), group discussions (Patton, 2015), and diaries (Day & Thatcher, 2009; Silverman, 2024), as a multiple-case study usually employs multiple methods of data collection (Bloor & Wood, 2006; Eisenhardt, 2021; Yin, 2018). Data were collected during Autumn 2021 and Spring 2022 in both target organizations as part of a larger research and development project exploring sustainability of workplace learning (Collin et al., 2023). Before the data collection, participating employees were informed by the researcher about the aims of the research and received information about consent, data protection and the study via e-mail. They were also informed about the study by their organization's supervisor and, therefore, received permission from their own supervisor to participate in the study. It is worth noting that the data utilized in this study can be described as secondary data originally collected for a different project, and not with a purpose to explore specifically employees' self-determination and CSD in the context of workplace learning.

TABLE 2 Data of the study

Organization	Central hospital	Technology organization	Total
Interviews	26	30	56
Group discussions	81 min	99 min	180 min
Diaries	9	20	29
Data collection time	2021 & 2022		

Data collection began with interviews ($N = 56$) in both organizations. Participants were randomly selected from those who volunteered to participate in the study. Consent was obtained from each participant. Data protection and privacy issues were discussed before the interviews. The interviews in both organizations were conducted remotely using Microsoft Teams. The interviews were structured as individual, semi-structured, thematic interviews (Patton, 2015) and sought to collect data based on participants' views, perceptions, and experiences of the phenomenon under review (Patton, 2015; Tracy, 2010). The themes discussed included competence development, workplace learning, work community, motivation, self-determination, and leadership work. Examples of questions include the following: 'How do you learn at work?', 'Do you feel that you have opportunities to learn at work?', 'What kind of help or support would you need to develop your competencies?', 'How is learning supported in your organization?', 'What kinds of things motivate you at work?', 'How would you describe the daily leadership work?' and 'What does supervisory work mean to you?' It is necessary to point out that the questions in semi-structured interview did not touch straight employees basic psychological needs or CSD, and the interview guide was not constructed based on SDT. Open conversation between interviewer and interviewee was emphasized, which allowed for the asking of follow-up questions, clarifying an interviewee's answer or advising an interviewee if necessary. Hence, each interview consisted of different follow-up questions. An overview of the participants can be found in Table 3.

TABLE 3 Participants of the study

Organization	Central hospital		Technology organization
Job titles	Physician	Nurse, head nurse	E.g., project manager, team leader, design engineer, IT expert, salesperson
Number of employees	6	8	13
Number of supervisors	8	4	17
Total number of personnel	26		30
Total number of participants	56		

After the interviews, the data collection continued with group discussions ($N = 180$ min), which took the form of face-to-face development-oriented group discussions. These group discussions were similar to focus group interviews in terms of creating an interactive space for participants to express their understanding, knowledge, and competencies, to engage, and to encourage others to share in the discussion (Patton, 2015). Group discussions were viewed as a suitable data collection method to explore the construction of a specific social phenomenon, as participants had a shared background and experiences from their daily work contexts (MacNaghten & Myers, 2004; Patton, 2015). However, the group discussions were not rigidly structured or formal in terms of the interview questions. Instead, an open conversational style and open-ended questions were utilized. These group discussions were conducted in planned settings as opposed to natural settings (Patton, 2015).

The data consist of four group discussions, two from the hospital (one group) and two from the technology organization (groups 1 and 2). Participants were supervisors or employees who usually guided other employees in their daily work in both organizations. From the hospital, physicians and head nurses participated, and from the technology organization, team leaders and project managers participated. Participants from both organizations mostly knew each other, although they had not all worked with each other on a daily basis. The group discussions included only a limited number of participants (Patton, 2015), varying from four to five participants per group. The duration of the discussions varied between 31 and 57 minutes. The group discussions were conducted by two people, one facilitating the conversation and the other taking the role of researcher. I played the role of facilitator in the hospital group.

The aim of the group discussions was to develop participants' understanding and knowledge of supporting employees' workplace learning in supervisory role in their own work contexts. The themes touched on workplace learning, a culture and climate for learning, and supporting learning as a supervisor. At the beginning of each group discussion, a brief orientation on the topic was presented by the facilitator and then the group was given open-ended questions that had been developed beforehand. The content for each discussion was planned by the facilitator and the researcher. The group discussions focused on open and informal conversation, in which participants could share their experiences, knowledge, and understanding of learning in the workplace. The sessions were not part of the university's curriculum nor aimed to provide specific learning goals or certificates.

The role of the facilitator was not only to ask questions but also to moderate the conversation (Patton, 2015), for example, by asking guiding questions if participants struggled to remain on topic or had other challenges, such as speaking spontaneously or taking long to consider questions. At the same time, the facilitator had to be aware of not being too dominant in the conversation (Patton, 2015). The benefit of group discussions is that they allow the facilitator and other participants to question and clarify their own and others' meanings and perspectives (Patton, 2015), which was important as the aim was to explore

the construction of the phenomenon in social interaction. Moreover, how people talk about something is more important than what is being talked about when the focus is on group discussions (Patton, 2015).

Simultaneously with the group discussions, learning diaries ($N = 29$) were also collected from 17 supervisors who participated in the individual interviews and group discussions. Five supervisors from the hospital and 12 from the technology organization wrote the diaries. Through diaries, it was possible to capture the supervisors' everyday (Silverman, 2024) leadership activities. In both organizations, some of the supervisors produced two learning diaries. The data of the learning diaries consisted of answers to the following questions: 'What does leading learning mean to you?', 'How would you describe the leading of learning?' and 'How it is manifested in practice in your daily work (please give examples)?' The length of the diaries varied from a couple of sentences to over one page of text.

Although, the primary purpose of data collection in the larger research project differed from that of the present study, I see that the dataset provides rich information to explore CSD. The data consist of diverse descriptions and perspectives of employees' ways of learning and working based on self-determination and basic psychological needs, and aspects and features of motivation. Moreover, there were descriptions of collaboration and work community, as well as descriptions of skills, competencies, and developmental needs. Therefore, I see that the data captures the relevant aspects of SDT, employees sense of autonomy, competence, and relatedness, making the data suitable for exploring CSD, although it was not the primary purpose of data collection. Before the analysis process commenced, all interviews and group discussions were transcribed and all data from the interviews, group discussions, and diaries were read to gain a preliminary overview.

2.5 Analysis of the study

Multiple-case studies can be analysed using various analytical tools (Yin, 2018). The analytical methods utilized in this study (see Table 4) were selected based on the aims of each sub-study and the research questions. Analytical methods included content analysis (Hsieh & Shannon, 2005), interaction analysis (McLeod et al., 2010), and phenomenographic analysis (Marton, 1986). The next section describes the analytical methods utilized in more detail.

TABLE 4 Overview of the analytical methods used

Sub-study	I	II	III
Aim of the sub-study	Describe the fulfilment of employees' basic psychological needs through collegial practices in workplace learning	Construct collective self-determination among employees through speech actions in development-oriented group discussions	Explore supervisors' conceptions of supportive actions for workplace learning based on self-determination
Analysis method	Content analysis	Interaction analysis and content analysis	Phenomenographic analysis
Data of the study	Interviews ($N = 56$)	Group discussions ($N = 180$ min)	Interviews ($N = 17$) and diaries ($N = 29$)
Examination level	Descriptions	Speech actions	Conceptions
Perspective to self-determination	Collegial practices	Collective construction	Supportive leadership actions

2.5.1 Content analysis

Content analysis is widely used as a technique to analyse qualitative data and derive meaning from the content of text data (Assarroudi et al., 2018; Elo et al., 2022; Hsieh & Shannon, 2005). The main focus of content analysis is to produce a broad description of a phenomenon (Elo & Kyngäs, 2008) and summarize the main content of the data (Drisko & Maschi, 2015).

In the first sub-study, directed content analysis (Assarroudi et al., 2018) was utilized to deepen and extend the understanding (Hsieh & Shannon, 2005) of SDT and three basic psychological needs (Rigby & Ryan, 2018) in the context of collegial learning situations in the workplace. Directed content analysis was considered a suitable approach to extend the previous theory to a new context (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). Moreover, this approach was chosen as suitable based on the theoretical and substantive interest in the problem being studied (Weber, 1990). In this study, interviews were used as data to develop and extend knowledge of the human experience of the phenomenon under examination (Hsieh & Shannon, 2005), employees' basic psychological needs. By employing directed content analysis, the previously existing theory helped to develop the research questions and offered guidance for the initial codes (Hsieh & Shannon, 2005; Potter & Levine-Donnerstein, 1999). I moved between inductive and abductive approaches (Graneheim et al., 2017) in order to deepen and explore the different variations and descriptions of basic needs.

The coding process is central to content analysis (Hsieh & Shannon, 2005), which aims to organize large amounts of text data into fewer content categories that represent similar meanings (Weber, 1990). In the preliminary phase of the analysis, all descriptions of collegial learning situations were included under

'prior research of workplace learning', emerging as a shared practice among colleagues in the work community (e.g. Billett, 2008; Collin, 2008).

In the first phase of the main analysis, all phrases, paragraphs and sections describing features of autonomy, competence, or relatedness were identified and coded with initial subcodes. When locating the descriptions of three needs, attention was directed toward needs underlying purpose within collective learning situations. This phase followed the directed content analysis (Hsieh & Shannon, 2005), as each need was operationalized in terms of the previous understanding of SDT. This understanding served as operational definitions for the subcodes. The aim of this phase was to find different descriptions of needs in collegial workplace learning situations and categorize these under preliminary categories. After all descriptions were coded using initial subcodes, these subcodes were reviewed and refined based on their content to form categories of descriptions. The resulting categories were then organized under the three basic needs, according to the main content summarized within each category (Drisko & Maschi, 2015).

In the second phase of the analysis, the two target organizations were compared. The aim was to reveal contextual and organizational differences between the collected descriptions and to strengthen the validity of the analysis process by avoiding an overemphasis on previous theory (Hsieh & Shannon, 2005). Focusing on similarities and differences in the descriptions meant exploring the extent to which needs are expressed, as well as the specific needs being targeted. The outcome is categories (Elo & Kyngäs, 2008) that describe employees' basic needs derived from the data through an analysis process (see Hsieh & Shannon, 2005).

2.5.2 Interaction analysis

Interaction analysis is an interdisciplinary empirical method that investigates human interactions with each other, such as talk, and emphasizes the fundamental social originality of knowledge and action (Jordan & Henderson, 1995). In the second sub-study, interaction analysis at the interpersonal level was applied (McLeod et al., 2010) to reveal the construction of CSD in development-oriented group discussions. The construction of CSD based on interaction includes certain kinds of actions in participants' speeches. Interaction in the group is understood to be based on participants' behaviours, constituting individuals' and groups' social reality aimed at creating communally shared meanings (Burtis & Turman, 2006).

Interaction analysis was regarded as a suitable methodological tool to reveal the dialogical details of the meaning-making process, that is, details of interaction in relation to certain social phenomena that content analysis alone cannot reveal (Marková et al., 2007). Once interaction was understood as an activity, participants' behaviour in the group was examined in more detail (Poole et al., 1999), as well as the construction of CSD as an underlying speech actions.

The first phase of the analysis focused on locating learning episodes inductively, based on sections where participants created new knowledge and

learned together in a group by sharing competencies and understanding and negotiating meanings. This episode was defined as a coherent section of speech distinct from the rest of the discussion with me as the researcher (Marková et al., 2007). In several episodes, learning emerged first as individual learning when participants discussed their knowledge and competencies. When these perspectives were challenged and discussed together, the participants either accepted, modified, or rejected their perspectives. Through this process of making meaning, a learning episode concludes with a summary or conclusion, resulting in newly created knowledge and understanding. Changes in participants' thoughts are understood as a manifestation of learning within the group (Billett, 2001), indicating collective learning among participants. The group is viewed as comprising individuals working toward shared meaning, goals, and tasks (Burtis & Turman, 2006). In addition, content analysis (Hsieh & Shannon, 2005) was used to understand the content of the conversation in order to identify and categorize learning episodes. In total, 16 learning episodes were identified and separated from the rest of the data, forming the basis for the second phase of analysis.

In the initial analysis of the second phase, speech sections illustrating one of the basic needs of autonomy, competence, or relatedness were located in theory-driven manner (Martela et al., 2021; Ryan & Deci, 2000). The analysis unit was a speech section (Poole et al., 1999) formed in the analysis process by me as researcher. Learning episodes consisted of multiple speech sections and sections consisted of multiple sentences offered by different participants.

In the subsequent analysis of the second phase, the focus was on finding individuals' speech actions from speech sections that facilitated either autonomy, competence, or relatedness by applying interaction analysis at the interpersonal level (see McLeod et al., 2010). Specifically, speech sections found in the initial analysis were further divided into speech actions which served as the unit of analysis (McLeod et al., 2010). In the data-driven location of speech actions, the focus was on how participants communicate in the group (Poole et al., 1999). Individual speeches were approached as an activity at the social interactional level (Burtis & Turman, 2006) constructing CSD.

Speech actions were located by focusing on how information was shared instead of what was said (Patton, 2015). Attention was placed on the tone of speeches and the underlying function of speeches. In addition to interaction analysis, content analysis (Hsieh & Shannon, 2005) was applied to confirm the correctness of the interpretation of meanings and the underlying function of speeches in relation to the content of group discussions. Although, the aim was not to locate themes or categories as is usual in content analysis (Hsieh & Shannon, 2005). As a result, multiple speech actions were found to construct CSD. All actions were named based on their function and action in conversation and categorized under the three basic psychological needs.

2.5.3 Phenomenographic analysis

Phenomenographic analysis is a useful qualitative tool to capture the diversity of constructed realities (Kettunen & Tynjälä, 2018). As a qualitative research approach, phenomenographic analysis investigates the different ways people experience or understand the same concept or phenomenon at a collective level (Marton, 1986; Marton & Pong, 2005; Marton & Booth, 1997; Bowden & Green, 2010). In the third sub-study, phenomenographic analysis was employed to describe relational, experiential, content-oriented, and qualitative (Marton, 1986) differences in experiencing the phenomenon (Marton, 1986; Patton, 2015) of leading learning in a particular group of supervisors.

The premises of phenomenography rely on the idea that there are a limited number of ways to experience certain phenomena and these ways are related to each other, constituting a logical set of categories (Kettunen & Tynjälä, 2018; Marton & Pong, 2005). Hence, qualitative distinctions and illustrations of the underlying structure of variation across a group of participants can be revealed (Kettunen & Tynjälä, 2018). This means understanding the different ways supervisors conceptualize the phenomenon of leading learning. The focus is on people's conceptions of the world or the phenomenon instead of the world or the phenomenon itself (Marton, 1986; Kettunen & Tynjälä, 2018). In phenomenographic analysis, data can come from different sources (Marton, 1986). The written diaries and interviews were utilized as data sources in the third sub-study.

The analysis process used in the third sub-study followed the guidelines and examples provided by Åkerlind (2005a) and Marton (1986). The goal of the analysis was not only to organize the data but also to find discrepancies to elucidate the various ways (Marton, 1986) in which supervisors define and understand leading learning in their respective work environments. A data-driven approach was employed (Marton & Booth, 1997), and no theories were used to guide the analytical process or establish the basis for the categories in this study (Kettunen & Tynjälä, 2018).

The first phase of the analysis focused on identifying all descriptions of leading learning and examining similarities and differences in their meanings (Kettunen & Tynjälä, 2018). All meanings describing the leading of learning were identified based on supervisors' descriptions by marking and segmenting the transcripts (Marton & Pong, 2005). Focusing on the similarities and differences of the meanings enabled identification of all variations or agreements expressed (Kettunen & Tynjälä, 2018). After identifying all expressed variations and expressions (Åkerlind, 2005a), a draft set of descriptive categories was developed, defined, and named. By comparing the identified similarities and differences between the meanings (Kettunen & Tynjälä, 2018), the aim was to illustrate that each category illustrated a unique way of approaching leading of learning, thereby allowing the categories to be differentiated from one another. The second phase involved creating a final system of categories of descriptions by delineating relationships among the categories (Kettunen & Tynjälä, 2018) to understand how supervisors themselves perceived the process of leading

learning. By examining the main features of each category and the qualitative similarities and differences among them (Marton, 1986), the initial categories were further elaborated, fixed, and defined (Kettunen & Tynjälä, 2018). As a result, the findings are presented as a logical set of categories of descriptions (Kettunen & Tynjälä, 2018; Marton, 1986) based on how supervisors themselves described the progress of leading learning in their diaries and interviews. The logically constructed set of qualitative categories based on the progression toward a complex, comprehensive, and complementary understanding (Åkerlind, 2005b) of leading of learning actions.

3 FINDINGS

In this study, CSD was explored in three sub-studies. The aim was to develop the understanding of CSD and its supportive actions in the context of workplace learning based on two work organizations, a central hospital and a technology organization. To get a comprehensive understanding, CSD was examined by focusing on descriptions of practices, construction through speech actions and conceptions of supportive actions. Table 5 provides an overview of the findings of the three sub-studies.

Based on the findings, this study suggests that CSD is based on a combination of individual initiatives and collective practices, in which individual-level self-determination and engagement in group settings is understood as basis for CSD to be constructed. At the group level, CSD emerge through interpersonal interaction aiming to fulfil employees basic psychological needs. Moreover, based on the findings CSD is enabled by social support received from other employees at the group-level and from the supervisor.

It was observed that CSD is described as an individual practices yet targeted toward other employees, which can be approached through autonomy, competence, and relatedness. Practices related to autonomy in CSD focus on recognizing individuals' experiences of choice, ownership, and self-endorsement in sharing information, asking for help, and discussing work-related matters in collective learning situations. Practices related to competence in CSD ensure that employees have all the necessary knowledge and resources completing their daily work tasks. These practices were described as sharing work-related experiences, observing others' way of working and identifying and developing expertise with the help of the community. Practices related to relatedness in CSD were described as support, encouragement, and a collaborative way of working, creating employees' sense of belonging and connection to others in the community.

TABLE 5 Overview of the findings of the three sub-studies

Sub-study	I	II	III
Aim of the study	Describe the fulfilment of employees' basic psychological needs through collegial practices in workplace learning	Construct collective self-determination among employees through speech actions in development-oriented group discussions	Explore supervisors' conceptions of supportive actions for workplace learning based on self-determination
Approach	Self-determination through collegial practices	Self-determination as collective construction	Self-determination through supportive leadership actions
Level of examination	Descriptions	Speech actions	Conceptions
Findings	<p>Practices focused on autonomy toward the community</p> <p>Sharing information</p> <p>Helping others and asking for help</p>	<p>Actions of autonomy and self-endorsement</p> <p>Sharing knowledge</p> <p>Giving meaningful rationale</p> <p>Providing choices and suggestions</p>	<p>Strengthen individual motivation in alignment with organization's goals</p> <p>Focused on individual and organization by motivating</p> <p>Aimed at individual learning</p>
	<p>Practices focused on competencies among employees</p> <p>Identifying and developing expertise</p> <p>Sharing work experiences</p>	<p>Actions of capability and participation</p> <p>Providing guidance and structure</p> <p>Relying on constructive</p>	<p>Leading through everyday situations as learning opportunities</p> <p>Focused on individuals and groups by facilitating</p> <p>Aimed at learning-to-learn skills</p>

Sub-study	I	II	III
Observing others' work		interaction	Leading through collective learning among work community Focused on individuals, groups, and community by enabling
Practices focused on relatedness in the community	Performing collectively and collaboratively Culture based on support, trust, and encouragement	Actions of relatedness, shared understanding, and common ground	Aimed at collective learning Leading by example Focused on individuals, groups, and community by guiding Learning by modelling
		Encouraging and supporting Showing compassion Acknowledging others' perspectives	

The findings reveal that from a constructive perspective CSD is based on interpersonal interaction where employees at the group-level fulfill each other's basic psychological needs. Speech actions fulfilling basic needs focus on sharing knowledge and understanding enabling sense of autonomy and freedom of choice. Participation and capability was enabled by actions of providing guidance and structure and relying on constructive interaction. Shared understanding and common ground was enabled by encouraging, showing compassion, and acknowledging others perspectives. Through these speech actions employees at the group-level can offer mutual support each other and thus enable motivation and engagement to common goals and direction at work.

From a leadership perspective, CSD can be supported in supervisory work by starting with strengthening individual-level motivation aiming to employees individual learning and self-determination, then progressing to utilization of daily work situations as learning opportunities, and eventually transitioning to shared, collective and collaborative learning situations that empower employees to construct CSD.

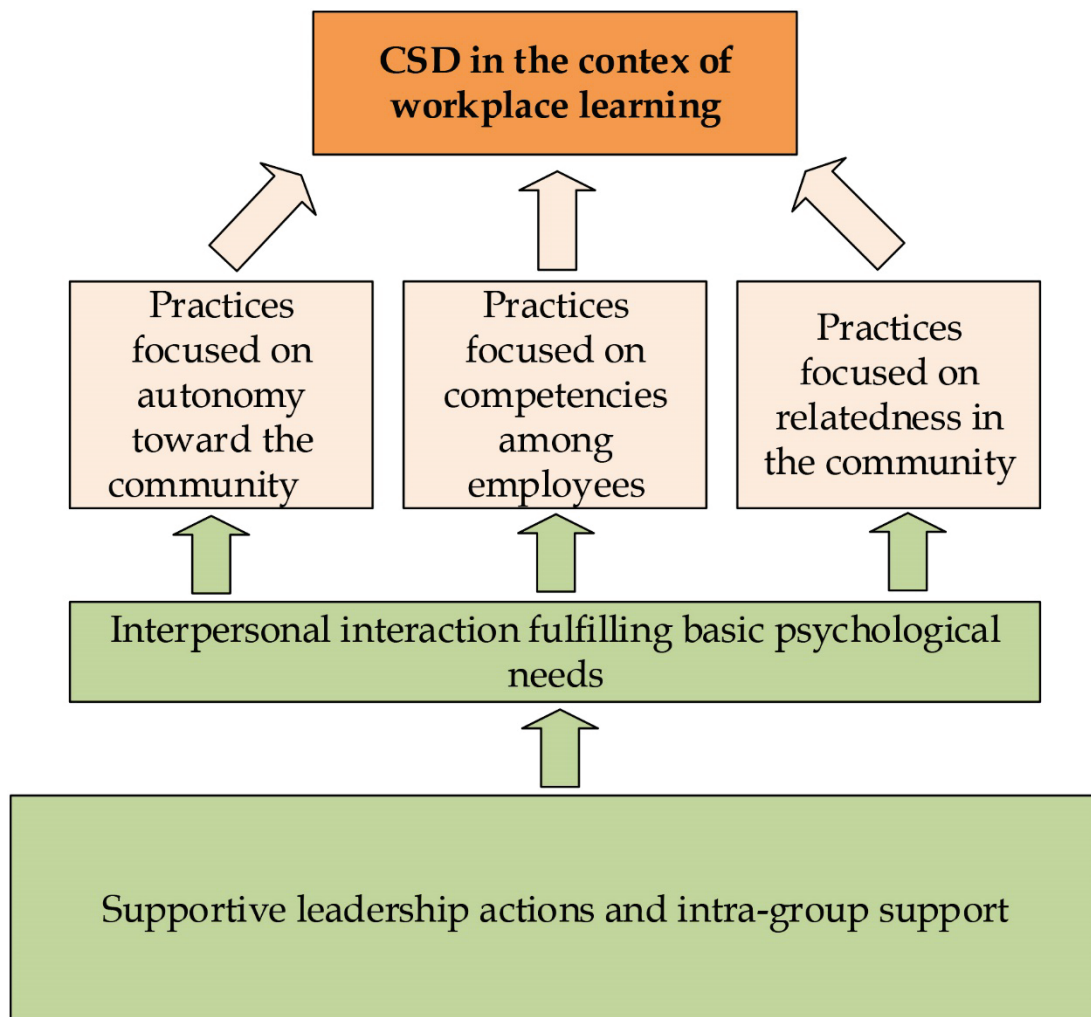


FIGURE 2 Summary of the main findings of the three sub-studies

Figure 2 presents the summary of the main findings of the three sub-studies. Next, the each sub-study of this dissertation is presented in more detail focusing on the findings. Lastly, I summarize the main findings related to the overarching research questions of this study.

3.1 Sub-study I: Descriptions of employees' self-determination through collegial practices in workplace learning situations

Modern expert work, viewed as a process of continuous learning and development, requires employees to be actively engaged, willing, capable, and interested in learning – in other words, they should have strong motivation and self-determination (Ryan & Deci, 2000). Based on SDT, motivation, growth, development, and learning rely on fulfilling three basic psychological needs – autonomy, competence, and relatedness (e.g., Ryan & Deci, 2020; Willems & Lewalter, 2012). However, in recent years, autonomy has been emphasized in organizations to meet ongoing learning needs. Relying on autonomy alone can be problematic and lead to unwanted outcomes (Collin et al., 2021; Gijbels et al., 2012) for both employees and organizations.

Therefore, the primary aim of the first sub-study was to examine the basic psychological needs behind self-determination in the context of collegial learning in knowledge-intensive work (Keronen et al., 2023). The research questions were: *How do employees in central hospital and ICT organization describe self-determination in collegial learning situations at work? How do the descriptions of self-determination differ between the two target organizations?*

The data consisted of 56 interviews collected from a hospital and a technology organization. Participants represented various job titles, such as line managers, IT experts, salespersons, nurses, and physicians. During semi-structured thematic interviews, the topics discussed included workplace learning, competence development, responsibilities at work, and the work community. The study used a qualitative comparative research strategy to explore two distinct cases (Lucas & Szatrowski, 2014). By analysing similarities and differences between the cases (Miles et al., 2014), different variations and the nature of self-determination in workplace learning were revealed. Directed content analysis was employed (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005) to deepen and extend the understanding (Hsieh & Shannon, 2005) of SDT and three basic psychological needs (Rigby & Ryan, 2018) in the context of collegial workplace learning.

Based on the findings in the two cases, autonomy emerged when employees consciously assisted each other, asked for help or shared work-related information with others. The main difference regarding autonomy was that in the hospital context, autonomy was viewed as a choice to share knowledge without the intention of solving current problems or challenging the work situation. In the technology organization, the general assumption regarding autonomy was to try to solve problems independently first and then ask for help

if necessary. In both organizations, autonomy was viewed as essential for creating collective learning situations as autonomous actions and initiatives were directed toward other members of the work community.

In both organizations, competence was demonstrated through the identification and development of competencies, the sharing of work-related experiences, and the observation of others' work. Competence was also illustrated through the utilization of others' competencies and expertise within the community. In the technology organization, autonomous initiatives were necessary to develop situations where competencies could be collectively developed with the help of the community. Employees were also required to have an understanding of other competencies within the community. In the hospital, the community played a major role in revealing one's competence and creating learning situations. Rare and challenging work situations were consciously created to benefit as many people as possible.

Relatedness manifests as support and a collaborative way of working. In both organizations, the ability to lean on colleagues' expertise was described as an important practice in creating a safe environment to learn from trial and error. In the hospital, relatedness was illustrated as faith and trust, making learning situations more meaningful and less burdensome. In the technology organization, a supportive and encouraging work environment was seen as important to create common ground and direction at work.

The findings highlight the collegial, relational, socially shared nature of fulfilling basic needs among employees and show qualitatively different practices in collegial learning situations that enable need satisfaction. Social interaction is essential in learning situations to fulfil these three basic needs. The findings emphasize the need to explore the collective nature of self-determination at the group level in more detail through social interaction.

3.2 Sub-study II: Construction of collective self-determination among employees in development-oriented group discussions

Employees' sense of self-determination is an essential part of learning in modern working life (e.g., Noe & Ellingson, 2017). However, it has not been studied from a collective perspective, even though the responsibility for work and learning rests on teams themselves (Harteis et al., 2005). CSD has previously been studied in the context of sociology and democracy (Thomas et al., 2017; Zuehl, 2016), but not within the context of working life or workplace learning. The aim of the second sub-study (Keronen et al., 2024) was to explore self-determination from a collective perspective focusing on the actions taken at a social interactional level to construct CSD. Specifically, the study aimed to understand how CSD is constructed in collective learning settings based on employees from a hospital

and a technology organization. The research question was: *How is collective self-determination constructed by speech acts in development-oriented group discussions?*

The data consists of audio recordings ($N = 180$ min) from four sessions – two at a hospital and two at a technology organization. The participants were employees in supervisory roles, such as physicians, head nurses, team leaders, and project managers. Interaction analysis (McLeod et al., 2010) and content analysis (Hsieh & Shannon, 2005) were applied. Interaction analysis at an interpersonal level (McLeod et al., 2010) was a suitable approach since the focus was on the underlying actions and functions of individual speeches in social interaction. In addition, content analysis (Hsieh & Shannon, 2005) was utilized to confirm the interpretations made regarding the content of the discussions.

The findings include speech sections on autonomy, competence, and relatedness, as well as more detailed speech actions that facilitated these sections. The aim of the speech sections on autonomy was to support participants' self-reliance and freedom of choice and action. These sections were facilitated by sharing knowledge and competencies, providing meaningful rationale, and offering choices and suggestions to support decision-making. Autonomy-supportive speech actions enable participants to engage in discussion, understand decisions made, contribute to the discussion, and be involved in the process of creating meaning.

The aim of the speech sections on competence was to support participation and enhance capability by providing structure and guidance. Facilitative speech actions included providing feedback, evaluating information and making concrete plans, setting goals and providing instructions on how to achieve the common goals and plans together as a group.

The speech sections on relatedness aimed to create a shared understanding and common ground within the group. Participants displayed a sense of community and compassion, encouraging and supporting each other, and overall aimed to show that they consider others' perspectives in group discussion. This created a trustful and respectful atmosphere for learning, as relatedness was facilitated by openness and a commitment to common and shared goals.

In CSD, the focus is on group-based activities, requiring participants' engagement, capabilities, responsibilities, and autonomous actions as part of a larger group working toward common goals and tasks, ultimately leading to learning. The utilization of even flatter structures to organize work (Laloux, 2014) highlights the importance of CSD and different teams in modern working life. Therefore, there is a need to explore the social and contextual practices and processes, including leadership, that support these new forms of organizing work.

3.3 Sub-study III: Conceptions of leading of learning based on self-determination in supervisory work

In knowledge-intensive work, supervisors are essential for supporting learning (e.g., Ellinger et al., 2008; E. Ellström & Ellström, 2018; Hughes, 2004; Wallo et al., 2022, 2024) and self-determination (e.g., Forner et al., 2020; Hocine & Zhang, 2014; Matsuo et al., 2019; Sarmah et al., 2022). Supervisors establish pedagogically appropriate practices, processes, and cultures in the workplace (Billett, 2014) and facilitate employees' basic psychological needs behind learning and development. The aim of the third sub-study (Keronen et al., 2025) was to examine supervisors' own conceptions of leading learning based on self-determination. Specifically, the aim was to answer the following research question: *How do supervisors describe actions for leading learning in their own work contexts?* The purpose was to explore supervisors' understanding of leading learning and identify the variations and dimensions of different conceptions within a group of supervisors from the hospital and technology organization.

The data used in the study included 17 interviews and 29 diaries from 17 supervisors. Some supervisors from both organizations produced two diaries. The participants were employed in supervisory positions, such as nurses, physicians, project managers and team leaders or were guiding other employees on a daily basis. Data-driven phenomenographic analysis (Marton, 1986; Åkerlind, 2005a) was employed to explore how certain group perceive the phenomenon (Kettunen & Tynjälä, 2018) of leading learning in supervisory work.

Phenomenographic analysis revealed four hierarchically structured categories that describe different phases of leading learning based on self-determination. Starting at the individual level, leading learning in supervisory work focuses on finding interfaces of individual motivation, skills, and strengths with organizational goals, as well as directing individual motivation to align with broader organizational goals. After harnessing individual motivation, daily work situations can be utilized as learning opportunities. The role of the supervisor is to provide such opportunities and help employees utilize them on a daily basis.

The first two categories pertain to actions that enable individual learning. Following these, employees can be expected to participate in collective learning situations, which are based on collective-level and shared learning processes that rely on social interaction. Supervisors facilitate interaction among employees in these collective learning situations, creating a supportive environment for learning. The fourth category involves leading by example, which complements the previous three categories and emphasizes the importance of supervisors' presence in employees' daily work.

Based on the findings, leading learning is closely tied to everyday learning situations and requires active participation, hand-on practices and the supervisor's presence in daily work (Wallo et al., 2022, 2024). These four categories describe leading learning as a process from a practical perspective

based on how supervisors themselves understand actions for leading learning based on self-determination in their own work contexts.

3.4 Summary of the main findings: CSD in the context of workplace learning

The main aim of this study was to develop the understanding of CSD and its supportive actions in the context of workplace learning in two contexts, a central hospital and a technology organization. The study examined the practices, construction, and supportive actions of CSD in relation to three overarching research questions. The first overarching research question focused on describing CSD in workplace learning situations and was addressed by the first and second sub-studies. The second overarching research question focused on the emergence of CSD as interpersonal phenomenon in a more detailed manner in workplace learning situations, with the first and second sub-studies providing answers to this research question. The third overarching research question focused on the supportive actions of CSD in workplace learning situations, which were explored in the first, second, and third sub-studies. A summary of the main findings in relation to the overarching research questions is presented in Table 6.

TABLE 6 Summary of the main findings in relation to the overarching research questions

Main aim of the study	Develop the understanding of CSD and its supportive actions in the context of workplace learning		
Overarching research questions	How is collective self-determination described in workplace learning situations in a central hospital and in a technology organization?	How does collective self-determination emerge as an interpersonal phenomenon in workplace learning situations in a central hospital and in a technology organization?	What kinds of actions support collective self-determination in workplace learning situations in a central hospital and in a technology organization?
Sub-studies	I & II	I & II	I, II & III
Findings	Practices focused on autonomy toward the community Practices focused on competencies among employees Practices focused on relatedness in the community	Engagement Capability and participation Collaboration Exchange of information Sharing and utilizing expertise Common ground Belonging	Ensuring individual self-determination and motivation Creating shared and collective situations Constructive interaction Ensuring competencies Being an example, model, present and available Creating an encouraging environment
Nature of CSD	Individuals' self-determination and engagement in group settings Group's capability, responsibility, and autonomy to direct its own actions toward common direction and common ground Constructed and enabled through interpersonal interaction		

This study approached CSD and its supportive actions in the context of workplace learning. Specifically, the CSD was explored in two cases, in a central hospital and in a technology organization. The findings reveal three major and overlapping conclusions: 1) CSD is based on individuals' self-determination and engagement in group settings, 2) CSD refers to group's capability, responsibility, and autonomy to direct its own actions toward common direction and common ground, and 3) CSD is constructed and enabled through interpersonal interaction received from other employees and from the supervisor. Furthermore, the interface of individual initiatives and collective practice as well as

interconnection of individual self-determination and group-level self-determination frame the phenomenon of CSD. CSD based on individual-level self-determination and engagement can be found when exploring the phenomenon through descriptions and speech actions. Findings reveal that CSD in group-level is based on interpersonal interaction in workplace learning situations when exploring the phenomenon through speech actions. Social support enabling CSD can be found when studying CSD through descriptions, speech actions and through supportive leadership actions.

Based on the findings, basis for CSD is employees' self-determination and engagement in individual level in group settings. Employees' self-determination and engagement in CSD can be described as individual initiatives and autonomous actions toward other employees in collective workplace learning situations. After these initiatives and autonomous actions as starting point, CSD can be understood as practices related to competence, knowledge and work experience in learning situations. These practices emerge when employees in group situations develop their competencies and understanding communally and utilize each other's competencies. Essential practices framing CSD in collective learning situations are the support and collaboration employees offer each other and, in this way, create a sense of relatedness, common ground, and a shared direction for working. Individual initiatives and autonomy in collective learning situations seem to be essential enablers for practices related to competence and relatedness to emerge.

At the group level, key element in constructing CSD is interpersonal interaction, manifesting as employees' speech actions and fulfilling others' basic psychological needs in collective learning situations. When each individual's basic needs are fulfilled through various speech actions, individuals in the group offer mutual support to each other, which in turn enables them to construct CSD. This kind of social interaction offering intra-group support means that employees in collective learning situations share information freely with each other, guide and facilitate other employees toward goals, and value everyone's perspectives in group situations, enabling everyone to participate. This kind of interaction supporting group's autonomy enables employees to be motivated and engaged shared goals and common direction through need satisfaction.

In supervisory work, CSD can be supported by actions considering both individual-level motivation and learning, and enabling employees to share collective and shared learning situations within the work community. Specifically, the focus is on observing everyday situations at work and communicating how these situations could be approached as learning situations. Supervisors can enable CSD by creating these collective learning situations, encouraging employees to participating in them and overall, encouraging employees to share experice and learn together. Hence, this is important as these collective learning situations are understood as context in which employees can engage and construct CSD. Moreover, supervisors support CSD by facilitating social interaction among employees. Supervisors' actions should also promote employees' competencies in learning situations. This means describing

employees' current expertise and skills, as well as their required expertise in the future. Hence, leadership supporting CSD requires the supervisor's presence and availability in daily work and is based on the coaching and facilitation of employees, trying to help them to develop themselves, both on individual and collective levels. In this sense, CSD and its supportive actions do not regard the individual and the collective group level as separate but rather as existing on a continuum, progressing from employees' individual-level engagement and self-determination toward collective practices and learning situations in which employees can construct CSD through interpersonal interaction. Figure 3 presents a synthesis of CSD and its supportive actions in the context of workplace learning.

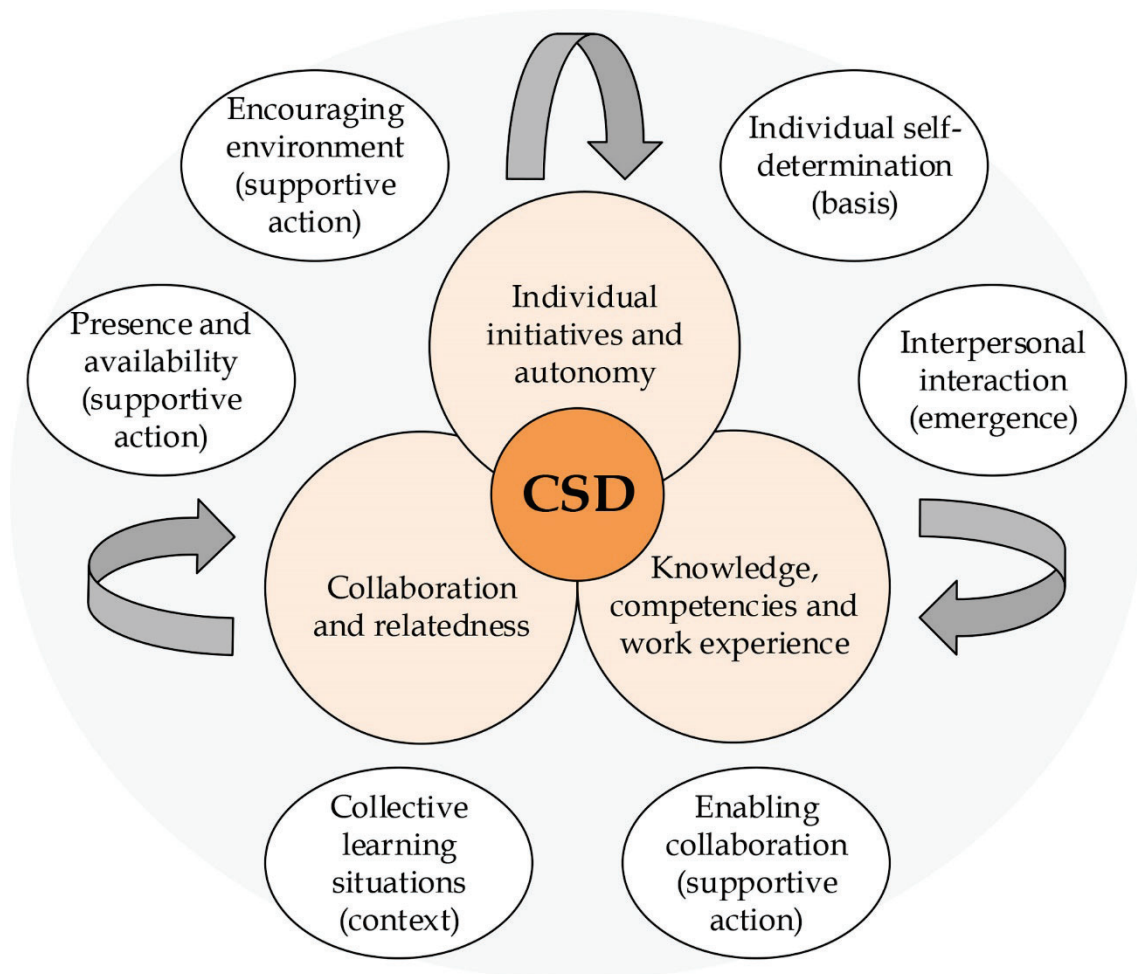


FIGURE 3 Synthesis of CSD and its supportive actions in the context of workplace learning

Overall, the findings show that each basic need underlying CSD has its own meaning and purpose, although they overlap and enable each other. As CSD is based on interpersonal interaction it highlights relational, collective, and shared activities in group settings at workplace. Through individual-level engagement and self-determination, CSD can be constructed and thereby understood as

group-level phenomenon. Moreover, the findings highlight the interconnection between individual-oriented actions and collective practices. Moreover, these practices at the individual and collective levels should not be regarded as separate elements when describing CSD. To summarize, CSD is understood through fulfilment of three basic psychological needs in the context of workplace learning, in which learning situations offer a context for employees to construct CSD at the group level through interpersonal interaction.

4 DISCUSSION

In this chapter, I present the findings in more detail and discuss how the understanding of self-determination from a collective perspective, as produced in this study, contributes to existing research. I will also discuss the commonalities and differences of CSD in the studied cases, that is, the central hospital and the technology organization. Finally, I offer concluding remarks based on the main findings.

4.1 Social and interactional nature of CSD: Individuals' self-determination and engagement in group settings

The findings of this study show that CSD can be understood through social and interactional practices in the context of workplace learning. Fundamental for CSD is individuals' engagement and motivation to participate in group setting. The key element in the construction of CSD is interpersonal interaction among employees, which enables the employees to meet each other's basic needs that underlie CSD at the group level. Similarly, Hetzer et al. (2012) found that reflective and social skills play an important role in self-determination. At the group level by fulfilling each individuals' basic needs, participants can offer intra-group support which enable them to construct CSD. Hence, intra-group support in CSD means mutual support among colleagues where support is reciprocal and employees actively help each other. In CSD, this refers to employees interdependence meaning that in social interaction each individuals' actions are influenced by the actions of others within a group.

The findings reveal that, at an interactional level, CSD in collective learning situations can be enabled through employees' speech actions, where employees offer meaningful rationale, share knowledge, and provide choices and suggestions to each other (Keronen et al., 2024). As Martela et al. (2021) reported, these autonomy-supportive speech actions facilitate employees' self-reliance and sense of freedom in terms of their own choices and actions. This study shows that

CSD can also be enabled in learning situations when employees rely on constructive interpersonal interaction. This means that in collective learning situations, employees provide guidance and feedback to each other and evaluate information together (Keronen et al., 2024). This allows employees to feel a sense of responsibility and capability to participate in group situations as reasonable individuals. Previous studies have shown that constructive interaction provides structure and clarity on how to achieve certain shared behaviours (Martela et al., 2021). The findings show, that especially in new or challenging learning situations in the workplace, employees can support each other's competence by explaining what should be done next and why. The findings on collaboration and relatedness in the present study allow employees in collective learning situations to create a shared understanding and common ground as a group and an appropriate atmosphere for working and learning (Keronen et al., 2024). In the same way, previous studies have found that relatedness illustrates a supportive culture for learning and working based on mutual connection, bonding, and trust (Martela et al., 2021; Rigby & Ryan, 2018).

From a supportive perspective, the findings show that supervisory actions can support CSD by integrating individual-level motivation with collective group-level activities and collective learning among employees. The social and interactional nature of CSD emerges as a result of supervisory work that describes individuals' current expertise, its alignment with organizational goals and, most importantly, future skills, competencies and how employees can achieve these through collective learning. Most importantly, in enabling CSD through supervisory work, it is essential to observe learning situations, make them visible to employees and encourage employees to utilize these collective learning situations, as they provide a context for employees to construct CSD at the group level.

Overall, this study's findings show that social interaction among employees, evaluating information, reflecting, and creating a common direction are central to construct CSD. Similarly, previous research found that groups' interaction, especially the ability to reflect their performance (I. Jeong & Shin, 2019; Prilla et al., 2012) and create a shared understanding (Döös & Wilhelmson, 2011) are crucial to learn and work at workplace. The findings suggest that the nature of CSD in the context of workplace learning can be described as social and interactional based on various interpersonal practices aiming to fulfil employees' basic psychological needs in group settings (see Slemp et al., 2024).

4.1.1 Fulfilment of individuals' basic psychological needs

The findings indicate that CSD and three underlying basic needs are met in group settings through social and interactional practices in the context of collective workplace learning in both study cases, a central hospital and a technology organization. CSD can be described as practices related to 1) autonomy and individual initiatives, 2) knowledge and sharing competencies and expertise, and 3) collaboration and relatedness in group settings. The differences of need satisfaction between the two case organizations are related mainly to the culture

and the nature of work, resulting in different assumptions regarding the fulfilment of basic needs (Keronen et al., 2023).

Autonomy as conscious choices and actions was fulfilled through practices of choosing to ask for help, help others and share work-related information with colleagues in both organizations (Keronen et al., 2023). Findings related to autonomy confirm previous research, as participants did not refer to total independence, individuality, freedom, or working alone (Rigby & Ryan, 2018; Lemmetty, 2020), but rather to individual responsibility and influence toward others. Differences in autonomy between the hospital and the technology organization related mainly to the underlying assumptions and level of autonomy in daily work. In the hospital, autonomy focused more on proactive activity to share information in advance, while in the technology organization, autonomy was highlighted in terms of first trying to solve problems individually, and only after that asking for help, if needed (Keronen et al., 2023). In this case, the nature of work and the work culture might explain this difference. In the technology organization, the work is based on self-determination and autonomy (Ha, 2015; Lemmetty, 2020), while the hospital work with patients and other experts from multiple fields requires close interaction and the sharing of knowledge on a daily basis (Newton et al., 2015).

Previous studies have also acknowledged individual responsibility and actions for learning (Lemmetty, 2020). In this research, individuals' autonomous actions were an essential basis for CSD in collective learning situations. Autonomous initiatives can be accompanied by different actions, either individual or collective (Ryan & Deci, 2000; Lemmetty, 2020), such as contributing group-level situations at work or the ability to share information with colleagues. The findings of the present study emphasize that practices of autonomy do not focus only on individual aims but can be targeted at other employees in the community (Keronen et al., 2023). This finding is consistent with previous research which, emphasizes that the need of autonomy and need for relatedness are not mutually exclusive (Keronen et al., 2023; see also Määttä et al., 2023). Rather, communality and collaboration can be an individual's autonomous choice (Keronen et al., 2023; Määttä et al., 2023).

In the present study, in both organizations, competence was achieved through the identification and development of competencies with more experienced colleagues, by observing others work and sharing work-related experiences with other employees (Keronen et al., 2023). Previous studies have also highlighted the important role of more experienced colleagues for the development of other employees in learning situations (Billett, 2014; Schei & Nerbø, 2015). The present study demonstrated that in the hospital, the community and more experienced colleagues played a significant role for novices in terms of revealing and developing their competencies, compared to the technology organization (Keronen et al., 2023). In a hospital, at the same time with strong sense of autonomy, the work culture is based on teaching and transferring knowledge and understanding, as well as tacit knowledge, to a younger generation. In a technology organization, practices related to

competence, knowledge, and work experience first require an individual's autonomous actions. Overall, the findings related to competence do not refer to specific competencies or skills needed in relation to work, but more to learning-to-learn skills, ability, and capability to acquire the required skills, knowledge, and attitudes in certain work contexts. Hence, employees need to have all the competencies and knowledge required for their work (Rigby & Ryan, 2018) to be able to construct CSD. This differs from Mulder's (2014) perspective, according to which competence usually refers to professional competence, consisting of different competencies and understanding of field-specific knowledge, skills, and attitudes.

In the present study, social practices fulfilling relatedness emerged among employees in collective learning situations as support, encouragement, collaboration, the ability to lean on other employees, and an appropriate atmosphere for learning in both organizations (Keronen et al., 2023). In the technology organization, subtle differences in practices of relatedness highlighted the organizational culture as consciously constructed, achieving feature building communality and creating a common direction at work (Keronen et al., 2023; see also Forner et al., 2020). In the hospital, relatedness crucial for working smoothly on a daily basis was emphasized as a natural and even obvious requirement of the work culture (Keronen et al., 2023). The strong sense of relatedness may stem from work practices that emphasize multiprofessionalism, collaboration, and consulting (Pimmer et al., 2013; Stabel et al., 2022). The findings of the present study indicate that practices of relatedness, that is, collaboration and support, make learning more meaningful and less burdensome (Keronen et al., 2023). This finding is important to note as previous studies have reported that learning itself can be problematic and burdensome and even challenge employees' well-being at work (Lemmetty & Collin, 2020).

4.1.2 CSD as a group-level phenomenon

The findings reveal that self-determination can be seen as a collective group-level phenomenon in workplace learning situations. As described above, social practices among employees in group settings are the basis for CSD. Through the fulfilment of the basic psychological needs of individuals in the group in social interaction, employees can construct CSD as group-level phenomenon. Previous studies have described social and shared practices as an essential resource for learning (Collin, 2006; Tynjälä, 2008). In the same way, social and shared practices among employees in collective learning situations can be seen as a resource for CSD to be constructed at the group level.

As a collective phenomenon, self-determination refers to relational, shared, and collective activities among group members, although individual initiatives underly this collective activity (Keronen et al., 2023). In this regard, CSD relies on and can be understood as the engagement in certain behaviour by an individual part of a larger group (Martela et al., 2021). When employees are part of a larger group, it emphasizes their motivation and engagement arising from common

goals (Keronen et al., 2024). Thomas et al. (2017) also found that in CSD at the group level motivation arises from group membership and a sense of communality among individuals, instead of individuals themselves. The findings on CSD in collective learning situations emphasize group's capability, autonomy and responsibility (Murphy, 2014) of its actions for the flexible completion of shared goals and creation of common ground and direction in the workplace.

The findings of this study are in line with those of previous studies on self-organized and autonomous teams in which employees have strong self-determination regarding daily work tasks (Wall et al., 1986). As Laloux (2014) found, my study also confirms that employees can regulate their behaviour at the group level by setting goals, analysing problems, making plans, and evaluating their own performance. However, this study contributes to previous studies on self-organized and autonomous teams by exploring the underlying motivational processes of these kinds of teams in the context of workplace learning. However, it is important to point out that the utilization of group-based activities when structuring work does not necessarily imply that employees are utilizing CSD. Instead, as this study reveals, CSD requires intra-group support where employees reciprocally enable each other's behaviour, motivation, and engagement in group by interpersonal interaction. Therefore, CSD is based on employees' ability as part of the larger group to construct suitable practices and processes in the current work situation. Hence, this requires employees to direct their actions toward common goals (Keronen et al., 2024).

Self-determination as a collective phenomenon in workplace learning situations integrates individual-level self-determination and autonomy with collective-level practices, in which collective-level self-determination results from the individual-level engagement and motivation. In this sense, the findings suggest that CSD in workplace learning as a group-level phenomenon can be understood as existing on a continuum for self-determination, emphasizing its social, collective, and relational nature. It is therefore possible that CSD could provide a suitable framework to organize work and learning in knowledge-intensive work environments where strong collaboration and collective learning among employees are required (see Wallo et al., 2013). Only individual-based self-determination or emphasizing the need for autonomy (Bell, 2017) might be a too narrow perspective to understand the complexity of learning and work in modern working life.

4.1.3 Coaching leadership supporting CSD

The findings show that leadership supporting CSD focuses on enabling both individual-level self-determination aimed at individual learning and communal group-level activities aimed at collective learning by utilizing coaching leadership actions (Keronen et al., 2025). In both organizations, supporting CSD in workplace learning starts with discovering and strengthening employees' individual motivational processes, skills, and goals (Keronen et al., 2025; see also Dawber, 2019). Strengthening employees' individual motivational processes has

been found to support employees' sense of autonomy also in previous studies (Forner et al., 2020), which is associated with CSD as it is based on individuals' autonomous actions, such as asking for help and sharing information with others (Keronen et al., 2023). At the individual level, the focus is on enabling autonomy and self-determination, which can be understood as a prerequisite for employees to engage and contribute to collective learning situations and CSD. However, the findings reveal that individual motivation and perspectives are essential to integrate broader organizational goals and strategies (Keronen et al., 2025). This finding can be interpreted as being linked to the collective level, suggesting that the aim is to integrate individual employees into to broader collective and organizational context. In this way, supervisors as coaches act as a link between employees and the organization's interests (Keronen et al., 2025). These findings suggest the idea of integrating individual, collective, and organizational levels (S. Jeong et al., 2018).

Enabling employees' autonomy by integrating organizations' goals and strategies (Keronen et al., 2025) is particularly important, as employees and groups cannot always complete work tasks and learn based on their preferences and autonomy. However, previous studies have found that employees can still feel a sense of autonomy if they receive reasonable explanations from supervisor for required behaviour (Forner et al., 2020). In the same way, this study reveals that constructive interaction (Martela et al., 2021) can be utilized to explain why certain work tasks are important (Keronen et al., 2024; see also Rigby & Ryan, 2018). When individual motivation is harnessed, everyday work situations can be utilized as learning situations (Keronen et al., 2025), which can be interpreted to movement toward collective level and in which employees can construct CSD at the group level. As Wallo et al., (2022) found, my study also reveals that making learning situations visible, helping, and guiding to utilize them in daily work are important enabling actions for supervisors. In the present study, this kind of support enables employees' learning-to-learn skills (Keronen et al., 2025). Similar findings have been found in previous studies on SDT, in which a sense of competence refers to an individual's need to possess all needed capabilities and to develop their competencies (Ryan & Deci, 2020).

Findings in the present study show that everyday learning situations are utilized as collective learning situations, in which supervisors encourage interaction among employees and share expertise in the work community (Keronen et al., 2025). This finding can be interpreted as highlighting the integration of supportive coaching actions at the collective level to facilitate CSD as supervisors have a major role in creating these collective learning situations. Previous studies have shown that supporting social interactions, interpersonal relationships and collaboration among the work community (Forner et al., 2020; Manganelli et al., 2018) is important as it creates possibilities for understanding others, the creation of common ground and a shared direction regarding work (Forner et al., 2020). Through these shared, collective, and collaborative actions, it can be interpreted that supervisors support CSD, as such situations provide employees with opportunities to engage in and construct CSD.

Based on the data in this study, enabling employees to share their understanding and competencies in the community (Keronen et al., 2025) is particularly important as CSD is based on the idea of employees utilizing others' competencies in challenging work and learning situations. At the collective level, this finding can be interpreted supporting group to use its collective resources related to expertise, competencies, and learning (Hackman & Wageman, 2005). Moreover, as the findings show, supervisors encourage employees to engage in social interaction, share competencies, and exchange expertise (Keronen et al., 2025). This finding can be interpreted as supporting the construction of CSD in a group-level, as the construction requires interpersonal interaction and intra-group support. The findings show that when CSD among employees relies on social practices related to competencies, knowledge, and experience (Keronen et al., 2023), it can be assumed that supervisors' understanding of the current and future knowledge and required competencies in the work community becomes crucial (Keronen et al., 2025) in supporting CSD purposefully. This perspective means that supervisors need to be present in employees' learning situations to be aware of their current competencies and, based on that, be able to review how their expertise needs to be developed in the future (Keronen et al., 2025). Hence, this finding suggests that although CSD refers that groups have more autonomy, self-determination, and control over their own work tasks and projects, supervisors are needed to manage the overall picture of work, behaviour, and learning needs in the work community. This finding is in line with a previous study by Wallo et al. (2024), who found that leadership supporting learning requires presence, availability, and practice-based actions on a daily basis.

Overall, enabling CSD by supervisory work requires considering both individual employees' and groups' learning needs (Keronen et al., 2025; see also Bong & Seneque, 2013; Berg & Karlsen, 2007). This means integrating individuals' initiatives and autonomy with collective group-level orientation and common direction. Similarly, previous studies have found that individual and team-based autonomy should be considered by supervisors (Ruiz-Palomino et al., 2021). In the present study, supervisors understood that individual learning and self-determination should be harnessed first before employees are expected to participate in collective learning situations (Keronen et al., 2025). Hence, individual-level self-determination can be understood as precondition for CSD to be constructed at the group level. When supervisors' support collective learning, they are understood to recognize the group-level perspectives of CSD. Hence, this study indicates that individual-level self-determination and engagement in group settings are connected to collective-level self-determination. These findings suggest the association with collective practices, such as groups' social interactions enabling individual performance and engagement (X. Liu & Batt, 2010) and supporting individual-level learning and self-determination (Matsuo, 2018). Accordingly, individuals' self-determination and engagement require supportive social practices and social interaction.

Consequently, these findings suggest that supervisors' supportive actions for CSD based on coaching can be integrated into a learning-supportive culture

in organizations (Park et al., 2008) where CSD and workplace learning are seen as interconnected. As CSD suggests that employees in groups have more responsibility and control over their own work (Keronen et al., 2024), enabling this kind of behaviour focuses on coaching and facilitating employees to develop themselves (Gabriel et al., 2014; Rigby & Ryan, 2018), encourages individual thinking and decision-making (McCarthy & Milner, 2013; Wageman, 2001), both individually and through group-based activities (Matsuo, 2018).

4.2 Concluding remarks: Toward CSD in the context of workplace learning

The findings of this study underly the important meaning of social, shared, and interactional practices among employees for need satisfaction and motivational processes to emerge in the context of workplace learning. Through interpersonal interaction and workplace relationships aiming to fulfil three basic psychological needs, autonomy, competence, and relatedness (Slemp et al., 2024), CSD reflects a group's orientation toward shared goals, common ground, and direction, as individuals contribute as part of a larger group. CSD emphasizes the group's capability, freedom, and responsibility in directing its own actions, thereby enabling alignment toward shared goals and the establishment of common ground. In construction of CSD, central is the interpersonal interaction between employees and intra-group support aiming to fulfill employees basic needs. Consequently, fulfilling employees' self-determination at the individual level is the basis for CSD to be constructed at the group level. From supportive perspective, leadership actions grounded in coaching leadership are aimed at recognizing individual-level self-determination, and then shifting to facilitate collective learning situations, which are understood as a context for CSD. As emphasized in SDT, CSD in the context of workplace learning requires socially supportive environment to be utilized (see Ryan et al., 2021).

The findings reported in this study suggest that CSD in workplace learning situations combines the preferred characteristics of contemporary working life with those of learning at work; employees need autonomy and individual initiatives (Noe & Ellingson, 2017), support, collaboration and collective practices among employees in terms of learning (Tynjälä, 2013; Billett, 2014), as well as competence and the ability to gain new knowledge and enhance their competence in group settings (Rigby & Ryan, 2018). Moreover, CSD can be understood as offering a relevant perspective on contemporary working life, where teams have increasing responsibility for their own work and learning (Wallo et al., 2013). This suggests that collective-level self-determination will become even more important work practice in the future, enabling efficient, proactive, and flexible work and learning, while also supporting employee well-being and optimal development (Coxen et al., 2021; Deci et al., 2017; Ryan & Deci, 2019).

Based on the findings, it can be inferred that CSD and the underlying basic needs can be understood as an essential premise of workplace learning in knowledge-intensive work (see Willems & Lewalter, 2012). Adult educational understanding of learning and collective learning based on shared practices and social interaction in the community (Billett, 2004; Marsick, 2009) are seen as an important resource and premise for CSD. These social practices of workplace learning offer a basis for CSD to be constructed. The findings suggest that the nature of workplace learning, and more specifically collective workplace learning, provides a meaningful context and premise for understanding CSD. Correspondingly, CSD encompasses many of the same aspects and practices as workplace learning, such as sharing competencies, utilizing the expertise in the community and overall, developing competencies collaboratively. Overall, a significant contribution of this study is the understanding of needs satisfaction in group settings in the context of learning at work (Keronen et al., 2023), rather than regarding learning merely as a positive outcome of self-determination (Hetzner et al., 2012).

5 CONCLUSION

In this chapter, I first describe the trustworthiness and validity of the research and the ethical considerations adhered to during the research process. Next, I discuss the theoretical, practical, and societal implications of the findings. Finally, I look at the limitations of this study and how these limitations can be addressed in future research.

5.1 Trustworthiness and ethical considerations

First, this section considers the ethical considerations of the research study, followed by a discussion of trustworthiness, reliability, usability, and transferability. While conducting this research study, I followed the guidelines of the Finnish National Board on Research Integrity (TENK, 2023), the guidelines of the University of Jyväskylä for responsible science (JYU, 2025) and the EU General Data Protection Regulation (Regulation 679/2016). The involved organizations and participants were informed about the details of the study, including the subject of the study, its goals, the schedule, and the utilization of the collected data. At the beginning of the interviews, I as the researcher informed the interviewees about the study and their rights as participants and asked them for their consent to participate. All interviewees participated as volunteers and could withdraw at any stage of the research process without any consequences. Interviewees were informed of this right at the beginning of the study. The target organizations and the participants were anonymized at the start of the research and are not identifiable in the final articles (sub-studies). Only an organization's major field of operation and participants' job titles were mentioned in the articles and in this dissertation. Ethical preassessment was conducted regarding the participation of the central hospital organization before starting the study (1810/13.00.04.00/2020), and the study was approved by the Human Sciences Ethics Committee of the University of Jyväskylä. Regarding the technology organization, a separate ethical evaluation was not considered necessary. All

stages of the study were conducted according to ethical research regulations and practices. Not causing significant risk or harm to participants is a key ethical requirement when conducting research (TENK, 2023), and I adhered to this requirement during the research process.

The data were collected utilizing multiple methods, which is typical in case studies (Bloor & Wood, 2006). Since the aim of a case study is to gain an in-depth comprehensive understanding of a certain phenomenon (Bloor & Wood, 2006), relying on only one source is not sufficient (Patton, 2015). The collected data were analysed using multiple analysis tools (Bloor & Wood, 2006) to reveal the collective nature of self-determination. Methods were carefully considered and selected to achieve the goals of each sub-study (Elo et al., 2014; Levitt et al., 2018) and to support and ensure credibility (Graneheim & Lundman, 2004). Utilizing multiple data sources and analysis methods is referred to as 'triangulation', a strategy that increases qualitative credibility and trustworthiness (Tracy, 2010) and enhances the accuracy of research findings (Denzin, 1978; Tracy, 2010). By employing triangulation, I increased the lenses to approach the phenomenon under study, allowing me to provide a more complete description and deeper understanding (Patton, 2015) of CSD and reduce the risk of potential biases by relying on only one lens (see Tracy, 2010). Furthermore, the advantage of multiple-case study research is that it draws upon insights from several cases, which suggest the enhancement of the grounding of findings (Eisenhardt & Graebner, 2007).

One challenge of multiple-case study research is the identification of cases, and therefore the system under study must be carefully considered as there are many options (Creswell & Poth, 2017). In this study, the two cases selected are two organizations a hospital organization and a technology organization, and specifically the phenomenon of CSD in employees' workplace learning situations in these organizations. The aim was to offer deep, rich, and contextual understanding of the phenomenon occurring in these cases (Eisenhardt, 2021). However, it should be noted that the transferability of findings to other contexts and organizations is limited by the fact that this study explored only one organization from each fields. Although, the findings of CSD were quite similar in both contexts, the emergence of CSD might different even within the field due to specific organizational features, nature of work, and work culture. Hence, the phenomenon of CSD presented here should be understood merely as one example of how it could emerge in these two selected cases and fields. Overall, the aim of this study is not to generalize the findings but to offer an in-depth and contextual understanding (Patton, 2015) of CSD in workplace learning, with specific reference to central hospital and technology organizations.

Based on the above-mentioned tools and practices, I was able to interpret the practices, construction, and supportive actions of CSD. Thus, this study provided an understanding of the phenomenon and its various features in two cases, central hospital and technology organizations. In the final articles (sub-studies), I included original data-based citations to support my interpretations and substantiate the validity of the findings (Levitt et al., 2018). Moreover, the

findings are presented accurately and clearly to support their trustworthiness (Elo et al., 2014) and at the same time allow others to have alternative interpretations (Graneheim & Lundman, 2004). I have strengthened the trustworthiness of the findings by giving a detailed explanation of the data collection and analysis processes. Utilized references were carefully considered to enhance validity by providing suitable background and understanding to explore CSD in the context of workplace learning. The research process has been described in as much detail as possible in both the sub-studies and this dissertation.

An important aspect of validity is transferability (Elo et al., 2014). As this study is based on qualitative research, the findings are not directly transferable to other contexts. I can only make certain suggestions on how the findings could be applied to different contexts (Graneheim & Lundman, 2004). To enhance the transferability, I have offered clear and context-sensitive descriptions of the cases studied (Patton, 2015), two organizations and their features and context-related practices (Eisenhardt, 2021; Graneheim & Lundman, 2004) of CSD in workplace learning. I believe the findings could be applied to the technology sector and hospital work. When workplace learning is a pertinent part of the work itself (Noe et al., 2014), employees' basic psychological needs will be emphasized in response to future work challenges (Gagné et al., 2022). Based on that, I suggest that the findings of CSD may provide insights for other fields and work contexts as well when considering the complexity of modern-day work tasks (Saks & Leijen, 2014). It could be assumed that in other fields and organizations, not only individual autonomy and self-determination (Rigby & Ryan, 2018) but also various collective practices (De Laat & Simons, 2002) and self-organized teams (Laloux, 2014) are important and required. Based on this assumption, it could be suggested that other organizations and fields may benefit from the insights gained in this study on CSD. Moreover, as responsibility for work and learning has shifted from organizations to employees and teams themselves (Ellinger, 2004; Rigby & Ryan, 2018), findings of CSD can be applied when enabling employees to work flexibly, efficiently, and proactively within various teams and groups at the workplace.

5.2 Theoretical, practical and societal implications

This study aimed to develop an understanding of CSD and its supportive actions in the context of workplace learning in two organizations, a central hospital and a technology organization. Based on the findings of this study, multiple theoretical, practical, and societal implications were revealed. First, I discuss the theoretical implications, and then I focus on the practical and societal implications of the research.

5.2.1 Theoretical implications

The first theoretical contribution of this study is that self-determination and basic psychological needs could be understood from collective perspectives. In previous research, employees' self-determination has mainly been explored through individually and autonomy-oriented perspective and activities (Rigby & Ryan, 2018). While the significance of the social environment and social interactions in supporting the fulfilment of basic psychological needs has been acknowledged (Ryan & Deci, 2020; Slemp et al., 2024), this study adopts the collective perspective to explore self-determination in group settings. The findings of this study demonstrate how CSD is constructed at the group level through fulfilment of basic needs. Moreover, the present study integrates individual- and collective-level perspectives of self-determination and illustrates how these perspectives are interconnected, providing a suitable and comprehensive framework for understanding employees' work and engagement in group settings in modern working life.

Second, this study generates new insights by bringing together the previous understanding of autonomous and self-organized teams, SDT, CSD, and workplace learning. As the research on this phenomenon seems to be fragmented across disciplines with various concepts and terms in use, this study attempted to address the integration of these diverse concepts and terms by aiming to understand self-determination from a collective perspective. This study contributes to the existing research by exploring the underlying processes of self-organized teams, i.e. the motivational and behavioural processes and practices allowing and constructing the self-determination and autonomy of these teams. While CSD has previously been explored within the field of sociology (Thomas et al., 2017; Zuehl, 2016), this study contributes to the existing understanding of the phenomenon by exploring it in a new context, in workplace learning. The findings of this study reveal how CSD can be conceptualized and described in employees' collective workplace learning.

The third theoretical contribution of this study is that workplace learning, particularly collective learning, provides a context and framework for fulfilling employees' basic psychological needs and the conditions necessary for the construction of CSD. This supports previous findings that CSD and the underlying basic needs are an integral part of workplace learning in modern working life (Willems & Lewalter, 2012; Harteis et al., 2005). Collective, shared, and social practices in learning situations can enhance motivation, which is an essential prerequisite for learning in the workplace. Moreover, learning is not only a positive outcome of motivation (Hetzner et al., 2012), and this study shows through which kinds of qualitatively different practices employees can be motivated to learn in group settings, for example by the ability to help others and the possibility to develop competencies together with colleagues. In that sense, adult learning at work should not only be viewed through autonomy but should also acknowledge employees' need for competence and relatedness at the same time (Bell, 2017; Slemp et al., 2024).

The fourth theoretical contribution mainly concerns methodology. As the majority of previous research on SDT has been conducted by quantitative methods (see, e.g., Bauer & Mulder, 2006; Beachboard et al., 2011; Chen & Jang, 2010; Hsu et al., 2019), in this study, qualitative methods were utilized (Ryan & Deci, 2020). By qualitative methods CSD and basic psychological needs were explored to reveal various demonstrations and manifestations of the phenomenon. Thus, aim was to deepen and provide rich understanding of SDT and the basic psychological needs (Lynch et al., 2020) from collective perspective. Qualitative methods also reveal context-related differences and features and thus help to understand the different features of self-determination in organizational contexts (Gagné & Deci, 2005). The multiple-case study approach can be understood to support this aim to produce an in-depth and detailed understanding (Creswell & Poth, 2017) of CSD in two cases. As a qualitative research study, this study helps to illustrate the concrete and empirical manifestations of CSD and also the complexity of the phenomenon (see Côté-Lecaldare et al., 2016). Moreover, with respect to the individual sub-studies, the second sub-study contributes to the previous understanding of theoretical principles of fulfilling basic psychological needs in social interaction (Martela et al., 2021) by exploring empirically needs satisfaction at an interactional level in group situations.

5.2.2 Practical and societal implications

The first practical implication concerns the motivational perspective to learning and development. By understanding basic psychological needs motivating employees in workplace learning, supervisors and HRD specialists in organizations should focus on recognizing individuals' motivational perspectives and form learning situations triggering employees' basic needs. Specifically, employees' basic needs could be flexibly supported by various learning and development situations at work on daily basis. Supervisors should consider individual needs, especially when employees seek to fulfil their personal needs and preferences at work (Lehtonen et al., 2022). Moreover, employees' sense of self-determination should not only be addressed during development discussions but also embedded in daily work practices, such as team meetings, project meetings, and informal daily interactions. When employees understand the role of motivation and the basic psychological needs underlying their actions and behaviour at work, they are better equipped to utilize this understanding also independently. It can be suggested that leaders should also consider the organization's social norms, climate, work culture, and everyday work and learning practices and whether these allow employees' basic needs to be met.

When considering employees' motivation through basic psychological needs in workplace learning, it is important to note that employees might have different basic needs to be met in different situations. Moreover, individuals might emphasize and acquire one of the three basic needs in certain situations. For example, in rare and challenging work situations, employees may want to

complete work tasks with the help of the community, allowing individuals to feel safe and possible to lean on a colleague's expertise. In these kinds of situations, it could be assumed that employees acquire sense of relatedness. In other situations, employee might like, for example, first to address a problem individually and then have a discussion with colleagues to share the experience. In that sense, neither CSD nor the basic psychological needs are a stable feature of motivation and engagement, but they can be predicted to be highly dependent on contextual and situational aspects and on the social support of environment offers (Ryan & Deci, 2000; Slemp et al., 2024). Overall, all three basic needs are crucial to consider to achieve working and learning supporting well-being, meaningfulness, and engagement (Gagné & Deci, 2005). Most importantly, as needs are overlapping and they have also cross-need impacts (Slemp, et al., 2024), the differences among each need in real-life settings might be subtle.

Second, a specific leadership challenge in supporting CSD involves balancing between individual motivation and autonomy with group-level autonomy and collaboration, while also aligning these with organizational strategies and goals. In real-life work settings, individual motivation and learning as prerequisite for CSD may represent an ideal rather than a consistent reality. Individual goals and motivation may sometimes conflict with those of the larger group or team and organization. Therefore, supporting CSD is likely to require active dialogue about the goals and strategies of individuals, teams, and the organization as a whole. From a supportive supervisory perspective, it seems to be crucial to offer a clear understanding on the goals and strategies of the organization and how they are connected to employees' individual skills and group's goals. In this sense, employees' competencies and learning should be considered at every organizational level to be fully utilized. The question of appropriate support for each employee and group becomes central, particularly when considering their diverse backgrounds, resources, and abilities for engaging in CSD. At the same time, it can be presumed that finding a balance between support and autonomy is crucial for supervisors. From leadership perspective the central question is sufficient resources in organizations for learning-oriented, facilitative, and coaching leadership.

Third, a specific challenge from a leadership perspective is ensuring that employees and teams in organizations utilizing CSD do not operate in isolation (Moe et al., 2021). Rather, they should remain interconnected, maintaining alignment with one another and with the organization's broader goals and strategies. Accordingly, CSD does not imply complete independence, unrestricted freedom, or autonomy for groups in all situations. Rather, it refers to a group's volition, self-reliance, and the ability to make informed choices and decisions within group. Furthermore, organizational structures and practice can be expected to shape and frame the emergence of CSD. As the findings suggest, the aims and goals of groups engaged in CSD should be aligned with organizational strategies. Therefore, supervisors' play a crucial role in facilitating communication between individual employees, teams, and organizational perspectives.

However, this kind of role-acting between employees' needs and organizational goals and strategies might be conflicting for supervisors and produce challenges and a conflict of values for them. Accordingly, this suggests an increased responsibility for supervisors, in addition to their important role as facilitators of learning. Therefore, it can be suggested that essential is to ensure supervisors' own well-being and support for them, for example, by providing them with training, mentoring, and coaching. In this sense, understanding leadership practices and resources that support CSD in learning situations is crucial for HRD specialists to develop supervisors' training and education. This also suggests that supervisors should not only have an understanding of the educational processes of adult learning (E. Ellström & Ellström, 2018) but more importantly, should understand the motivational propensities and perspectives of employees' actions and behaviour in work contexts (Manganelli et al., 2018). Education and training for supervisors should be considered to support adult learning processes, as well as communicating work tasks, goals, strategies and learning requirements in an autonomy-supportive way. Moreover, HRD should offer the necessary resources for supervisors to plan and implement work tasks that effectively meet employees' basic psychological needs. This can be assumed to require close collaboration across all organizational levels and actors, particularly between supervisors and HRD specialists.

Fourth, practical implication concerns the collective workplace learning. Based on the findings, it would be essential to ensure collective group-level situations where employees can share their expertise and knowledge, and develop competencies communally. These situations are crucial as they are understood as basis and context for CSD to be constructed. Obvious challenge for supervisors to support CSD is to ensure that, in knowledge-intensive work, employees have the time and space to share work-related information, also informally, and have spontaneous discussions during their daily work. In fast-paced work environments and organizational cultures, such as hospital and technology organization, CSD cannot be assumed to emerge automatically. Rather it must be actively facilitated with adequate resources, support, and guidance provided by the supervisors. Moreover, employees are expected to require practice and guidance when they begin relying on CSD on a daily basis, which requires supervisors presence and availability enabling collective learning in daily work. Moreover, it can be suggested that the ability to create meaningful connections with others through technological communication tools will become increasingly crucial in the future. When technological systems alter the nature and quality of social interaction (Gagné et al., 2022), it may be presumed that they pose a challenge to group members' internal commitment and engagement. Most critically, such changes may hinder the development of shared practices, communality, belongingness, and collaborative ways of working and learning.

Fifth, the findings of interaction enabling group's autonomy in CSD refers to daily interaction between employees when completing work tasks. Therefore the responsibility for constructing CSD relies on every employee and supervisor to be constructed. This also indicates that each individual can flexibly contribute

to the construction of CSD in everyday work situations. It can be suggested that CSD does not require highly structured practices or depend on the hierarchy of the organization. Instead open, constructive, and supportive interaction between employees during daily work tasks should be the focus on enabling CSD. Overall, at the core of CSD is employees' interpersonal skills, their ability and willingness to collaborate, and their engagement and motivation in shared goals in group settings.

However, one particular challenge in CSD may relate to a group's internal cohesion, potential conflicts, and different perspectives. While the findings suggest that employees working in group settings are capable of resolving such challenges independently within group, it is important to acknowledge that actual circumstances may differ from expectations. In real-life situations, challenges may arise that require support beyond the group's immediate resources. Overall, it is reasonable to assume that groups will inevitably encounter conflicts and make decisions that may not satisfy all participants. It may be inferred that the key question is whether groups can resolve these issues autonomously, and how supervisors can intervene and influence the groups' internal dynamics. Consequently, employees' should be supported and provided with the necessary resources to effectively manage such situations. From organizational perspective, it is advisable to establish procedures and strategies to support conflict resolution within groups.

From a societal perspective, as CSD emphasizes motivation, flexibility, collaboration, and engagement, it can be a suitable practice and premise in modern working life. Specifically, CSD can be utilized to respond to the challenges and continuous changes in working life, as uncertainty and unpredictability challenge and change the nature of working, learning, and social interaction (Gagné et al., 2022). In addition to impacting individual autonomy, work tasks are rarely completed completely alone and different teamwork practices are utilized in daily work. It can be presumed that CSD might more accurately describe current working life and learning than only self-determination, individual ability or autonomy alone, although individual-level self-determination and engagement emerges as a prerequisite for the construction of collective, group-level phenomenon. The findings demonstrate a strong interconnection between individual employees and their social environment, suggesting that individuals operate in relation to others within a broader social context. In the future, this will raise an important question regarding the role and value of the social practices, social interaction, and overall communality and relatedness at work for learning and development.

Moreover, an essential question is how employees' need for relatedness can be fulfilled and supported in a society based on individualism, individual development, and individuals' aim to fulfil their personal values and goals. A key challenge arises when employees prioritize their own interests and values, emphasizing individual choices, and particularly if these choices compromise the development of shared vision, direction, common ground, and collaboration. In the CSD, the focus is not solely on the individual, but rather on individual self-

determination as part of relational processes that enable individuals to act and engage within a broader group.

This study and the findings of CSD highlight fundamental assumption of human motivation, engagement, learning, and development that require a supportive social environment and social interaction to emerge (Rigby & Ryan, 2018; Slemp et al., 2024). This perspective should not be overshadowed in contemporary working life and society. When challenges arise in the workplace, individuals need the support, assistance, and guidance of others to navigate complex, burdensome, and even wicked problems. Rather than placing increasing emphasis on individual-centered choices and responsibility, it is worth considering a shift toward communality and collectivity, where the value and significance of individuals to one another is both recognized, appreciated, and reinforced.

Overall, the importance of work and learning practices that support employees' well-being is expected to grow in the future, particularly in light of previous research on burdensome aspects of workplace learning (Lemmetty & Collin, 2020). In terms of uncertainty and interdependence characterizing working life, the challenge is whether and how basic needs can be fulfilled in future work in different and continuously changing settings (Gagné et al., 2022). At the same time, these features of working life require employees to be adaptive, proactive, and flexible – in other words, to have a strong sense of self-determination (Gagné et al., 2022) also in collective level. Hence, it can be assumed that the role of basic psychological needs and CSD as group-level phenomenon will become increasingly emphasized in addressing uncertainty, technological change, continuous changes in learning requirements, and the navigation of complex networks and communities in the future. It may be suggested that by enabling fulfilment of employees' basic needs underlying CSD, organizations could foster a long-lasting and sustainable culture for learning and working (Gagné et al., 2022; Rigby & Ryan, 2018), benefitting both employees and the organization (Berg & Karlsen, 2007).

5.3 Limitations and suggestions for future research

There are some limitations regarding this study. Considering the differences between the cases, such as field, history, culture, and hierarchy, the findings might be context-related and in that sense transferability to other contexts is limited. However, as a multiple-case study, this study offers some similarities and differences regarding CSD that can be considered when utilizing CSD in different organizations. Moreover, as this is a qualitative study, the aim was not to generalize findings, but to offer an in-depth, contextual, and descriptive understanding (Patton, 2015) of CSD as a phenomenon through two cases, a central hospital and a technology organization. The emphasis was placed on elucidating on understanding of CSD and its essential characteristics.

One obvious constraint of this study is related to the utilization of secondary data and the fact that the data were not originally gathered to answer the current research questions presented in this study and, most importantly, not to explore self-determination from a collective perspective. Although the secondary data offered me access to large amounts of data and multiple data sources; interviews, group discussions, and written diaries, there are some limitations that need to be addressed. The utilization of secondary data required a strong interpretation from me as a researcher when I analysed the data. In the sub-studies, I have included original data citations to support the findings and interpretations I have made. Additionally, in descriptions of the analysis processes in sub-studies, I have given examples of the interpretation process to support the findings. It can be argued that the self-determination as a phenomenon and the three basic psychological needs have been well established and defined in previous research (e.g. Deci et al., 2017; Rigby & Ryan, 2018; Ryan & Deci, 2000, 2020; Ryan et al., 2021). This allowed me to utilize the previous understanding of basic needs when operationalizing CSD through them. SDT was applied throughout the research process to minimize the risk of misinterpretation and overinterpretation of the findings. In particular, during the analysis process when locating and categorizing various descriptions, speech actions, and conceptions, the data were interpreted in relation to prior theoretical understanding of basic psychological needs. In this sense, I utilized directed content analysis as part of the analysis processes in both the first and second sub-studies.

Although, I have operationalized CSD through basic psychological needs, the way I have located descriptions, speech actions, and conceptions in the analysis process is not the only way. This process includes the perspectives and choices that I have made as a researcher, which naturally influence the interpretation and, thereby, the findings derived from the data. It is possible that some aspects, features, and perspectives of basic psychological needs – thus all dimensions of CSD as a phenomenon – might not have been fully captured due to operationalization and the utilization of secondary data. Especially in light of the three basic needs as overlapping and having cross-need impacts (Slemp et al., 2024), it is possible that descriptions and speech actions in the first and second sub-studies could have been located differently. For example, one description could have been placed under more than one basic need because the subtle differences. This might have affected the scope and depth of the interpretations and the findings presented. This should be acknowledged when interpreting the findings. Overall, the operationalization of CSD through three basic psychological needs may limit the transferability and applicability of the findings to other contexts, fields, and organizations.

An apparent limitation of this study, especially in the first and third sub-studies, is that it explores the phenomenon under study only through participants' descriptions and conceptions. The utilization of an external perspective through, for example, observation as a data collection method (Patton, 2015) would have offered understanding from a different perspective

and therefore might have complemented the understanding of CSD. It might also have revealed possible sociocultural premises and constraints of CSD that this study did not touch on at all. For example, since CSD is based on interpersonal interaction, organizational cultural features and frames, such as atmosphere, climate, and the physical environment, can be assumed to influence the nature and construction of CSD. Moreover, as CSD is understood to be constructed through everyday interactions and workplace situations, examining the organizational culture, values, and norms could enhance the understanding. Consequently, this calls for research strategies such as ethnography and participant observation.

In the second sub-study, the roles of the facilitator and the researcher in the development-oriented group discussion should be considered carefully. Although their roles were to facilitate the group but at the same time not to be dominant (Patton, 2015), they might have influenced the construction of a social phenomenon. Therefore, the results might be different in real-life working situations, depending on, for example, whether the official supervisor is present or not, the combination in the group of people, or due to other interpersonal features, such as the nature and quality of relationships among employees in the work community. Hence, exploring the phenomenon in organized and constructed setting is one notable limitation in the present study.

An apparent limitation of the method in the second sub-study is that the group's interpersonal interaction was analyzed using only audio recordings, not, for example, video recordings which would have revealed facial expressions and gestures. In the third sub-study, one limitation is that the understanding of leadership actions enabling CSD is based only on supervisors' own conceptions and experiences of the phenomenon, not an observable behaviour or concrete spontaneous actions in real-life situations. The essential question to consider is whether they apply and enact these practices in reality and how effectively. Although it is important to point out that in phenomenography the primary aim is not to produce understanding and, based on that, make claims about the truth itself (Åkerlind, 2005a). Instead the focus was on considering the differences and changes in meaning in terms of how supervisors describe leading of learning based on self-determination. Instead of presenting the findings of the third sub-study as the truth, the supportive actions of CSD are usable and meaningful for the intended audience in these two organizations (see Kettunen & Tynjälä, 2018).

This study does not consider possible problematic features and practices related to CSD nor the challenges related to leadership or other constraining features and frames in organizations. Hence, the aim of this study is not to present CSD as the ideal and only positive phenomenon. In real-life settings, CSD might have problematic features, which need to be explored in more detail in order to utilize CSD productively and accordingly in organizations. Overall, the interpretations I have made as a researcher are tempered by the recognition that alternative operationalizations and analytical lenses could produce different insights.

Based on the findings, several suggestions for future research can be proposed. Future studies should focus on how employees' psychological needs can be fulfilled in different organizations and work contexts, especially in digital contexts. The essential question in remote and hybrid work contexts is how and through which kinds of processes and practices employees can be motivated, since need satisfaction in learning rely on social interaction and CSD is engaged with social, relational, and communal practices with other employees in the community. As this study did not separate remote/hybrid work and on-site work when exploring CSD and supervisors' supportive actions, future work could address this gap as the location of the work might have an impact on the emergence of CSD. Especially, different digital communication tools (Ollila et al., 2018) might change the nature and quality of social interaction (Gagné et al., 2022). In addition, it would be crucial to explore motivation and the basic needs of employees who work alone or independently, such as personnel in small and micro companies, and self-employed individuals. Overall, the question of employees' self-determination becomes crucial since, from an employee perspective, highly independent or remote work requires a strong sense of competence, such as capabilities and learning-to-learn skills, as well as a sense of belonging and support. Essential is how basic needs are fulfilled in these kinds of contexts and whether highly independent employees receive enough support and from whom, so that learning would not cause negative outcomes, such as loneliness or overwhelming responsibilities and, at worst, challenge well-being.

From a methodological perspective, various methods should be utilized, for example, observations and ethnography could reveal the social and cultural aspects and constraints, and overall the emergence of CSD in real-life work settings. Especially, future studies, could consider the possible problematic features and constraints of CSD. Moreover, it would be essential to understand in which kinds of situations and contexts CSD is suitable and an achievable way of organizing work and learning, and in which situations it might cause challenges or other negative outcomes for employees, teams, or organizations. Employees' experiences and understanding of CSD as phenomenon should be explored to get a deeper and more detailed understanding of the phenomenon, also at different organizational levels and in hybrid/remote work. Moreover, studies utilizing an intervention or a longitudinal perspective offering education for employees or supervisors of self-determination and underlying basic psychological needs would be significant, especially from a practical perspective. Hence, an important perspective is to consider both short- and long-term outcomes related to CSD. Exploring organizational frameworks and preconditions that enable or hinder CSD would be essential for gaining deeper understanding, particularly from a practical perspective, to effectively utilize CSD as a premise for working and learning.

Overall, further research is needed to explore CSD as group-level phenomenon in working life. SDT could also be extended and refined to better address the collective perspective. Although, this study acknowledged both individual and group-levels of CSD, additional research is needed to establish

this emerging concept and to define the phenomenon more comprehensively. CSD could be investigated through methods such as group discussions and observations in real-life work settings. Such approaches could reveal the novel nuances, subtle undertones, and hindering features for CSD within social interactions among employees. This study served as a starting point for advancing a collective perspective to self-determination and basic psychological needs. Therefore, further inquire is needed to deepen both theoretical and practical understanding of CSD.

YHTEENVETO

Yhteisöohjautuvuus työssä oppimisessa - Laadullinen tutkimus keskussairaalasta ja teknologia-alan organisaatiosta

Tutkimuksen tausta

Tämän väitöskirjatutkimuksen tavoitteena on lisätä ymmärrystä yhteisöohjautuvuudesta, sen ilmenemisestä, rakentumisesta ja sitä tukevista käytännöistä työssä oppimisen kontekstissa kahdessa suomalaisessa työorganisaatiossa, keskussairaalassa ja teknologia-alan organisaatiossa. Laajemmassa keskustelussa yhteisöohjautuvuus kiinnittyy ajankohtaisiin työelämän muutoksiin ja haasteisiin. Vastuuta työstä ja oppimisesta on siirretty organisaatiotasolta yhä enemmän yksittäisten työntekijöiden ohella tiimeille (Wallo ym., 2013; Harteis ym., 2005). Oppimisvastuun kasvaessa ja oppimisen ollessa välttämätön osa työtä, työntekijöiltä odotetaan yhä vahvempaa halua, kykyä ja kiinnostusta eli sisäistä motivaatiota ja sitoutumista oppimiseen (Ryan & Deci, 2020). Itsemääräämisteorian mukaan yksilön motivaation, oppimisen ja kehittymisen taustalla on kolme psykologista perustarvetta, autonomian, kyvykkyyden ja yhteenkuuluvuuden tunne (Ryan ym., 2021; Ryan & Deci, 2000, 2020). Vaikka itseohjautuvuus ja autonomia ovat olennainen osa etenkin tietointensiivistä työtä, pelkästään autonomiaan nojaaminen yksilölähtöisenä ilmiönä voi olla ongelmallinen ja tuottaa monia ei toivottuja lopputuloksia, kuten yksinjäämisen ja erillisyyden kokemuksia muista etenkin haastavissa työ- ja oppimistilanteissa (Collin ym., 2021; Gijbels ym., 2012). Työtehtäviä suoritetaan harvoin alusta loppuun täysin yksin ja itsenäisesti ja kompleksiset työtehtävät edellyttävät yhteistyötä, osaamisen jakamista, yhteisöllistä oppimista (Lemmetty, 2020) sekä tiimi- ja parityöskentelyn muotoja (De Laat & Simons, 2002). Siten itseohjautuvuutta tulisi lähestyä myös kollektiivisena ryhmätason ilmiönä, yhteisöohjautuvuutena. Tällöin korostuu työntekijöiden kyky työskennellä joustavasti osana laajempaa ryhmää yhteisten tavoitteiden saavuttamiseksi.

Itsemääräämisteorian mukaan psykologisten perustarpeiden täyttyminen ei nojaa vain yksilön omaan toimintaan tai kykyyn, vaan edellyttää sosiaalisen ympäristön tarjoamia mahdollisuuksia ja tukea perustarpeiden täyttymiselle (Deci ym., 2017; Rigby & Ryan, 2018; Ryan & Deci, 2000, 2020). Kun vastuuta oppimisen ja työn tukemisesta on siirretty yhä enemmän organisaatiotasolta esihenkilöille (Ellinger ym., 2003; Torraco & Lundgren, 2020), on esihenkilöillä keskeinen rooli niin työssä oppimisen (Wallo ym., 2022, 2024) kuin psykologisten perustarpeiden tukemisessa (Forner ym., 2020; Hocine & Zhang, 2014; Matsuo ym., 2019; Sarmah ym., 2022). Valmentavaa johtamista voidaan pitää sopivana lähtökohtana yhteisöohjautuvuuden tukemiselle (Gabriel ym., 2014), sillä se huomioi samanaikaisesti yksilötason motivoitumisen ja oppimisen sekä ryhmätason autonomian ja kollektiivisen oppimisen (Matsuo, 2018; Ruiz-Palomino ym., 2021). Esihenkilöillä voi kuitenkin olla haasteita omaksua suhteellisen uusi rooli

oppimisen valmentajina ja fasilitoijina (Dawber, 2019; J. T. Huang & Hsieh, 2015) huomioiden oppimisen taustalla olevat psykologiset perustarpeet (Gabriel ym., 2014).

Yhteisöohjautuvuutta lähestytään tässä tutkimuksessa psykologisten perustarpeiden kautta, jotka täyttyvät ryhmätilanteissa sosiaalisen vuorovaikutuksen myötä. Aiempi tutkimus psykologisista perustarpeista on keskittynyt pääosin yksilöorientoituneisiin näkökulmiin (Rigby & Ryan, 2018). Kollektiivisen tason ilmiönä yhteisöohjautuvuutta on tutkittu sosiologiassa ryhmän kollektiivisena kykynä ohjata sen toimintaa (Thomas ym., 2017), mutta ei työelämän tutkimuksessa tai aikuiskasvatustieteen kentällä. Käytännön tasolla organisaatiot ovat soveltaneet yhteisöohjautuvuuden ajatusta hyödyntämällä itseohjautuvia ja autonomisia tiimejä, joilla on autonomiaa päivittäisissä työtehtävissä (Laloux, 2014; Moe ym., 2008). Tällöin yhteisöohjautuvuus viittaa ryhmän kykyyn ohjata joustavasti sen toimintaa yhteisten tavoitteiden saavuttamiseksi ja työtehtävien suorittamiseksi (Cohen & Ledford, 1994). Aiempi tutkimus itseohjautuvista tiimeistä ei kuitenkaan ole huomionnut niitä käyttäytymisen ja motivoitumisen prosesseja ja käytäntöjä, joiden kautta ryhmä voi orientoitua yhteiseen suuntaan ja toimia autonomisesti (Bunderson & Boumgarden, 2010). Laajemmassa keskustelussa yhteisöohjautuvuus voidaan ymmärtää itseohjautuvuuden jatkumona. Aiempi tutkimus ja yhteisöohjautuvuutta kuvaavat käsitteet ja määritelmät näyttävät kuitenkin hajanaisina eri tutkimusaloilla eikä yhteisöohjautuvuutta ole tarkasteltu työssä oppimisen kontekstissa.

Tämä tutkimus vastaa näihin edellä esitettyihin haasteisiin ja tutkimusaukoihin tuottaen uutta ymmärrystä yhteisöohjautuvuudesta, sen ilmenemisestä, rakentumisesta ja sitä tukevista käytännöistä työssä oppimisen kontekstissa. Tarkastelun kohteena on se, millaiset sosiaaliset ja vuorovaikutukselliset käytännöt työssä oppimisessa mahdollistavat työntekijöiden perustarpeiden täyttymisen ja siten yhteisöohjautuvuuden ilmenemisen ja rakentumisen. Yhteiskunnallisesti tutkimus tarjoaa uutta ymmärrystä itseohjautuvuudesta kollektiivisen tason ilmiönä, yhteisöohjautuvuutena.

Teoreettinen viitekehys

Tutkimuksen teoreettinen viitekehys koostuu itsemääräämisteorian lisäksi työssä oppimisen, kollektiivisen oppimisen ja valmentavan johtamisen aiemmasta kirjallisuudesta. Itsemääräämisteorian mukaan autonomian tarve viittaa yksilön kokemukseen omaehtoisesta, oman toiminnan ja valintojen mukaisesta toiminnasta (Ryan & Deci, 2020). Kyvykkyyden tarve tarkoittaa hallinnan ja kyvykkyyden tunnetta siitä, että yksilöllä on osaamista, kykyä ja taitoa tehtävien suorittamiseen (Rigby & Ryan, 2018). Yhteenkuuluvuuden tarve kuvaa arvostuksen, vastavuoroisen välittämisen ja merkityksellisyyden kokemusta suhteessa toisiin (Ryan & Deci, 2020). Kun psykologiset perustarpeet täyttyvät, yksilön oletetaan olevan aktiivinen, motivoitunut sekä kasvuun ja oppimiseen pyrkivä (Ryan & Deci, 2000).

Yhteisöohjautuvuudella tarkoitetaan yksilöiden psykologisten perustarpeiden täyttymistä sosiaalisessa vuorovaikutuksessa ryhmätilanteissa (Rigby &

Ryan, 2018; Ryan ym., 2021; Ryan & Deci, 2000, 2020). Perustarpeiden täyttymisen myötä yksilöt voivat sitoutua ja motivoitua yhteiseen jaettuun toimintaan (Martela ym., 2021), jolloin sitoutuminen ja motivaatio nousevat enemmän ryhmään sitoutumisesta kuin yksilöstä itsestään. Tällöin yhteisöohjautuvuus viittaa siihen, miten yksilöt työskentelevät, sitoutuvat ja motivoituvat yksilöinä osana laajempaa ryhmää. Autonomiataukeva vuorovaikutus tarkoittaa selkeiden perustelujen antamista ja kontrolloivan kielen välttämistä (Rigby & Ryan, 2018; Slep ym., 2024). Kyvykkyyttä tukeva vuorovaikutus tarjoaa struktuuria, palautetta sekä ohjeita siitä, miten haluttu toiminta voidaan saavuttaa (Martela ym., 2021). Yhteenkuuluvuutta tukeva vuorovaikutus tarkoittaa sosiaalisten suhteiden vahvistamista ja tunnetta siitä, että yksilö on merkityksellinen osa laajempaa ryhmää (Rigby & Ryan, 2018). Kollektiivisena ryhmätason ilmiönä yhteisöohjautuvuudella tarkoitetaan tässä tutkimuksessa ryhmän kykyä, vastuuta ja vapautta määrittellä ryhmän sisällä sen toimintatavat (Thomas ym., 2017). Tällöin ryhmä ohjaa omaa toimintaansa asettamalla tavoitteita, paikantamalla ongelmia, tekemällä suunnitelmia ja arvioimalla sen toimintaa ja suoriutumista (Cohen & Ledford, 1994; Laloux, 2014).

Työssä oppimisella viitataan aikuisten työssä tai työn lomassa tapahtuviin oppimistilanteisiin (Billett, 2008). Oppimisella tarkoitetaan muutosta yksilön tai ryhmän ajattelussa tai toiminnassa tuottaen uutta ymmärrystä, osaamista, tietoja ja taitoja (Billett, 2004). Työssä oppiminen ilmenee jaettuna ja yhteisöllisenä toimintana sosiaalisissa vuorovaikutustilanteissa (Billett, 2014; Collin, 2006, 2008). Kollektiivisella oppimisella tarkoitetaan tilanteita, joissa työntekijät jakavat omia kokemuksiaan ja näkemyksiään, neuvovat, opettavat tai ohjaavat toisia, kysyvät apua tai seuraavat kollegan työskentelyä (Collin, 2008; Smet ym., 2022; Tynjälä, 2013). Toisilta kollegoilta oppimisen lisäksi kollektiivinen oppiminen edellyttää yhdessä uuden jaetun ymmärryksen muodostamista (Döös & Wilhelmson, 2011) sekä kriittistä tiedon ja oman toiminnan reflektointia (Knapp, 2010; I. Jeong & Shin, 2019). Valmentavalla johtamisella tarkoitetaan työntekijän ja esihenkilön vuorovaikutuksellista, jaettua ja yhteisöllistä prosessia (Dawber, 2019), jonka tavoitteena on auttaa työntekijöitä kehittämään omaa osaamistaan (Park ym., 2008). Esihenkilöiden tehtävänä on auttaa työntekijöitä tunnistamaan arjen työtilanteita oppimistilanteina (Park ym., 2008). Valmentava johtaminen huomio yksilötason motivoitumisen sekä ryhmien autonomian (Ruiz-Palomino ym., 2021). Sen avulla voidaan tukea yksilöiden, ryhmien (Dawber, 2019; Hagen, 2012) ja organisaation oppimista (Bond & Seneque, 2013).

Tässä tutkimuksessa yhteisöohjautuvuutta tarkastellaan kollektiivisissa oppimistilanteissa työssä, sillä huomio halutaan kiinnittää siihen, miten sosiaaliset käytännöt mahdollistavat yhteisöohjautuvuuden ja sen taustalla olevien psykologisten perustarpeiden täyttymisen. Yhteisöohjautuvuuden tarkastelussa hyödynnetään kolmea eri lähtökohtaa: käytäntöjä, puhetekoja ja käsityksiä. Näiden näkökulmien avulla voidaan luoda kokonaisvaltainen ja kattava ymmärrys yhteisöohjautuvuuden ilmenemisestä, rakentumisesta ja sitä tukevista käytännöistä työssä oppimisen kontekstissa.

Tutkimuskysymykset ja tutkimuksen toteutus

Tutkimuksen tavoitteena on lisätä ymmärrystä yhteisöohjautuvuudesta, sen ilmenemisestä, rakentumisesta ja sitä tukevista käytännöistä työssä tapahtuvassa oppimisessa. Tutkimuskysymykset ovat:

1. Miten yhteisöohjautuvuutta kuvataan työssä tapahtuvissa oppimistilanteissa keskussairaalassa ja teknologia-alan organisaatiossa?
2. Miten yhteisöohjautuvuus ilmenee työssä tapahtuvissa oppimistilanteissa keskussairaalassa ja teknologia-alan organisaatiossa?
3. Millaiset käytännöt tukevat yhteisöohjautuvuutta työssä tapahtuvissa oppimistilanteissa keskussairaalassa ja teknologia-alan organisaatiossa?

Tutkimus on toteutettu kolmen osatutkimuksen myötä, mistä on julkaistu kansainväliset tutkimusartikkelit sekä yhteenveto-osuudesta, johon on koottu kolmessa osatutkimuksessa hyödynnetty teoreettinen viitekehys, metodologia ja tulokset. Tutkimus on tapaustutkimus (Eisenhardt, 2021), jonka kohteena on kaksi suomalaista työorganisaatiota, keskussairaala ja teknologia-alan organisaatio. Tutkimuksen aineisto on kerätty molemmissa organisaatioissa vuosina 2021–2022 työntekijöiltä ja esihenkilöiltä. Aineisto koostuu puolistrukturoiduista teemahaastatteluista ($N = 56$), ryhmäkeskusteluista ($N = 180\text{min}$) sekä päiväkirja-aineistosta ($N = 29$). Aineiston analyysissä hyödynnettiin laadullista sisällönanalyysiä (Elo ym., 2022), vuorovaikutuksen analyysiä (McLeod ym., 2010) ja fenomenografista analyysiä (Åkerlind, 2005a).

Tutkimuksen tulokset

Yhteisöohjautuvuutta oppimistilanteissa voidaan kuvata kolmesta eri näkökulmasta. Työntekijöiden kuvausten perusteella yhteisöohjautuvuus pohjautuu molemmissa organisaatioissa 1) tietoihin valintoihin ja yksilön autonomisiin käytäntöihin, jotka kohdistuvat muihin työntekijöihin työyhteisössä, 2) osaamiseen linkittyviin käytäntöihin työntekijöiden välillä sekä 3) yhteenkuuluvuuden tunteeseen, tukeen ja yhteistyöhön linkittyviin käytäntöihin työyhteisössä. Työssä oppimisen kollektiivisissa tilanteissa, työntekijöiden autonominen ja aktiivinen toiminta, kuten avun kysyminen ja valinta jakaa tietoa kollegalle mahdollistavat yhteisöohjautuvuuden rakentumisen. Samanaikaisesti yhteisölliset ja jaetut käytännöt mahdollistavat yksilöiden motivoitumisen ja sitoutumisen yhteisölliseen toimintaan. Nämä yksilöorientoituneet ja yhteisölliset käytännöt oppimistilanteissa näyttävät vahvasti arjen työhön, sen sujuvuuteen sekä työn luonteeseen kiinnittyvinä. Yksilöiden aloitteellisen toiminnan seurauksena yhteisöohjautuvuutta voidaan kuvata osaamiseen, sen kehittämiseen ja työkokemukseen kiinnittyvien käytäntöjen kautta. Työntekijät tunnistavat yhdessä osaamistarpeita sekä kehittävät tietoisesti osaamista työyhteisössä yhteisöllisesti. Toisten tukemiseen, yhteisölliseen työskentelyyn ja yhteenkuuluvuuden tunteen rakentamiseen linkittyvien käytäntöjen avulla työntekijät voivat joustavasti tukea toistensa

työskentelyä, rakentaa luottamusta ja tukea yhteisöllistä päätöksentekoa. Tämän myötä haastavat työ- ja oppimistilanteet muodostuvat vähemmän kuormittaviksi, kun työntekijät voivat tarvittaessa nojata kollegan osaamiseen ja tukeen työyhteisössä.

Ryhmätasolla työntekijöiden välinen vuorovaikutus, joka täyttää työntekijöiden psykologiset perustarpeet mahdollistaa yhteisöohjautuvuuden rakentamisen kollektiivisena ilmiönä oppimistilanteissa. Vuorovaikutuksessa työntekijät rakentavat yhteisöohjautuvuutta jakamalla tietoa, antamalla palautetta ja ohjeita tavoitellun toiminnan tueksi sekä huomioimalla toisten näkökulmat. Avoin, kannustava ja rakentava vuorovaikutus mahdollistaa työntekijöiden omaehtoisen sitoutumisen ja motivaation ryhmän yhteiseen jaettuun toimintaan. Sosiaalisen vuorovaikutuksen kautta rakentuvana kollektiivisena ilmiönä yhteisöohjautuvuus tarkoittaa ryhmän autonomiaa, vapautta ja vastuuta ohjata sen toimintaa sekä päättää kyseiseen työ- ja oppimistilanteeseen sopivat käytännöt ja toimintatavat. Työntekijöiden perustarpeiden täytyminen mahdollistaa myös ryhmän sisäisen tuen jäsenten välillä.

Yhteisöohjautuvuuden tukeminen edellyttää ensin työntekijöiden motivaation ja sitoutumisen vahvistamista suhteessa organisaation laajempiin tavoitteisiin. Tämän jälkeen esihenkilöiden tehtävänä on tukea työntekijöitä tunnistamaan ja hyödyntämään arjen työtilanteita yhteisöllisinä oppimistilanteita. Esihenkilön tehtävänä on kannustaa ja ohjata työntekijöitä kollektiivisiin oppimistilanteisiin, joissa työntekijät voivat jakaa osaamistaan ja asiantuntijuuttaan. Vuorovaikutukselliset ja yhteisölliset oppimistilanteet ovat keskeinen edellytys yhteisöohjautuvuuden muodostumiselle. Yhteisöohjautuvuuden tukeminen edellyttää esihenkilön läsnäoloa työntekijöiden arjessa, esimerkkinä ja mallina toimimista sekä kannustavan ja luottamukseen perustuvan työ- ja oppimiskulttuurin luomista.

Johtopäätökset

Tutkimuksen tulosten perusteella voidaan todeta, että yhteisöohjautuvuus sosiaalisena, jaettuna ja vuorovaikutteisena ilmiönä tarkoittaa yksilöiden sitoutumista ja motivoitumista osana laajempaa ryhmää. Yhteisöohjautuvuus rakentuu sosiaalisessa vuorovaikutuksessa ryhmän jäsenten perustarpeiden täyttymisen myötä, mikä mahdollistaa ryhmän sitoutumisen yhteiseen jaettuun toimintaan (Keronen ym., 2024; Martela ym., 2021). Tällöin yhteisöohjautuvuudessa on kyse ryhmän vapaudesta, vastuusta ja autonomiasta määritellä joustavasti sen toimintatavat (Auvinen ym., 2018; Laloux, 2014; Thomas ym., 2017). Oppimistilanteissa yhteisöohjautuvuus edellyttää yksilötason autonomiaa ja aloitteellisuutta sekä yhteisöllisiä ja jaettuja käytäntöjä (Keronen ym., 2023). Yhteisöohjautuvuudessa yhdistyy työntekijöiden tarve autonomiaan (Noe & Ellingson, 2017), yhteisöllisyys ja tuki oppimisen näkökulmasta (Billett, 2014; Tynjälä, 2013) sekä työntekijöiden tarve kehittää omaa osaamistaan (Rigby & Ryan, 2018). Tiimien ollessa yhä suuremmassa vastuussa omasta työstään ja oppimisestaan (Wallo ym., 2013), näytetään yhteisöohjautuvuus tulevaisuudessa yhä keskeisempänä edellytyksenä työn tekemiselle ja työssä oppimiselle. Yhteisöohjautuvuus korostaa yksittäisen

työntekijän osaamisen sijaan osaamisen kokonaisuutta, jakamista ja hyödyntämistä laajemmin työyhteisössä. Yhteisöohjautuvuuden ja sen taustalla olevien psykologisten perustarpeiden avulla voidaan organisaatioissa luoda työntekijöiden hyvinvointia tukevia oppimisen ja työn käytäntöjä sekä samanaikaisesti saavuttaa organisaation pidemmän ajan tavoitteet kestäväällä tavalla (Gagné ym., 2022; Rigby & Ryan, 2018). Vaikka yhteisöohjautuvuus oppimistilanteissa viittaa siihen, että työntekijät voivat säädellä joustavasti toimintaansa kyseiseen tilanteeseen sopivaksi, se ei viittaa täydelliseen itsenäisyyteen tai autonomiseen toimintaan ilman tukea ja työskentelyn raameja (Määttä ym., 2023; Vansteenkiste ym., 2020). Olennaista on valmentavan esihenkilötyön keinoin varmistaa (Bond & Seneque, 2013), että yhteisöohjautuvuuteen pohjautuvien ryhmien työskentely on linjassa organisaation laajempien tavoitteiden kanssa.

Monissa organisaatioissa hyödynnetään yhteisöohjautuvuuden ajatusta antamalla vapautta, vastuuta ja autonomiaa tiimeille. Tärkeää on kuitenkin ymmärtää ensin yhteisöohjautuvuuden taustalla olevat käytännöt ja prosessit, ettei se muodostu automaattiseksi oletukseksi ja ideaaliksi työntekijöiden oppimiselle ja työskentelylle. Oppimisvaatimusten kasvaessa ja teknologian muuttaessa sosiaalisen vuorovaikutuksen luonnetta ja laatua, on yhä olennaisempaa kiinnittää huomioita siihen, miten tulevaisuudessa organisaatioissa luodaan työntekijöitä sitouttavaa ja motivoivaa kulttuuria (Gagné ym., 2022). Tukemalla työntekijöiden psykologisia perustarpeita voidaan luoda hyvinvointia tukevia oppimisen käytäntöjä (Ryan & Deci, 2000) ja näin vastata viime vuosina esiin nousseisiin oppimisen kuormittavuuden sekä hyvinvoinnin haasteisiin (Lemmetty & Collin, 2020). Yhteisöohjautuvuus korostaa yksilön ja sosiaalisen ympäristön välistä suhdetta ja yksilöiden toiminnan tapahtuvan aina suhteessa toisiin ihmisiin. Individualismia, yksilöllisiä valintoja sekä yksilön vapautta ja vastuuta korostavassa yhteiskunnassa on keskeistä pysähtyä pohtimaan yhteisöllisyyden, yhteenkuuluvuuden tunteen ja kollegiaalisuuden merkitystä työntekijöiden joustavalle, proaktiiviselle ja tavoitteelliselle toiminnalle tulevaisuudessa.

REFERENCES

- Agarwal, R., Angst, C. M., & Magni, M. (2009). The performance effects of coaching: A multilevel analysis using hierarchical linear modeling. *International Journal of Human Resource Management*, 20(10), 2110–2134. <https://doi.org/10.1080/09585190903178054>
- Åkerlind, G. S. (2005a). Variation and commonality in phenomenographic research methods. *Higher Education Research and Development*, 24(4), 321–334. <https://doi.org/10.1080/07294360500284672>
- Åkerlind, G. S. (2005b). Learning About Phenomenography: Interviewing, Data Analysis and Qualitative Research Paradigm. In J. A. Bowden, & P. Green (Eds.), *Doing Developmental Phenomenography*, (pp. 63–73). RMIT University Press.
- Åkerlind, G. (2012). Variation and commonality in phenomenographic research methods. *Higher Education Research & Development*, 31(1), 115–127. <https://doi.org/10.1080/07294360.2011.642845>
- Ashton, D. N. (2004). The impact of organisational structure on organisational learning. *International Journal of Training and Development*, 8(1), 43–54. <https://doi.org/10.1504/mejm.2019.097817>
- Assarroudi, A., Heshmati Nabavi, F., Armat, M. R., Ebadi, A., & Vaismoradi, M. (2018). Directed qualitative content analysis: The description and elaboration of its underpinning methods and data analysis process. *Journal of Research in Nursing*, 23(1), 42–55. <https://doi.org/10.1177/1744987117741667>
- Autin, K. L., Herdt, M. E., Garcia, R. G., & Ezema, G. N. (2022). Basic Psychological Need Satisfaction, Autonomous Motivation, and Meaningful Work: A Self-Determination Theory Perspective. *Journal of Career Assessment*, 30(1), 78–93. <https://doi.org/10.1177/10690727211018647>
- Auvinen, T., Riivari, E., & Sajasalo, P. (2018). Lessons learned from traditional and ‘new-age’ leadership. In A. Eskola (Eds.), *Navigating through changing times*, (pp. 95–112). Routledge.
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, 34(10), 2045–2068. <https://doi.org/10.1111/j.1559-1816.2004.tb02690.x>
- Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. Freeman.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Erlbaum.
- Bauer, J., & Mulder, R. H. (2006). Upward feedback and its contribution to employees’ feeling of self-determination. *Journal of Workplace Learning*, 18(7/8), 508–521. <https://doi.org/10.1108/13665620610693051>
- Beachboard, M. R., Beachboard, J. C., Li, W., & Adkison, S. R. (2011). Cohorts and relatedness: Self-determination theory as an explanation of how learning communities affect educational outcomes. *Research in Higher Education*, 52(8), 853–874. <https://doi.org/10.1007/s11162-011-9221-8>

- Beattie, R. S., Kim, S., Hagen, M. S., Egan, T. M., Ellinger, A. D., & Hamlin, R. G. (2014). Managerial coaching: A review of the empirical literature and development of a model to guide future practice. *Advances in Developing Human Resources*, 16(2), 184–201.
<https://doi.org/10.1177/1523422313520476>
- Bell, B. S. (2017). Strategies for supporting self-regulation during self-directed learning in the workplace. In R. A. Noe, & J. E. Ellingson (Eds.), *Autonomous learning in the workplace*, (pp. 117–134). Routledge.
- Berg, M. E., & Karlson, J. T. (2007). Mental models in project management coaching. *Engineering Management Journal*, 19(3), 3–13.
<https://doi.org/10.1080/10429247.2007.11431736>
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Penguin Books.
- Billett, S. (2000). Guided learning at work. *Journal of Workplace Learning*, 12(7), 272–285. [doi:10.1108/13665620010353351](https://doi.org/10.1108/13665620010353351)
- Billett, S. (2001). Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning*, 13(5), 209–214.
<https://doi.org/10.1108/EUM0000000005548>
- Billett, S. (2004). Workplace participatory practices : Conceptualising workplaces as learning environments. *Journal of Workplace Learning*, 16(6), 312–324. <https://doi.org/10.1108/13665620410550295>
- Billett, S. (2008). Learning throughout working life: A relational interdependence between personal and social agency. *British Journal of Educational Studies*, 56(1), 39–58. <https://doi.org/10.1111/j.1467-8527.2007.00394.x>
- Billett, S. (2014). Mimesis: Learning through everyday activities and interactions at work. *Human Resource Development Review*, 13(4), 462–482.
<https://doi.org/10.1177/1534484314548275>
- Bjørk, I. T., & Sørensen, A. L. (2013). Exploring informal learning among hospital nurses. *Journal of Workplace Learning*, 25(7), 426–440.
<https://doi.org/10.1108/JWL-01-2013-0003>
- Blanchard, A. L., & Allen, J. A. (2023). The entitativity underlying meetings: Meetings as key in the lifecycle of effective workgroups. *Organizational Psychology Review*, 13(4), 458–477.
<https://doi.org/10.1177/20413866221101341>
- Bligh, M. C., Pearce, C. L., & Kohles, J. C. (2006). The importance of self- and shared leadership in team based knowledge work: A meso-level model of leadership dynamics. *Journal of Managerial Psychology*, 21(4), 296–318.
<https://doi.org/10.1108/02683940610663105>
- Bloor, M., & Wood, F. (2006). *Keywords in qualitative methods: A vocabulary of research concepts*. Sage. <https://doi.org/10.4135/9781849209403>
- Bond, C., & Seneque, M. (2013). Conceptualizing coaching as an approach to management and organizational development. *Journal of Management Development*, 32(1), 57–72. <https://doi.org/10.1108/02621711311287026>

- Bowden, J., & Green, P. (2010). Relationality and the myth of objectivity in research involving human participants. In J. Higgs, N. Cherry, R. Macklin, & R. Ajjawi (Eds.), *Researching practice: A discourse on methodologies* (pp. 1–16). Sense Publishers.
- Bunderson, J. S., & Boumgarden, P. (2010). Structure and learning in self-managed teams: Why ‘bureaucratic’ teams can be better learners. *Organization Science*, 21(3), 609–624.
<https://doi.org/10.1287/orsc.1090.0483>
- Burr, V. (2015). *Social constructionism* (3rd ed.). Routledge.
- Burtis, J. O., & Turman, P. D. (2006). *Group communication pitfalls. Overcoming barriers to an effective group experience*. Sage.
- Cerasoli, C. P., Alliger, G. M., Donsbach, J. S., Mathieu, J. E., Tannenbaum, S. I., & Orvis, K. A. (2018). Antecedents and outcomes of informal learning behaviors: A meta-analysis. *Journal of Business and Psychology*, 33(2), 203–230. <https://doi.org/10.1007/s10869-017-9492-y>
- Chambers, C. R., Wehmeyer, M. L., Saito, Y., Lida, K. M., Lee, Y., & Singh, V. (2007). Self-determination: What do we know? Where do we go? *Exceptionality*, 15(1), 3–15. <https://doi.org/10.1080/09362830709336922>
- Chen, K. C., & Jang, S. J. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behavior*, 26(4), 741–752. <https://doi.org/10.1016/j.chb.2010.01.011>
- Cibangu, S. K., & Hepworth, M. (2016). The uses of phenomenology and phenomenography: A critical review. *Library and Information Science Research*, 38(2), 148–160. <https://doi.org/10.1016/j.lisr.2016.05.001>
- Clarke, N. (2005). Workplace learning environment and its relationship with learning outcomes in healthcare organizations. *Human Resource Development International*, 8(2), 185–205. <https://doi.org/10.1080/13678860500100228>
- Coetzer, A., Wallo, A., & Kock, H. (2019). The owner-manager’s role as a facilitator of informal learning in small businesses. *Human Resource Development International*, 22(5), 420–452. <https://doi.org/10.1080/13678868.2019.1585695>
- Cohen, S. G., & Ledford, G. E. Jr. (1994). The effectiveness of self-managing teams: a quasi-experiment, *Human Relations*, 47(1), 13–43. [doi:10.1177/001872679404700102](https://doi.org/10.1177/001872679404700102)
- Collin, K. (2005). Experience and shared practice – design engineers’ learning at work (Publication No. 261) [Doctoral dissertation, University of Jyväskylä]. JYX repository. <https://jyx.jyu.fi/bitstream/handle/123456789/13310/9513921883.pdf?sequence=1&isAllowed=y>
- Collin, K. (2006). Connecting work and learning: Design engineers’ learning at work. *Journal of Workplace Learning*, 18(7/8), 403–413. <https://doi.org/10.1108/13665620610692971>

- Collin, K. (2008). Development engineers' work and learning as shared practice. *International Journal of Lifelong Education*, 27(4), 379–397. <https://doi.org/10.1080/02601370802213856>
- Collin, K., Herranen, S., Paloniemi, S., Auvinen, T., Riivari, E., Sintonen, T., & Lemmertty, S. (2018). Leadership as an enabler of professional agency and creativity: Case studies from the Finnish information technology sector. *International Journal of Training and Development*, 22(3), 222–232. <https://doi.org/10.1111/ijtd.12130>
- Collin, K., Keronen, S., Lemmetty, S., Auvinen, T., & Riivari, E. (2021). Self-organised structures in the field of ICT: Challenges for employees' workplace learning. *Journal of Workplace Learning*, 33(2), 95–108. <https://doi.org/10.1108/JWL-10-2019-0124>
- Collin, K., Lemmetty, S., Jaakkola, M., & Keronen, S. (2023). *Lähijohtaminen kestävään oppimisen edistäjänä työelämässä (JoKo): Tutkimushankkeen loppuraportti [Leading sustainable learning at work (JoKo): Final report]* (Report No. 18). University of Jyväskylä. <https://doi.org/10.17011/jyureports/2023/18>
- Collin, K. & Paloniemi, S. (2008). Supporting experience sharing as participatory workplace practice. In S. Billett, C. Harteis & A. Eteläpelto (Eds.), *Emerging perspectives on workplace learning* (pp. 167-181). Sense Publisher
- Collin, K., & Valleala, U. M. (2005). Interaction among employees: How does learning take place in the social communities of the workplace and how might such learning be supervised? *Journal of Education and Work*, 18(4), 401–420. <https://doi.org/10.1080/13639080500327873>
- Côté-Lecaldare, M., Joussemet, M., & Dufour, S. (2016). How to support toddlers' autonomy: A qualitative study with child care educators. *Early Education and Development*, 27(6), 822–840. <https://doi.org/10.1080/10409289.2016.1148482>
- Coxen, L., van der Vaart, L., Van den Broeck, A., & Rothmann, S. (2021). Basic Psychological Needs in the Work Context: A Systematic Literature Review of Diary Studies. *Frontiers in Psychology*, 12, Article 698526, 1–18. <https://doi.org/10.3389/fpsyg.2021.698526>
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- Cronin, C. (2014). Workplace learning – a healthcare perspective. *Education and Training*, 56(4), 329–342. <https://doi.org/10.1108/ET-03-2013-0039>
- Cunliffe, A. (2008). Social constructionism. In R. Thorpe, & R. Holt (Eds.), *The SAGE dictionary of qualitative management research* (Vol 1-0). Sage. <https://doi.org/10.4135/9780857020109>
- Cuyvers, K., Van Oostveen, C., Endedijk, M. D., & Struben, V. (2024). Nurses' self-regulated learning in clinical wards: Important insights for nurse educators from a multi-method research study. *Nurse Education Today*, 137, Article 106179. <https://doi.org/10.1016/j.nedt.2024.106179>
- Dawber, T. (2019). The manager as coach and facilitator of development for employees in Information Technology (IT). *International Journal of Evidence*

- Based Coaching and Mentoring, 13, 32–48. <https://doi.org/10.24384/pkeh-xp84>
- Day, M., & Thatcher, J. (2009). 'I'm really embarrassed that you're going to read this ...': Reflections on using diaries in qualitative research. *Qualitative Research in Psychology*, 6(4), 249–259. <https://doi.org/10.1080/14780880802070583>
- De Laat, M., & Simons, R.-J. (2002). Collective learning: Theoretical perspectives and ways to support networked learning. *European Journal for Vocational Training*, 27, 13–24.
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer. <https://doi.org/10.1007/978-1-4899-2271-7>
- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology*, (Vol. 1, pp. 416–436). Sage. <https://doi.org/10.4135/9781446249215.n21>
- Decius, J., Schaper, N., & Seifert, A. (2021). Work characteristics or workers' characteristics? An input-process-output perspective on informal workplace learning of blue-collar workers. *Vocations and Learning*, 14(2), 285–326. <https://doi.org/10.1007/s12186-021-09265-5>
- Denzin, N. K. (1978). *Sociological methods: A sourcebook* (2nd ed.). McGraw Hill.
- Douglas, C., Martin, J. S., & Krapels, R. H. (2006). Communication in the transition to self-directed work teams. *Journal of Business Communication*, 43(4), 295–321. <https://doi.org/10.1177/0021943606291704>
- Drisko, J., & Maschi, T. (2015). *Content analysis*. Oxford University Press.
- Döös, M., & Wilhelmson, L. (2011). Collective learning: Interaction and a shared action arena. *Journal of Workplace Learning*, 23(8), 487–500. <https://doi.org/10.1108/13665621111174852>
- Eisenhardt, K. M. (2021). What is the Eisenhardt Method, really? *Strategic Organization*, 19(1), 147–160. <https://doi.org/10.1177/1476127020982866>
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory Building from Cases: Opportunities and Challenges. *The Academy of Management Journal*, 50(1), 25–32. <http://www.jstor.org/stable/20159839>
- Ellinger, A. D. (2004). The concept of self-directed learning and its implications for human resource development. *Advances in Developing Human Resources*, 6(2), 158–177. doi.org/10.1177/1523422304263327
- Ellinger, A. D. (2005). Contextual factors influencing informal learning in a workplace setting: The case of 'reinventing itself company'. *Human Resource Development Quarterly*, 16(3), 389–415. <https://doi.org/10.1002/hrdq.1145>
- Ellinger, A. D., Ellinger, A. E., & Keller, S. B. (2003). Supervisory coaching behavior, employee satisfaction, and warehouse employee performance: A

- dyadic perspective in the distribution industry. *Human Resource Development Quarterly*, 14(4), 435–458. <https://doi.org/10.1002/hrdq.1078>
- Ellinger, A. D., Hamlin, R. G., & Beattie, R. S. (2008). Behavioural indicators of ineffective managerial coaching: A cross-national study. *Journal of European Industrial Training*, 32(4), 240–257. <https://doi.org/10.1108/03090590810871360>
- Ellström, E., & Ellström, P. E. (2018). Two modes of learning-oriented leadership: A study of first-line managers. *Journal of Workplace Learning*, 30(7), 545–561. <https://doi.org/10.1108/JWL-03-2018-0056>
- Ellström, P.-E., & Kock, H. (2008). Competence development in the workplace: Concepts, strategies and effects. *Asia Pacific Education Review*, 9(1), 5–20. <https://doi.org/10.1007/BF03025821>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Elo, S., Kajula, O., Tohmola, A., & Kääriäinen, M. (2022). Steps and phases of qualitative content analysis process. *Hoitotiede*, 34(4), 215–225.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis. *SAGE Open*, 4(1), 1–10. <https://doi.org/10.1177/2158244014522633>
- Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247–273. <https://doi.org/10.1080/158037042000225245>
- European Union. Regulation (EU) No 679/2016 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). <https://gdpr-info.eu/>
- Fenwick, T. (2008). Understanding relations of individual-collective learning in work: A review of research. *Management Learning*, 39(3), 227–243. <https://doi.org/10.1177/1350507608090875>
- Finnish, National Board of Research Integrity TENK. (2023). https://tenk.fi/sites/default/files/2023-03/HTK-ohje_2023.pdf
- Fontana, R. P., Milligan, C., Littlejohn, A., & Margaryan, A. (2015). Measuring self-regulated learning in the workplace. *International Journal of Training and Development*, 19(1), 32–52. <https://doi.org/10.1111/ijtd.12046>
- Forner, V. W., Jones, M., Berry, Y., & Eidenfalk, J. (2020). Motivating workers: How leaders apply self-determination theory in organizations. *Organization Management Journal*, 18(2), 76–94. <https://doi.org/10.1108/OMJ-03-2020-0891>
- Gabriel, A. S., Moran, C. M., & Gregory, J. B. (2014). How can humanistic coaching affect employee well-being and performance? An application of self-determination theory. *Coaching*, 7(1), 56–73. <https://doi.org/10.1080/17521882.2014.889184>

- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. <https://doi.org/10.1002/job.322>
- Gagné, M., Parker, S. K., Griffin, M. A., Dunlop, P. D., Knight, C., Klonek, F. E., & Parent-Rochelleau, X. (2022). Understanding and shaping the future of work with self-determination theory. *Nature Reviews Psychology*, 1(7), 378–392. <https://doi.org/10.1038/s44159-022-00056-w>
- Ganotice, F. A., Chan, L., Chow, A. Y. M., Khoo, U. S., Lam, M. P. S., Liu, R. K. W., Poon, R. P. W., Wang, M. N., Tsoi, F. H. S., & Tipoe, G. L. (2022). What characterize high and low achieving teams in Interprofessional education: A self-determination theory perspective. *Nurse Education Today*, 112, Article 105321. <https://doi.org/10.1016/j.nedt.2022.105321>
- Garavan, T. N., & McCarthy, A. (2008). Collective learning processes and human resource development. *Advances in Developing Human Resources*, 10(4), 451–471. <https://doi.org/10.1177/1523422308320473>
- Geerts, I. A. G. M., Bierbooms, J. J. P. A., & Cloudt, S. W. M. G. (2021). Understanding self-managing teams in Dutch healthcare: Empirical evidence to non-sequential team development processes. *Journal of Health Organization and Management*, 35(9), 101–120. <https://doi.org/10.1108/JHOM-04-2020-0122>
- Gergen, K. J. (2004). Constructionism, social. In M. S. Lewis-Beck, A. Bryman, & T. Futing Liao (Eds.), *The SAGE encyclopedia of social science research methods* (pp. 184–185). Sage. <https://doi.org/10.4135/9781412950589>
- Gijbels, D., Raemdonck, I., Vervecken, D., & van Herck, J. (2012). Understanding work-related learning: The case of ICT workers. *Journal of Workplace Learning*, 24(6), 416–429. <https://doi.org/10.1108/13665621211250315>
- Gomez-Baya, D., & Lucia-Casademunt, A. M. (2018). A self-determination theory approach to health and well-being in the workplace: Results from the sixth European working conditions survey in Spain. *Journal of Applied Social Psychology*, 48(5), 269–283. <https://doi.org/10.1111/jasp.12511>
- González-Cutre, D., Romero-Elías, M., Jiménez-Loaisa, A., Beltrán-Carrillo, V. J., & Hagger, M. S. (2020). Testing the need for novelty as a candidate need in basic psychological needs theory. *Motivation and Emotion*, 44(2), 295–314. <https://doi.org/10.1007/s11031-019-09812-7>
- Graneheim, U. H., Lindgren, B. M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. <https://doi.org/10.1016/j.nedt.2017.06.002>
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. <https://doi.org/10.1016/j.nedt.2003.10.001>
- Gubbins, C., & MacCurtain, S. (2008). Understanding the dynamics of collective learning: The role of trust and social capital. *Advances in Developing Human Resources*, 10(4), 578–599. <https://doi.org/10.1177/1523422308320372>

- Ha, T. S. (2015). Learning stories from IT workers – development of professional expertise. *Studies in Continuing Education*, 37(1), 79–98.
<https://doi.org/10.1080/0158037X.2014.967347>
- Hackman, J. R., & Wageman, R. (2005). A theory of team coaching. *Academy of Management Review*, 30(2), 269–287.
<https://doi.org/10.5465/AMR.2005.16387885>
- Hagen, M. S. (2012). Managerial coaching: A review of the literature. *Performance Improvement Quarterly*, 24(4), 17–39.
<https://doi.org/10.1002/piq.20123>
- Hajar, A. (2021). Theoretical foundations of phenomenography: A critical review. *Higher Education Research and Development*, 40(7), 1421–1436.
<https://doi.org/10.1080/07294360.2020.1833844>
- Harteis, C. (2018). Machines, change and work: An educational view on the digitalization of work. In C. Harteis (Eds.), *The impact of digitalization in the workplace* (pp. 1–10). Springer. https://doi.org/10.1007/978-3-319-63257-5_1
- Harteis, C., Bauer, J.; Festner, D., Gruber, H., & Heid, H. (2005). Self-determination in daily working life. In H. Gruber, C. Harteis. R. H. Mulder, & M. Rehr (Eds.), *Bridging individual, organizational and cultural perspectives on professional learning* (pp. 244-252). Roderer.
- Hein, V., & Urban, K. (2025). The Relationship Between Perceived Leader Support and Autonomous Motivation to Learn in the Workplace. *Vocations and Learning*, 18(1), 1-22. <https://doi.org/10.1007/s12186-025-09370-9>
- Hetzner, S., Heid, H., & Gruber, H. (2012). Change at work and professional learning: How readiness to change, self-determination and personal initiative affect individual learning through reflection. *European Journal of Psychology of Education*, 27(4), 539–555. <https://doi.org/10.1007/s10212-011-0094-1>
- Hillberg Jarl, F. (2024). The impact of leadership on the workplace learning of individuals and teams: A literature review and synthesis. *Learning Organization*, 31(3), 411–439. <https://doi.org/10.1108/TLO-11-2022-0144>
- Hocine, Z., & Zhang, J. (2014). Autonomy supportive leadership: A new framework for understanding effective leadership through self-determination theory. *International Journal of Information Systems and Change Management*, 7(2), 135–149.
<https://doi.org/10.1504/IJISCM.2014.069397>
- Holton, E. F., Wilson, L. S., & Bates, R. A. (2009). Toward development of a generalized instrument to measure andragogy. *Human Resource Development Quarterly*, 20(2), 169–193.
<https://doi.org/10.1002/hrdq.20014>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
<https://doi.org/10.1177/1049732305276687>

- Hsu, H. C. K., Wang, C. V., & Levesque-Bristol, C. (2019). Reexamining the impact of self-determination theory on learning outcomes in the online learning environment. *Education and Information Technologies*, 24(3), 2159–2174. <https://doi.org/10.1007/s10639-019-09863-w>
- Huang, J. T., & Hsieh, H. H. (2015). Supervisors as good coaches: Influences of coaching on employees' in-role behaviors and proactive career behaviors. *International Journal of Human Resource Management*, 26(1), 42–58. <https://doi.org/10.1080/09585192.2014.940993>
- Huang, X., & Lai, C. (2020). Connecting formal and informal workplace learning with teacher proactivity: A proactive motivation perspective. *Journal of Workplace Learning*, 32(6), 437–456. <https://doi.org/10.1108/JWL-01-2020-0005>
- Hughes, C. (2004). The supervisor's influence on workplace learning. *Studies in Continuing Education*, 26(2), 275–287. <https://doi.org/10.1080/158037042000225254>
- Huusko, M., & Paloniemi, S. (2006). Fenomenografia laadullisena tutkimussuuntauksena kasvatustieteissä [Phenomenography as qualitative research orientation in the field of education]. *Suomen kasvatustieteellinen aikakauskirja*, 37(2), 4, 162–173.
- Hytönen, T. (2002). Exploring the practice of human resource development as a field of professional expertise (Publication No. 202) [Doctoral dissertation, University of Jyväskylä]. JYX repository. <https://urn.fi/URN:ISBN:951-39-1289-2>
- Janssens, L., Smet, K., Patrick, O., & Kyndt, E. (2017). The relationship between learning conditions in the workplace and informal learning outcomes: A study among police inspectors. *International Journal of Training and Development*, 21(2), 92–112. <https://doi.org/doi.org/10.1111/ijtd.12095>
- Jeong, I., & Shin, S. J. (2019). High-performance work practices and organizational creativity during organizational change: A collective learning perspective. *Journal of Management*, 45(3), 909–925. <https://doi.org/10.1177/0149206316685156>
- Jeong, S., Han, S. J., Lee, J., Sunalai, S., & Yoon, S. W. (2018). Integrative literature review on informal learning: Antecedents, conceptualizations, and future directions. *Human Resource Development Review*, 17(2), 128–152. <https://doi.org/10.1177/1534484318772242>
- Jordan, B., & Henderson, A. (1995). Interaction Analysis: Foundations and Practice. *Journal of the Learning Sciences*, 4(1), 39–103. https://doi.org/10.1207/s15327809jls0401_2
- Katz-Navon, T. Y., & Erez, M. (2005). When collective- and self-efficacy affect team performance: The role of task interdependence. *Small Group Research*, 36(4), 437–465. <https://doi.org/10.1177/1046496405275233>
- Keronen, S., Lemmetty, S., & Collin, K. (2023). Employees' self-determination in collegial learning situations at work: A comparative study of a Finnish ICT organization and a central hospital. *Scandinavian Journal of Work and Organizational Psychology*, 8(1): 13–16. <https://doi.org/10.16993/sjwop.192>

- Keronen, S., Lemmetty, S., & Collin, K. M. (2024). Construction of collective self-determination in development-oriented group discussions. *Journal of Workplace Learning*, 36(9), 88–105. <https://doi.org/10.1108/JWL-05-2024-0110>
- Keronen, S., Lemmetty, S., & Collin, K. (2025). Conceptions of the Leading of Learning in Supervisory Work: A Qualitative Study Based on a Finnish Technology Organization and a Central Hospital. *International Journal of Training and Development*, 1–13. <https://doi.org/10.1111/ijtd.70009>
- Kettunen, J., & Tynjälä, P. (2018). Applying phenomenography in guidance and counselling research. *British Journal of Guidance and Counselling*, 46(1), 1–11. <https://doi.org/10.1080/03069885.2017.1285006>
- Khandakar, M. S. A., & Pangil, F. (2019). Relationship between human resource management practices and informal workplace learning: An empirical study. *Journal of Workplace Learning*, 31(8), 551–576. <https://doi.org/10.1108/JWL-04-2019-0049>
- Knapp, R. (2010). Collective (team) learning process models: A conceptual review. *Human Resource Development Review*, 9(3), 285–299. <https://doi.org/10.1177/1534484310371449>
- Knowles, M. (1975). *Self-directed learning*. Follet.
- Kubiak, E. (2022). Increasing perceived work meaningfulness by implementing psychological need-satisfying performance management practices. *Human Resource Management Review*, 32(3), Article 100792. <https://doi.org/10.1016/j.hrmmr.2020.100792>
- Kyndt, E., Dochy, F., & Nijs, H. (2009). *Learning conditions for non-formal and informal workplace learning*. 21(5), 369–383. <https://doi.org/10.1108/13665620910966785>
- Kyndt, E., Vermeire, E., & Cabus, S. (2016). Informal workplace learning among nurses learning outcomes: Organisational learning conditions and personal characteristics that predict learning outcomes. *Journal of Workplace Learning*, 28(7), 435–450. <https://doi.org/10.1108/JWL-06-2015-0052>
- Laloux, F. (2014). *Reinventing organizations: A guide to creating organizations inspired by the next stage in human consciousness*. Nelson Parker.
- Langfred, C. W. (2000). The paradox of self-management: Individual and group autonomy in work groups. *Journal of Organizational Behavior*, 21(5), 563–585. [https://doi.org/10.1002/1099-1379\(200008\)21:5<563::AID-JOB31>3.0.CO;2-H](https://doi.org/10.1002/1099-1379(200008)21:5<563::AID-JOB31>3.0.CO;2-H)
- Lee, M. Y., & Edmondson, A. C. (2017). Self-managing organizations: Exploring the limits of less-hierarchical organizing. *Research in Organizational Behavior*, 37, 35–58. <https://doi.org/10.1016/j.riob.2017.10.002>
- Lehtonen, E. E., Nokelainen, P., Rintala, H., & Puhakka, I. (2022). Thriving or surviving at work: How workplace learning opportunities and subjective career success are connected with job satisfaction and turnover intention? *Journal of Workplace Learning*, 34(1), 88–109. <https://doi.org/10.1108/JWL-12-2020-0184>

- Lemmetty, S. (2020). Self-learning is present every day – in fact, it’s my job. Self-directed workplace learning in technology-based work (Publication No. 243) [Doctoral dissertation, University of Jyväskylä]. JYX repository. <http://urn.fi/URN:ISBN:978-951-39-8196-9>
- Lemmetty, S., & Collin, K. (2020). Throwaway knowledge, useful skills or a source for wellbeing? Outlining sustainability of workplace learning situations. *International Journal of Lifelong Education*, 39(5–6), 478–494. <https://doi.org/10.1080/02601370.2020.1804004>
- Lemmetty, S., & Collin, K. (2022). Jatkuva oppiminen ja aikuispedagogiikka työssä [Continuous learning and adult pedagogy at work]. SoPhi. <http://urn.fi/URN:ISBN:978-951-39-9443-3>
- Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA publications and communications board task force report. *American Psychologist*, 73(1), 26–46. <https://doi.org/10.1037/amp0000151>
- Liu, X., & Batt, R. (2010). How supervisors influence performance: A multilevel study of coaching and group management in technology-mediated services. *Personnel Psychology*, 63(2), 265–298. <https://doi.org/10.1111/j.1744-6570.2010.01170.x>
- Liu, C.-Y., Pirola-Merlo, A., Yang, C.-A., & Huang, C. (2009). Disseminating the Functions of Team Coaching Regarding Research and Development Team Effectiveness: Evidence from High-Tech Industries in Taiwan. *Social Behavior and Personality*, 37(1), 41–57. <https://doi.org/10.2224/sbp.2009.37.1.41>
- Liljedahl, M., Björck, E., Ponzer, S., & Bolander Laksov, K. (2019). Navigating without a map: How medical students interact with clinical learning environments. *Studies in Higher Education*, 44(2), 275–286. <https://doi.org/10.1080/03075079.2017.1359822>
- Lucas, S. R., & Szatrowski, A. (2014). Qualitative comparative analysis in critical perspective. *Sociological Methodology*, 44(1), 1–79. <https://doi.org/10.1177/0081175014532763>
- Lundqvist, D., Wallo, A., Coetzer, A., & Kock, H. (2023). Leadership and Learning at Work: A Systematic Literature Review of Learning-oriented Leadership. *Journal of Leadership and Organizational Studies*, 30(2), 205–238. <https://doi.org/10.1177/15480518221133970>
- Lynch, M. F., Salikhova, N. R., & Ereemeeva, A. V. (2020). Basic needs in other cultures: Using qualitative methods to study key issues in self-determination theory research. *Psychology, Journal of the Higher School of Economics*, 17(1), 134–144. <https://doi.org/10.17323/1813-8918-2020-1-134-144>
- MacNaghten, P., & Myers, G. (2004). Focus groups. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 65–79). Sage.

- Malcolm, J., Hodkinson, P., & Colley, H. (2003). The interrelationships between informal and formal learning. *Journal of Workplace Learning*, 15 (7/8), 313–318. <https://doi.org/10.1108/13665620310504783>
- Manganelli, L., Thibault-landry, A., Forest, J., & Carpentier, J. (2018). Self-determination theory can help you generate performance and well-being in the workplace: A review of the literature. *Advances in Developing Human Resources*, 20(2), 227–240. <https://doi.org/10.1177/1523422318757210>
- Manuti, A., Pastore, S., Scardigno, A. F., Giancaspro, M. L., & Morciano, D. (2015). Formal and informal learning in the workplace: A research review. *International Journal of Training and Development*, 19(1), 1–17. <https://doi.org/10.1111/ijtd.12044>
- Marková, I., Linell, P., Grossen, M., & Salazar Orvig, A. (2007). *Dialogue in focus groups: Exploring socially shared knowledge*. Equinox Publishing.
- Marsick, V. J. (2009). Toward a unifying framework to support informal learning theory, research and practice. *Journal of Workplace Learning*, 21(4), 265–275. <https://doi.org/10.1108/13665620910954184>
- Marsick, V. J., & Watkins, K. E. (2001). Informal and incidental learning. *New Directions for Adult and Continuing Education*, 2001(89), 25. <https://doi.org/10.1002/ace.5>
- Martela, F., Hankonen, N., Ryan, R. M., & Vansteenkiste, M. (2021). Motivating voluntary compliance to behavioural restrictions: Self-determination theory-based checklist of principles for COVID-19 and other emergency communications. *European Review of Social Psychology*, 32(2), 305–347. <https://doi.org/10.1080/10463283.2020.1857082>
- Martela, F., & Ryan, R. M. (2020). Distinguishing between basic psychological needs and basic wellness enhancers: the case of beneficence as a candidate psychological need. *Motivation and Emotion*, 44(1), 116–133. <https://doi.org/10.1007/s11031-019-09800-x>
- Marton, F. (1986). Phenomenography: A research approach to investigating different understandings of reality. *Journal of Thought*, 21(3), 28–49. <https://www.jstor.org/stable/42589189>
- Marton, F., & Booth, S. (1997). *Learning and awareness*. Routledge.
- Marton, F. (2000). The structure of awareness. In J. Bowden, & E. Walsh (Eds.), *Phenomenography* (pp.102–116). RMIT University Press.
- Marton, F., & Pong, W. Y. (2005). On the unit of description in phenomenography. *Higher Education Research and Development*, 24(4), 335–348. <https://doi.org/10.1080/07294360500284706>
- Matsuo, M. (2018). How does managerial coaching affect individual learning? The mediating roles of team and individual reflexivity. *Personnel Review*, 47(1), 118–132. <https://doi.org/10.1108/PR-06-2016-0132>
- Matsuo, M., Arai, K., & Matsuo, T. (2019). Empowering leadership and meaningful work: The mediating role of learning goal orientation. *International Journal of Training and Development*, 23(4), 328–338. <https://doi.org/10.1111/ijtd.12165>

- McAnally, K., & Hagger, M. S. (2024). Self-determination theory and workplace outcomes: A conceptual review and future research directions. *Behavioral Sciences, 14*(6), Article 428. <https://doi.org/10.3390/bs14060428>
- McCarthy, G., & Milner, J. (2013). Managerial coaching: Challenges, opportunities and training. *Journal of Management Development, 32*(7), 768–779. <https://doi.org/10.1108/JMD-11-2011-0113>
- McLeod, J. M., Kosicki, G. M., & McLeod, D. M. (2010). Levels of analysis and communication science. In C. R. Berger, M. E. Roloff, & D. R. Roskos-Ewoldsen (Eds.), *The Handbook of Communication Science* (2nd ed., pp. 183–200). Sage.
- Messmann, G., Evers, A., & Kreijns, K. (2022). The role of basic psychological needs satisfaction in the relationship between transformational leadership and innovative work behavior. *Human Resource Development Quarterly, 33*(1), 29–45. <https://doi.org/10.1002/hrdq.21451>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Moe, N. B., Dingsøyr, T., & Dybå, T. (2008). Understanding self-organizing teams in agile software development. *Proceedings of the Australian Software Engineering Conference (ASWEC)*, 76–85. <https://doi.org/10.1109/ASWEC.2008.4483195>
- Moe, N. B., Šmite, D., Paasivaara, M., & Lassenius, C. (2021). Finding the sweet spot for organizational control and team autonomy in large-scale agile software development. *Empirical Software Engineering, 26*(5), 1–41. <https://doi.org/10.1007/s10664-021-09967-3>
- Mulder, M. (2014). Conceptions of professional competence. In S. Billett, C. Hartels, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning* (pp. 107–137). Springer.
- Murphy, M. (2014). Self-determination as a Collective Capability: The Case of Indigenous Peoples. *Journal of Human Development and Capabilities, 15*(4), 320–334. <https://doi.org/10.1080/19452829.2013.878320>
- Muthusamy, S. K., Wheeler, J. V., & Simmons, B. L. (2005). Self-managing work teams: Enhancing organizational innovativeness. *Organization Development Journal, 23*(3), 53–66.
- Määttä, S., Palmu, I., Hankonen, N., Huhtiniemi, M., Lehtvuori, A., Martela, F., Polet, J., Sjöblom, K., Stenius, M., & Vasalampi, K. (2023). Itsemäärämisteoria ymmärrettäväksi: pääteesit, suomennokset ja väärinkäsitysten oikaisua [Making self-determination theory understandable: main theses, translations, and correction of misconceptions]. *Psykologia, 58*(04–06), 305–323. <https://doi.org/10.62443/psykologia.v58i4-6.131169>
- Nederveen Pieterse, A., Hollenbeck, J. R., van Knippenberg, D., Spitzmüller, M., Dimotakis, N., Karam, E. P., & Sleesman, D. J. (2019). Hierarchical leadership versus self-management in teams: Goal orientation diversity as moderator of their relative effectiveness. *Leadership Quarterly, 30*(6), Article 101434. <https://doi.org/10.1016/j.leaqua.2019.101343>

- Newton, J. M., Henderson, A., Jolly, B., & Greaves, J. (2015). A contemporary examination of workplace learning culture: An ethnomethodology study. *Nurse Education Today*, 35(1), 91–96.
<https://doi.org/10.1016/j.nedt.2014.07.001>
- Ng, J. Y. Y., Ntoumanis, N., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-Determination Theory Applied to Health Contexts: A Meta-Analysis. *Perspectives on Psychological Science*, 7(4), 325–340. <https://doi.org/10.1177/1745691612447309>
- Nie, Y., Chua, B. L., Yeung, A. S., Ryan, R. M., & Chan, W. Y. (2015). The importance of autonomy support and the mediating role of work motivation for well-being: Testing self-determination theory in a Chinese work organisation. *International Journal of Psychology*, 50(4), 245–255.
<https://doi.org/10.1002/ijop.12110>
- Noe, R. A., Clarke, A. D. M. & Klein, H. J. (2014). Learning in the twenty-first century workplace. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 245–275. doi.org/10.1146/annurev-orgpsych-031413-091321
- Noe, R. A., & Ellingson, J. E. (2017). Autonomous learning in the workplace: An introduction. In J. E. Ellingson, & R. A. Noe (Eds.), *Autonomous learning in the workplace* (pp. 1–12). Routledge.
<https://doi.org/10.4324/9781315674131>
- Olafsen, A. H., Niemiec, C. P., Halvari, H., Deci, E. L., & Williams, G. C. (2017). On the dark side of work: A longitudinal analysis using self-determination theory. *European Journal of Work and Organizational Psychology*, 26(2), 275–285. <https://doi.org/10.1080/1359432X.2016.1257611>
- Ollila, S., Raisio, H., Vartiainen, P., Lindell, J., Pernaa, H.-K., & Niemi, T. (2018). *Organisaatio muutoksen pyörteissä – hajautuksessa asiantuntijoidenosaaminen esiin*. Työelämäntutkimus 16(4), 236–250.
<https://journal.fi/tyoelamantutkimus/article/view/82692>
- Paik, Y., Seo, M. G., & Jin, S. (2019). Affective information processing in self-managing teams: The role of emotional intelligence. *Journal of Applied Behavioral Science*, 55(2), 235–267.
<https://doi.org/10.1177/0021886319832013>
- Pajuoja, M., Viitala, R., & Henttonen, K. (2025). Supporting innovating employees: How managerial coaching affects four dimensions of innovative work behavior. *Review of Managerial Science*, 1–22.
<https://doi.org/10.1007/s11846-025-00837-6>
- Park, S., McLean, G. N., & Yang, B. (2008, February 20–24). *Revision and validation of an instrument measuring managerial coaching skills in organizations* [Conference paper]. Academy of Human Resource Development Conference, Panama City, FL.
<https://files.eric.ed.gov/fulltext/ED501617.pdf>
- Patanakul, P., Chen, J., & Lynn, G. S. (2012). Autonomous teams and new product development. *Journal of Product Innovation Management*, 29(5), 734–750. <https://doi.org/10.1111/j.1540-5885.2012.00934.x>

- Patton, M. Q. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4th ed.). Sage.
- Pearce, C. L., & Manz, C. C. (2005). The new silver bullets of leadership: The importance of self- and shared leadership in knowledge work. *Organizational Dynamics*, 34(2), 130–140. <https://doi.org/10.1016/j.orgdyn.2005.03.003>
- Pimmer, C., Pachler, N., & Genewein, U. (2013). Contextual dynamics in clinical workplaces: Learning from doctor-doctor consultations. *Medical Education*, 47(5), 463–475. <https://doi.org/10.1111/medu.12130>
- Poell, R. F. (2014). Workplace learning theories and practices. In J. Walton, & C. Valentin (Eds.), *Human resource development: Practices and orthodoxies* (pp. 19–32). Palgrave Macmillan.
- Poole, M. S., Keyton, J., & Frey, L. R. (1999). Group communication methodology. In L. R. Frey, D. S. Gouran, & M. S. Poole, M.S. (Eds.), *Handbook of group communication theory & research* (pp. 92–112). Sage.
- Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27(3), 258–284. <https://doi.org/10.1080/00909889909365539>
- Prilla, M., Pammer, V., & Balzert, S. (2012). The push and pull of reflection in workplace learning: Designing to support transitions between individual, collaborative and organisational learning. In A., Ravenscroft, S., Lindstaedt, C. D., Kloos, & D., Hernández-Leo, (Eds.), *Proceedings of the 7th European Conference on Technology Enhanced Learning*, (pp. 278–291). Springer. https://doi.org/10.1007/978-3-642-33263-0_22
- Rapp, T. L., Bachrach, D. G., Rapp, A. A., & Mullins, R. (2014). The role of team goal monitoring in the curvilinear relationship between team efficacy and team performance. *Journal of Applied Psychology*, 99(5), 976–987. <https://doi.org/10.1037/a0036978>
- Riera Claret, C., Sahagún, M. Á., & Selva, C. (2020). Peer and informal learning among hospital doctors: An ethnographic study focused on routines, practices and relationships. *Journal of Workplace Learning*, 32(4), 285–301. <https://doi.org/10.1108/JWL-11-2018-0141>
- Rigby, C. S., & Ryan, R. M. (2018). Self-determination theory in human resource development: New directions and practical considerations. *Advances in Developing Human Resources*, 20(2), 133–147. <https://doi.org/10.1177/1523422318756954>
- Ruiz-Palomino, P., Gutiérrez-Broncano, S., Jiménez-Estévez, P., & Hernandez-Perlines, F. (2021). CEO servant leadership and strategic service differentiation: The role of high-performance work systems and innovativeness. *Tourism Management Perspectives*, 40, Article 100891. <https://doi.org/10.1016/j.tmp.2021.100891>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1002/jsfa.2740050407>

- Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. The Guilford Press.
- Ryan, R. M., & Deci, E. L. (2019). Brick by brick: The origins, development, and future of self-determination theory. In A. J. Elliot (Eds.), *Advances in motivation science*, (Vol. 6, pp. 111-156). Elsevier.
<https://doi.org/10.1016/bs.adms.2019.01.001>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860.
<https://doi.org/10.1016/j.cedpsych.2020.101860>
- Ryan, R. M., & Deci, E. L. (2022). Self-determination theory. In F. Maggino (Eds.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 1-7). Springer. https://doi.org/10.1007/978-3-319-69909-7_2630-2
- Ryan, R. M., Deci, E. L., Vansteenkiste, M., & Soenens, B. (2021). Building a science of motivated persons: Self-determination theory's empirical approach to human experience and the regulation of behavior. *Motivation Science*, 7(2), 97-110. <https://doi.org/10.1037/mot0000194>
- Saks, K., & Leijen, Ä. (2014). Distinguishing self-directed and self-regulated learning and measuring them in the e-learning context. *Procedia - Social and Behavioral Sciences*, 112, 190-198.
<https://doi.org/10.1016/j.sbspro.2014.01.1155>
- Salovaara, P., & Bathurst, R. (2018). Power-with leadership practices: An unfinished business. *Leadership*, 14(2), 179-202.
<https://doi.org/10.1177/1742715016652932>
- Sarmah, P., Van den Broeck, A., Schreurs, B., Proost, K., & Germeys, F. (2022). Autonomy supportive and controlling leadership as antecedents of work design and employee well-being. *Business Research Quarterly*, 25(1), 44-61.
<https://doi.org/10.1177/23409444211054508>
- Schei, V., & Nerbø, I. (2015). The invisible learning ceiling: Informal learning among preschool teachers and assistants in a Norwegian kindergarten. *Human*, 26(3), 299-238. <https://doi.org/10.1002/hrdq>
- Silverman, D. (2024). *Interpreting qualitative data* (7th edition). Sage.
- Skule, S. (2004). Learning conditions at work: A framework to understand and assess informal learning in the workplace. *International Journal of Training and Development*, 8(1), 8-20. <https://doi.org/10.1111/j.1360-3736.2004.00192.x>
- Slater, J. (2017). Social constructionism. In M., Allen (Eds.), *The Sage encyclopedia of communication research methods* (Vol. 4, pp. 1624-1628). Sage.
<https://doi.org/10.4135/9781483381411>
- Slemp, G. R., Kern, M. L., Patrick, K. J., & Ryan, R. M. (2018). Leader autonomy support in the workplace: A meta-analytic review. *Motivation and Emotion*, 42(5), 706-724. <https://doi.org/10.1007/s11031-018-9698-y>
- Slemp, G. R., Field, J. G., Ryan, R. M., Forner, V. W., Van den Broeck, A., & Lewis, K. J. (2024). Interpersonal supports for basic psychological needs and their relations with motivation, well-being, and performance: A meta-

- analysis. *Journal of Personality and Social Psychology*, 127(5), 1012–1037. <https://doi.org/10.1037/pspi0000459.supp>
- Smet, K., Grosemans, I., De Cuyper, N., & Kyndt, E. (2022). Outcomes of informal work-related learning behaviours: A systematic literature review. *Scandinavian Journal of Work and Organizational Psychology*, 7(1), 1–18. <https://doi.org/10.16993/sjwop.151>
- Stabel, L. S., McGrath, C., Björck, E., Elmberger, A., & Laksov, K. B. (2022). Navigating affordances for learning in clinical workplaces: A qualitative study of general practitioners' continued professional development. *Vocations and Learning*, 15(3), 427–448. <https://doi.org/10.1007/s12186-022-09295-7>
- Stajkovic, A. D., Lee, D., & Nyberg, A. J. (2009). Collective Efficacy, Group Potency, and Group Performance: Meta-Analyses of Their Relationships, and Test of a Mediation Model. *Journal of Applied Psychology*, 94(3), 814–828. <https://doi.org/10.1037/a0015659>
- Stake, R. E. (1995). *The art of case study research*. Sage.
- Stolz, S. A. (2020). Phenomenology and phenomenography in educational research: A critique. *Educational Philosophy and Theory*, 52(10), 1077–1096. <https://doi.org/10.1080/00131857.2020.1724088>
- Svensson, L., Ellström, P. E., & Åberg, C. (2004). Integrating formal and informal learning at work. *Journal of Workplace Learning*, 16(8), 479–491.
- Takahashi, A. R. W., & Araujo, L. (2020). Case study research: Opening up research opportunities. *RAUSP Management Journal*, 55(1), 100–111. <https://doi.org/10.1108/RAUSP-05-2019-0109>
- Takeuchi, H., & Nonaka, I. (1986). New product development. *Harvard Business Review*, 54(1), 137–146.
- Teixeira, P. J., Marques, M. M., Silva, M. N., Brunet, J., Duda, J. L., Haerens, L., La Guardia J., Lindwall, M., Lonsdale, C., Markland, D., Michie, S., Moller, A., Ntoumanis, N., Patrick, H., Reeve, J., Ryan, R. M., Sebire, S., Standage, M., Vansteenkiste, M., ... Hagger, M. S. (2020). A classification of motivation and behavior change techniques used in self-determination theory-based interventions in health contexts. *Motivation Science*, 6(4), 438–455. <https://doi.org/10.1037/mot0000172>
- Thomas, E. F., Amiot, C. E., Louis, W. R., & Goddard, A. (2017). Collective self-determination: How the agent of help promotes pride, well-being, and support for intergroup helping. *Personality and Social Psychology Bulletin*, 43(5), 662–677. <https://doi.org/10.1177/0146167217695553>
- Torraco, R. J., & Lundgren, H. (2020). What HRD is doing – What HRD should be doing: The case for transforming HRD. *Human Resource Development Review*, 19(1), 39–65. <https://doi.org/10.1177/1534484319877058>
- Tracy, S. J. (2010). Qualitative quality: Eight a 'big-tent' criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837–851. <https://doi.org/10.1177/1077800410383121>
- Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational Research Review*, 3, 130–154. <https://doi.org/10.1016/j.edurev.2007.12.001>

- Tynjälä, P. (2013). Toward a 3-P model of workplace learning: A literature review. *Vocations and Learning*, 6(1), 11–36. <https://doi.org/10.1007/s12186-012-9091-z>
- University of Jyväskylä (2025, May 14). Guidelines for responsible science and research ethics and contact details for advice. University of Jyväskylä. <https://www.jyu.fi/en/research/responsible-science/guidelines-for-responsible-science-and-research-ethics-and-contact-details-for-advice>
- Van den Broeck, A., Ferris, D. L., Chang, C. H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, 42(5), 1195–1229. <https://doi.org/10.1177/0149206316632058>
- van Tuin, L., Schaufeli, W. B., & Van den Broeck, A. (2021). Engaging leadership: Enhancing work engagement through intrinsic values and need satisfaction. *Human Resource Development Quarterly*, 32(4), 483–505. <https://doi.org/10.1002/hrdq.21430>
- Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, 44(1), 1–31. <https://doi.org/10.1007/s11031-019-09818-1>
- Varjus, S.-L., Leino-Kilpi, H., & Suominen, T. (2011). Professional autonomy of nurses in hospital settings – A review of the literature. *Scandinavian Journal of Caring Sciences*, 25, 201–207. <https://doi.org/10.1111/j.1471-6712.2010.00819>
- Viitala, R. (2004). Towards knowledge leadership. *Leadership & Organization Development Journal*, 25(6), 528–544. <https://doi.org/10.1108/01437730410556761>
- Viitala, R., Laiho, M., Pajuoja, M., & Henttonen, K. (2023). Managerial coaching and employees' innovative work behavior: The mediating effect of work engagement. *International Journal of Entrepreneurship and Innovation*, 1–14. <https://doi.org/10.1177/14657503231221693>
- Wageman, R. (2001). How leaders foster self-managing team effectiveness: Design choices versus hands-on coaching. *Organization Science*, 12(5), 559–577. <https://doi.org/10.1287/orsc.12.5.559.10094>
- Wall, T., D., Kemp, N., J., Jackson, P., R. & Clegg, C., W. (1986). Outcomes of autonomous workgroups: a long-term field experiment. *Academy of Management Journal*, 29(2), 280–304.
- Wallo, A., Ellström, E., & Kock, H. (2013). Leadership as a balancing act between performance- and development-orientation: A study of managers' and co-workers' understanding of leadership in an industrial organisation. *Organization Development Journal*, 3(34), 222–237. <https://doi.org/http://dx.doi.org/1108/01437731311326666>
- Wallo, A., Kock, H., Reineholm, C., & Ellström, P. E. (2022). How do managers promote workplace learning? Learning-oriented leadership in daily work. *Journal of Workplace Learning*, 34(1), 58–73. <https://doi.org/10.1108/JWL-11-2020-0176>
- Wallo, A., Lundqvist, D., & Coetzer, A. (2024). Learning-oriented leadership in organizations: An integrative review of qualitative studies. *Human*

- Resource Development Review*, 23(2), 230–275.
<https://doi.org/10.1177/15344843241239723>
- Watkins, K. E., & Marsick, V. J. (2014). Adult education & human resource development: Overlapping and disparate fields. *New Horizons in Adult Education and Human Resource Development*, 26(1), 42–54.
<https://doi.org/10.1002/nha3.20052>
- Weer, C. H., DiRenzo, M. S., & Shipper, F. M. (2016). A Holistic View of Employee Coaching: Longitudinal Investigation of the Impact of Facilitative and Pressure-Based Coaching on Team Effectiveness. *Journal of Applied Behavioral Science*, 52(2), 187–214.
<https://doi.org/10.1177/0021886315594007>
- Wijga, M., Endedijk, M. D., & Veldkamp, B. P. (2023). A social regulation perspective on team reflexivity: The development of an analytical framework. *Vocations and Learning*, 16(2), 251–291.
<https://doi.org/10.1007/s12186-023-09315-0>
- Willems, A. S., & Lewalter, D. (2012). Self-determination and learning. In N. M. Seel (Eds.), *Encyclopedia of the sciences of learning* (pp. 2993–2997). Springer.
https://doi.org/10.1007/978-1-4419-1428-6_250
- Weber, R. P. (1990). *Basic content analysis*. Sage.
- Yang, B. (2004). Holistic learning theory and implications for human resource development. *Advances in Developing Human Resources*, 6(2), 241–262.
<https://doi.org/10.1177/1523422304263431>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.) Sage.
- Young, R. A., & Collin, A. (2004). Introduction: Constructivism and social constructionism in the career field. *Journal of Vocational Behavior*, 64(3), 373–388. <https://doi.org/10.1016/j.jvb.2003.12.005>
- Yu, S., Levesque-Bristol, C., & Maeda, Y. (2018). General need for autonomy and subjective well-being: A meta-analysis of studies in the US and East Asia. *Journal of Happiness Studies*, 19(6), 1863–1882.
<https://doi.org/10.1007/s10902-017-9898-2>
- Zaimovic, T., Kozic, M., Efendić, A., & Džanić, A. (2021). Self-organizing teams in software development – myth or reality. *TEM Journal*, 10(4), 1565–1571.
<https://doi.org/10.18421/TEM104-10>
- Zuehl, J. (2016). *Collective self-determination* [Doctoral dissertation, Princeton University]. ProQuest, Parkway.



ORIGINAL PAPERS

I

EMPLOYEES' SELF-DETERMINATION IN COLLEGIAL LEARNING SITUATIONS AT WORK: A COMPARATIVE STUDY OF A FINNISH ICT ORGANIZATION AND A CENTRAL HOSPITAL

by

Sara Keronen, Soila Lemmetty & Kaija Collin, 2023

Scandinavian Journal of Work
and Organizational Psychology, Vol 8(1): 13, 1-16

<https://doi.org/10.16993/sjwop.192>

Reproduced with kind permission by Stockholm University Press.



Employees' Self-Determination in Collegial Learning Situations at Work: A Comparative Study of a Finnish ICT Organization and a Central Hospital

SARA KERONEN 

SOILA LEMMETTY 

KAIJA COLLIN 

*Author affiliations can be found in the back matter of this article

 SCANDINAVIAN JOURNAL
OF WORK AND ORGANIZATIONAL PSYCHOLOGY

ORIGINAL ARTICLE

 STOCKHOLM
UNIVERSITY PRESS

ABSTRACT

Expert work, seen as continuous learning and development, requires autonomy and responsibility at the individual level and collegiality and sharing of expertise at the team level. To have strong intrinsic motivation, employees must have the volition, ability, and interest to develop themselves and gain new knowledge. Enabling intrinsic motivation requires the self-determination to fulfill three basic psychological needs: autonomy, competence, and relatedness. However, self-determination not only relies on an individual's own activity but is also influenced by the demands, obstacles, and affordances of the sociocultural context. Likewise, studies on learning in expert work in the field of adult education have shown that collegiality and social interaction are vital resources for learning. Therefore, this study explores employees' self-determination in collegial learning situations in expert work in two contexts. A comparative qualitative research strategy and directed content analysis were utilized. The data consist of thematic interviews ($N = 56$) with employees from a Finnish central hospital and a Finnish information and communication technology organization. The findings show that self-determination is an essential part of collegial learning in modern expert work, thus providing the motivation behind learning. Social interaction can be seen as an enabler of employees' sense of self-determination to be fulfilled in learning situations. The paper concludes with a discussion of the commonalities and differences in self-determination in collegial learning situations in these two expert work contexts. Finally, suggestions for future research are provided.

CORRESPONDING AUTHOR:

Sara Keronen

University of Jyväskylä,
Department of Education, PO
Box 35, FI-40014 University of
Jyväskylä, Finland
sara.e.keronen@jyu.fi

KEYWORDS:

self-determination; collegial
learning; expert work;
workplace; ICT organization;
hospital

TO CITE THIS ARTICLE:

Keronen, S., Lemmetty, S., &
Collin, K. (2023). Employees'
Self-Determination in Collegial
Learning Situations at Work:
A Comparative Study of a
Finnish ICT Organization
and a Central Hospital.
*Scandinavian Journal of Work
and Organizational Psychology*,
8(1): 13, 1–16. DOI: [https://doi.
org/10.16993/sjwop.192](https://doi.org/10.16993/sjwop.192)

INTRODUCTION

Learning is an essential prerequisite for work tasks to be accomplished in the fields of healthcare and technology. In hospitals, employee learning is critical to ensuring patient health (Stabel et al., 2022) and working responsibly (McConnell et al., 2018), while in information and communication technology (ICT) organizations, it is the key to responding to digitalization and the rapid development of technologies (Ha, 2015). In both contexts, the work can be understood as expert work, as the completion of tasks and the quality of the work rely on individual competencies and expertise. Such expert work is seen as continuous learning, which requires autonomy and responsibility at the individual level and collegiality and sharing of expertise at the team level (Noe & Ellingson, 2017). Continuous learning in modern expert work demands employees to be active, willing, able, and interested in learning—in other words, to have strong intrinsic motivation (Ryan & Deci, 2000).

According to the self-determination theory (SDT) by Ryan and Deci (2000), enabling employees' intrinsic motivation relies on the fulfillment of three basic psychological needs—autonomy, competence, and relatedness—which are seen as essential to optimal human growth and development (Rigby & Ryan, 2018) and learning in the work context (Hetzner et al., 2012; Willems & Lewalter, 2012). In recent years, learning requirements in organizations have been met by increasing employees' freedom and autonomy. However, prioritizing autonomy alone can generate unwanted outcomes, leading individuals to become too independent, separate from others, or feel unsupported when their own competence is not sufficient to overcome a challenging work situation (Collin et al., 2021; Gijbels et al., 2012). Therefore, alongside autonomy, it is important to focus on the other key psychological needs of SDT: competence and relatedness.

Research on the basic psychological needs underlying intrinsic motivation has tended to focus on individual-oriented perspectives (Rigby & Ryan, 2018), although the fulfillment of these needs does not rely only on the individual's own activity but is also influenced by the demands, obstacles, and affordances of the sociocultural context in which the person acts (Ryan & Deci, 2000). At the same time, studies on adult education have shown that collegiality and social interaction are vital resources for learning at work, as learning occurs through participation in socially shared practices in the work community (Billett, 2014). As expert work is rarely completed alone, learning emerges as interactive, shared, and relational at the collegial level (Billett, 2014). Therefore, learning and social interaction can be seen as intertwined, rather than separate elements of expert work (Collin, 2008). Given that collegial learning is an increasingly central part of expert work itself, it is

important to point out that previous work-life studies on SDT have not focused on the context of collegial learning; however, they have shown that the self-determination arising from intrinsic motivation and basic needs is a central starting point in contemporary work emphasizing individual responsibility.

In the organizational context, SDT has been previously examined in relation to, for example, work-related stress (Olafsen et al., 2017), job satisfaction (Nie et al., 2015), and psychological well-being (Gomez-Baya & Lucia-Casademunt, 2018). In the educational context, SDT has been widely utilized to study, for example, motivation in online learning settings (Chen & Jang, 2010), learning through reflection (Hetzner et al., 2012), and improving learning outcomes in higher education through learning communities (Beachboard et al., 2011). Most of these studies are quantitative (e.g., Bauer & Mulder, 2006; Beachboard et al., 2011; Chen & Jang, 2010), and scholars have called for empirical qualitative research on SDT (Ryan & Deci, 2020). However, while self-determination has been widely explored in conventional learning settings (Hsu et al., 2019) and educational training contexts (Chambers et al., 2007), more research is needed on the different learning environments (Hsu et al., 2019), especially in different organizations and work contexts (Gagné & Deci, 2005).

This study investigated self-determination in the context of collegial learning at work in two different organizations, an ICT organization and a central hospital, which we understand to be rich learning environments for employees. This study aims to increase the understanding of self-determination and its definition in the context of collegial learning situations in expert work. This study contributes to previous research on self-determination and the utilization of SDT in different contexts by increasing the qualitative understanding of self-determination and its relation to collegial learning in different workplaces. In addition, from the perspective of adult education, collegial learning based on social interaction and participation in social activities at work becomes essential to affording employees a sense of self-determination to be fulfilled and, thus, enabling them to feel intrinsically motivated.

In the following, we present our theoretical background of self-determination and describe what collegial learning at work means. We then highlight findings from previous research in two targeted industries: hospital and technology. We present the research aim and questions, as well as the methodological choices related to qualitative comparative research. Then, we present the main findings of our study through four categories of outcomes. We illustrate how employee self-determination is described in these collegial learning situations and show, in detail, how the findings of self-determination differ between the two target organizations. Finally, we discuss the study's findings, novelty, and shortcomings in relation

to previous research, describe key research needs for further research, and offer practical suggestions.

SELF-DETERMINATION IN THE CONTEXT OF COLLEGIAL LEARNING SITUATIONS AT WORK

SDT is an appropriate approach to studying learning (Willems & Lewalter, 2012), as it simultaneously considers an individual's need for autonomy, competence, and relatedness (Ryan & Deci, 2000). These needs can be seen as key to supporting the intrinsic motivation needed for learning and successful performance in the work context (Baard et al., 2004; Bauer & Mulder, 2006; Ryan & Deci, 2000). The more employees feel the fulfillment of these needs, the more they take the initiative, which in turn leads to better learning outcomes (Hetzner et al., 2012). First, autonomy is considered an integral part of an individual's learning in the work context, in which individuals have become increasingly responsible for their own work and learning (Noe & Ellingson, 2017). Second, competence can be seen as being directly linked to learning, as it refers to employees' needs to gain new knowledge and develop themselves (Rigby & Ryan, 2018). Finally, relatedness is an integral part of learning at work, as learning often takes place as a collegial phenomenon in social interactions in work situations (Billett, 2014; Lemmetty, 2020).

SELF-DETERMINATION THEORY (SDT)

SDT is based on the idea that all human beings have the three abovementioned fundamental psychological needs (Ryan & Deci, 2000). First, *autonomy* refers to a sense of choice and self-endorsement of one's actions and ownership of and volition for one's work. In working life, individuals do not always have the option to choose; instead, they have specific tasks and goals to accomplish. However, individuals can have autonomy in these tasks when they are clear and accepted. Essential to fulfilling the need for autonomy is a clear purpose and rational explanation for the action (Rigby & Ryan, 2018). Autonomy, as a feeling of volition, can be accompanied by any act, individual or collective (Ryan & Deci, 2000). Autonomy can be defined as self-determination in deciding what to do and how to do it (Willems & Lewalter, 2012). Second, *competence* refers to the basic need to feel effective, successful, and developed. In organizations, individuals want to feel as though they have all the resources, skills, and expertise necessary to complete their daily tasks. Therefore, competence is continuously expressed by organizations. Employees also want to continually stretch their abilities to feel that they have the opportunity to grow and develop toward their career goals. Finally, *relatedness* refers to the need for belonging, a sense of meaning and connectedness

to others, and feelings of being supported and that one's support is valued. In the workplace, the need for relatedness is fulfilled when employees feel respected, valued, and engaged at all organizational levels. (Rigby & Ryan, 2018).

The fulfillment of basic psychological needs facilitates intrinsic motivation, which refers to acting with a sense of endorsement, volition, and congruence (Deci & Ryan, 2012). This includes the idea that individuals are motivated when they are allowed to carry out their own intentions, develop things that are important to them, and act in their own interests (Deci & Ryan, 2008). The basic psychological needs of SDT are essential to creating the basis for the intrinsic motivation that defines a person's will to act based on their own interests, not external coercion or control. Gagné and Deci (2005) argue that work environments that promote the fulfillment of these three basic psychological needs increase employees' intrinsic motivation, which in turn produces positive outcomes, performance, creativity, cognitive flexibility, job satisfaction, and behavior change.

SDT's purpose is to define the factors that nurture a human's natural potential to grow, develop, and feel content, and thus, to research the processes and circumstances that promote effective activity and development among individuals, groups, and communities (Ryan & Deci, 2000). Exploring the social-contextual conditions that either facilitate or hinder people's self-motivation, performance, and development is essential (Ryan & Deci, 2000). The fulfillment of these three needs leads to higher job satisfaction and more positive well-being at work (Gomez-Baya & Lucia-Casademunt, 2018) and supports learning in the context of work (Bauer & Mulder, 2006). Basic psychological needs are necessary for optimal human growth (Rigby & Ryan, 2018). Thus, they can be assumed an essential precondition and part of both individual and collegial learning in the work context (Willems & Lewalter, 2012). From this perspective, studies on collegiality between members of the work community in learning at work are also pertinent.

COLLEGIAL LEARNING AT WORK AS A SHARED PRACTICE

Workplaces are learning environments that include structured practices for individuals to participate in learning situations and in learning derived through everyday participation in different activities at work (Billett, 2014). Learning situations at work usually encompass characteristics of both formality and informality (Collin, 2008; Malcolm et al., 2003), which should be seen more as a continuum and interrelated (Marsick, 2009) than as the opposite of each other. The work community can be seen as an important learning environment (Collin, 2008) in which learning needs to emerge (Billett, 2014). Expert work, in particular, is

often problem-based, development-oriented work in which the learning processes of individuals and groups arise through everyday activities and practices (Tynjälä, 2013). Learning in the workplace can be broadly defined as learning activities at work and for work (Billett, 2008; Tynjälä, 2013).

When workplaces are approached as rich learning environments, an essential aspect is how learning arises from participation in social practices in the workplace (Billett, 2014). From this perspective, learning emerges and is based on people's participation in different workplace activities and practices (Manuti et al., 2015; Tynjälä, 2013). Learning includes social interaction between colleagues (Collin, 2008), and the relationship between individuals and social practices shapes learning (Billett, 2014). As learning and social interaction at work can be seen as intertwined elements, social communities and communal practices create space for learning when these practices are shared in social interactions among employees in teams, groups, and networks (Collin, 2008).

Collegial learning arises as shared practice when others tell, teach, instruct, demonstrate, or otherwise guide an individual's learning (Billett, 2014). One concrete form of learning in the workplace is asking for help and guiding others in work tasks (Collin, 2008; Smet et al., 2022). Learning also manifests as observing colleagues' actions (Björk & Sørensen, 2013; Smet et al., 2022), active retrieval of information (Kyndt et al., 2009), and learning through trial and error (Tynjälä, 2013). In such learning situations, more experienced or expert colleagues play a major role in guiding others (Billett, 2014). However, learning is not limited to situations in which it is guided directly and intentionally by others. Instead, learning emerges as a continuous process in which individuals participate in daily activities in the work community. Thus, learning also occurs outside of direct guidance (Billett, 2014) through the completion of daily work tasks. Therefore, from a sociocultural perspective, learning at work includes both individual and collective perspectives (Billett, 2014).

HOSPITALS AND ICT ORGANIZATIONS AS CONTEXTS FOR LEARNING AND SELF-DETERMINATION

Organizations based on expert work, such as hospitals and ICT organizations, can be considered places where learning and competence development are necessary. According to Berings et al. (2008), learning in a hospital occurs through one's own work, social interactions with colleagues, theory or guidance, reflections on work experiences, and life outside of work. In addition, learning through reflective work-related discussions, collaboration, and feedback plays a critical role in employee learning and the sharing of what has been learned (Bontemps-Hommen et al., 2020; Kyndt et al., 2016; Riera Claret et al., 2020). An essential resource

for learning is interactions with colleagues and other specialists (Brooks et al., 2017; Stabel et al., 2022). Thus, consulting and interprofessional teamwork are typical ways to complete everyday tasks and learn in hospitals (Pimmer et al., 2013).

Similarly, researchers in the ICT field have found that learning is linked to everyday work and is framed by solving complex problems (Collin, 2008) and working with technologies (Vähäsantanen & Eteläpelto, 2017). Learning takes place either in interactions with colleagues and customers or independently as information retrieval (Gijbels et al., 2012; Ha, 2015; Lemmetty, 2020), which requires employees' autonomy and control over their own learning processes (Bell, 2017; Frenkel & Sanders, 2007). Due to digitalization and the rapid development of technologies in the ICT industry, professionals are required to engage in learning in response to the continuous performance demands in the field (Ha, 2015). In addition, the younger generation expects more meaningfulness, autonomy, and responsibility from work (Noe & Ellingson, 2017). In both the hospital and ICT sectors, autonomy has been found to be an essential precondition for expert work and learning in the workplace (Clarke, 2005; Lemmetty, 2020). Freedom and autonomy are required to complete work tasks as tasks become more complex and nonroutine (Saks & Leijen, 2014). In expert work, employees' self-determination is important because external control may negatively affect learning and creativity (Collin et al., 2018).

ICT organizations are often based on a less hierarchical configuration (Lee & Edmondson, 2017; Holbeche, 2015) because they utilize agile developmental methods that require different teams and organizational structures (Moe et al., 2008). Autonomy and flexibility are enhanced in ICT organizations (Cerasoli et al., 2018) by minimizing hierarchy, creating independent teams, and even allowing for nonleadership (Auvinen et al., 2017; Collin et al., 2018). Thus, the power, responsibility, and opportunities for decision making by individuals and teams are greater (Moe et al., 2008; Rigby & Ryan, 2018). A low hierarchy also offers employees' personal fulfillment, meaningful work, and opportunities to learn and develop (de Hauw & de Vos, 2010). In traditional organizations like hospitals, top management often makes bigger decisions and directs employees. However, autonomy does not depend only on the structure of an organization. Studies conducted in hospitals have shown that autonomy in this field is also essential (Clarke, 2005), especially in the daily work context of physicians and nurses. Nurses are independent in their daily work of caring for patients, although they are not responsible for administrative and organizational decisions and actions (Varjus et al., 2011). Likewise, physicians are already trained during their studies to be independent and autonomous in the clinical learning environment (Liljedahl et al., 2019). Therefore, hospitals are multifaceted and complex

learning environments (Cronin, 2014), especially from a hierarchical point of view (Riera Claret et al., 2020). However, autonomy and self-determination can be seen as essential requirements of expert work.

Increasing autonomy and freedom in expert work requires greater responsibility (Rigby & Ryan, 2018). Thus, as learning in the workplace becomes a greater part of work, it requires stronger individual autonomy and a shift in responsibility from management and supervisors to individual employees and groups (Lemmetty, 2020). However, the meaning of different organizational structures for learning and self-determination remains unclear. A less hierarchical structure produces freedom, which contributes to individual learning (Mintzberg, 1980), whereas rigid guidance can impair employees' creativity and spontaneity (Takeuchi & Nonaka, 1986). However, clear structures are needed to support learning (Bunderson & Boumgarden, 2010), especially if employees' knowledge and competencies are not sufficiently strong (Ashton, 2004). Without support, learning can, at worst, be entirely an individual's responsibility, which may become burdensome and problematic (Gijbels et al., 2012; Lemmetty, 2020). Therefore, so that individuals and organizations do not suffer, autonomy and self-determination should not imply loneliness or working alone (Collin et al., 2018).

RESEARCH AIMS AND QUESTIONS

This study aims to increase the understanding of self-determination in the context of collegial learning situations in expert work in a Finnish ICT organization and a Finnish central hospital. The following research questions were investigated:

1. How do employees in central hospital and ICT organization describe self-determination in collegial learning situations at work?
2. How do the descriptions of self-determination differ between the two target organizations?

METHODS

In this study, we used a qualitative comparative research strategy (Greckhamer et al., 2018) as a systematic means to study two different cases: an ICT organization and a central hospital (Lucas & Szatrowski, 2014). A qualitative comparative research strategy is case-oriented and focuses on key comparisons between cases (Lucas & Szatrowski, 2014). The case strategy is appropriate for analyzing similarities and differences across cases (Miles et al., 2014). In this study, a qualitative comparative case study was applied to reveal commonalities and differences in the descriptions of self-determination

between these two organizations. The comparative case study approach also allows for building a deep within-case understanding (Stake, 2008) of self-determination as a phenomenon in two organizations. Therefore, we purposefully chose two organizations that differ from each other in history, hierarchy, culture, and industry (see Greckhamer et al., 2018).

TARGET ORGANIZATIONS AND COLLECTED DATA

The study participants were employees from the two organizations. The first participating organization was from the healthcare industry—a midsized hospital with approximately 2,500 employees. The participating personnel were from an operational unit consisting of nurses and physicians. The hospital is a multifaceted environment for learning research because various learning situations with patients require collaboration and guidance, in addition to more traditional apprentice models, to avoid inefficient training and incorrect learning results. Thus, consulting and interprofessional teamwork are typical ways to complete everyday work tasks. The second organization was a midsized technology organization with over 450 employees. The company serves Finnish clients from other industries, the public sector, and international organizations from over 30 countries. The personnel work as software developers, IT experts, and knowledge management experts. In this organization, teamwork and leadership practices have been developed to support learning. Moreover, virtual communication channels and remote working conditions are typical parts of everyday interactions and work. An ethical preassessment was conducted in connection with the participation of the hospital organization before the start of the study (1810/13.00.04.00/2020), and the study was approved by University of Jyväskylä, Human Sciences Ethics Committee. Regarding the participation of an ICT organization, a separate ethical evaluation was not considered necessary. However, all stages of the study were conducted in accordance with research ethics regulations and practices.

The study data consisted of thematic interviews ($N = 56$). The interviewees were selected to represent different job titles of employees, line managers, and supervisors. Interviewees from the hospital were physicians and nurses, while interviewees from the ICT organization were titled, for example, software developers, design engineers, sales managers, and team leaders. The interviews were conducted as individual semi-structured interviews to emphasize open conversations between the interviewer and interviewee. The themes discussed touched on competence development, workplace learning, work responsibilities, the work community, and the autonomy of the work. The following are examples of questions used in the interview: “What kind of help or support would you need to develop your competence?”

“Do you feel that you have opportunities to learn at work?”, “What kinds of things would support or hinder your opportunities to learn every day at work?”

ANALYSIS

Before the main analysis began, the interviews were transcribed and then analyzed using qualitative directed content analysis, in which the analysis is guided by a theory or relevant research findings for the initial codes. The aim of directed content analysis is to conceptually extend the existing theory (Hsieh & Shannon, 2005). In this study, directed content analysis was used to deepen the understanding of self-determination (Ryan & Deci, 2000) in the context of collegial learning at work. In the preliminary phase, all descriptions of collegial learning situations at work were depicted in interviews with employees. The selection of learning situations was guided by previous theories of learning as a phenomenon shared by colleagues in a work community (Billett, 2014; Collin, 2008). The purpose of this preliminary phase was to limit the data relevant to this study based on the research questions.

The first phase of the main analysis was based on a previous understanding of the three basic needs of SDT: autonomy, competence, and relatedness (Rigby & Ryan, 2018). These needs were operationalized through a previous definition, and the focus of the analysis was to find different descriptions of these needs in collegial learning situations. All phrases, paragraphs, or sections describing autonomy, competence, or relatedness were highlighted from the transcripts and coded with the initial subcodes generated from the data (Hsieh & Shannon, 2005). For example, the code for competence development was attributed to data suggesting individuals' intentions to gain knowledge and develop their competence. All codes were then categorized according to the three needs of SDT. Directed content analysis guided this first phase of analysis (Hsieh & Shannon, 2005) by determining operational definitions for each need and therefore guided the coding and categorization process. This phase addressed the first research question by focusing on descriptions of autonomy, competence, and relatedness.

In the second analysis phase, comparisons were made by finding similarities and differences in the descriptions of each psychological need and comparing them between the two organizations. The focus was on to what extent the needs are expressed and determining the target of the expression of the need. The aim was to answer the second research question by revealing contextual and organizational differences in the descriptions of self-determination in collegial learning situations.

Next, we present our findings as a result of the directed content analysis. The findings are presented based on the previously discussed theory (Hsieh & Shannon, 2005) of self-determination and its three basic psychological needs (Rigby & Ryan, 2018). After that, we describe the

commonalities and differences in self-determination between the two target organizations. The beginning of each Findings subsection presents the learning situations in which each need is fulfilled. Then, we describe each need in these learning situations.

FINDINGS

DESCRIPTIONS OF AUTONOMY

Descriptions of autonomy were found in conjunction with learning situations in which individuals share information or experiences with others and ask colleagues for help solving a problem or challenging task or get a colleague's opinion. Autonomy was also seen in daily work situations in which individuals discuss important things concerning their work, team, or current work tasks. In these collegial learning situations, many illustrations of autonomy were found in the sense of choice and self-endorsement of one's actions, ownership, and volition in work.

In the ICT organization, autonomy was seen to arise from self-awareness of the limitations of one's own understanding and, as a result, as the conscious choice to ask for help from a colleague or supervisor. Participant 23 (developer) stated, “People ask [me for] help [...] every day, and I ask [for] help every day. The information moves between people. If you can't find out something, it doesn't have to stay that way.” An individual does not wait for the problem to be solved but rather actively chooses to ask for help. Thus, autonomy was linked to a work approach emphasizing an individual's initiative and responsibility.

Autonomy was also visible in an individual's ability to help other members. Helping others was seen to as an easy daily practice at work and thus essential to making work run smoothly. In the ICT organization, colleagues help each other both face to face and through information technology systems. Participant 14 (developer) explained, “We have a very low threshold to ask [for] help from [a] colleague who has been working on this for a long time. We have this Slack system for internal communication in [the] organization.”

In the ICT organization, autonomy, based on the conscious choice to ask for help, manifested as a practice that creates collegial learning situations at work. The nature of expert work in ICT organizations is based on freedom and autonomy. Participant 23 (developer) explained that the initial assumption in problem-solving situations is to first try solving work tasks independently. However, an individual's autonomous actions and choice to ask for help play an important role in creating collegial learning situations.

Furthermore, an individual's choice to ask for help, and thus be active in the process, is a significant practice for creating access to collegial learning situations. Thus, individual autonomy was expressed as a sense

of choice to share a problem with a colleague. For example, Participant 14 (developer) explained that, when he told a colleague about his problem at work, the colleague advised him about a remote coffee break during which he could gain more information and discuss and solve problems collaboratively. This illustrates how an individual's sense of choice to act in a certain way can provide access to collegial learning situations, thus enabling collaboration.

In the central hospital, autonomy emerged as self-awareness of the limitations of one's own understanding and as the conscious choice to actively ask for help. In this case, help is sought from more experienced colleagues. As seen in Participant 56's (nurse) statement below, awareness of one's limitations and asking for help were perceived as intertwined and linked practices:

[If] the situation is new [to] me, or I have seen it sometimes, but I don't necessarily remember properly, [...] I ask [a] more experienced colleague or [a] colleague who knows something about it.

Furthermore, autonomy was illustrated not only as the conscious choice to search for information but also as the choice to share it with others in the community. Through teamwork and social interaction, individuals share important work-related information with one another. Participant 45 (nurse) explained:

If something changes, I will figure it out somehow. Ask colleagues. We have very close relationship[s] with other nurses here since there are not many of us anymore. So, we share information [with] each other daily when we hear that something has changed or where the latest information can now be found.

Thus, the desire to share information may not result from an external compulsion to share work-related information with others but rather from one's own perceptions and choice to share the information because it could benefit others. Hence, autonomous actions were linked to initiative, which is important to effective work.

Autonomy appeared in an individual's ability to help others in the work community. This ability is based on the desire to make another person's work easier. As Participant 45 (nurse) explained, employees "share work tasks with nurses" so that they do not "duplicate work" and so that their "work hours may be sufficient." Thus, in the hospital, helping others involves dividing work tasks evenly and guiding and advising others in difficult work situations.

In addition, autonomy was seen in the need to discuss one's work experiences and, in the hospital context, difficult patient cases with colleagues. It is

important that individuals are conscious of their ability to participate in social interactions and understand how these discussions make learning possible in the community. The following response by Participant 35 (physician) illustrates how employees in the hospital share work-related information, their own experiences, and difficult cases with each other:

We often discuss where I visited [during the day], and I did this and that. We share experiences with residents, so we learn from other's experiences, especially if someone [does] something particularly good or something exceptionally rare comes up. We go through our mistakes as well to figure out what could have been done better.

The hospital employees' need to have discussions with others and hear their opinions on current issues was further linked to the decision-making process regarding patient treatment. Physicians consciously choose to gather information from colleagues or the community, even when they are responsible for a patient's treatment. In this case, autonomy does not refer to a fully independent activity. Rather, autonomous action is targeted at the community and social levels of interaction. This is illustrated in the following statement by Participant 41 (physician), which demonstrates a strong sense of communality and consultation for work and learning in the hospital:

The most important principle for every physician is the autonomy to accomplish one's work. [The] physician makes the treatment decisions with the patient and is responsible for that. The responsibility is undivided [...] But, of course, we are a community. There [are] many ways to get consulting and peer support—different working groups, or clinical meeting[s] where these problem-solving situations, in particular, can be considered.

DESCRIPTIONS OF COMPETENCE

Descriptions of competence emerged in connection with learning situations in which a colleague teaches, demonstrates, or guides someone, either face to face or via digital communication tools. These kinds of situations were described as formally instructed situations or informal situations that individuals face at work on a daily basis. Competence could also be seen in apprentice model situations in which more experienced colleagues guide or teach others. Competence occurs in daily work situations in which individuals collaborate to complete daily tasks. These learning situations contain many illustrations of competence as a need to feel effective, be successful, and grow at work.

In the ICT organization, competence was illustrated as knowledge of one's own competence at work and the ability to observe one's own work and actions and then recognize the issue at hand. Furthermore, competence appeared to be the ability to ponder different solutions to current problems. However, individuals may not be able to solve them alone. Participant 15 (developer) described how individuals require knowledge of their own work to describe the problem and the desired solution to a colleague:

First, you need to recognize the problem. Then, try to think about the path to the solution. What are the possible solution options to get the desired result? [...] When you get someone to help you, you need to know how to describe the problem [to] him/her and the desired result.

In collegial learning situations, competence was also presented as an awareness of one's own competence in relation to colleagues' competencies in the work community. In the ICT organization, participants described the importance of knowing and identifying who could offer their help to solve work issues. Individuals need knowledge of others' competencies to identify someone in the work community who may be able to help. According to Participant 11 (developer), someone rarely solves a problem alone. Rather, one "need[s] to know the right people" to ask for help, which can, in turn, develop one's competence.

In addition, competence was attached to competence development by performing tasks on a daily basis with colleagues or a team. Participants linked competence to the choice of asking colleagues or teammates for help. Thus, individuals should take the initiative to develop competence and complete the task under a colleague's guidance. As Participant 21 (developer) explained, if a technical challenge arises or she has to solve a difficult problem, she will approach it with her team. She further stated that she asks, "Has anyone done this before?" or "Could someone help?", and then proceeds to solve it with someone who can help.

In the central hospital, competence was seen as occurring with the help of the community. The community helps identify one's competence and guides competence development in situations in which a more experienced colleague can advise or teach them, either verbally or through example. In these situations, a more experienced colleague explains what is happening and helps the individual identify the limits of their own competence. Participant 37 (physician) explained that more-experienced physicians can help identify the limits of specialized physicians' competencies by observing how they operate. He stated that "the attending physician's role is [to monitor] the situation." Furthermore, he expressed that an experienced physician can explain

how and why they would do something in a certain way when the specialized physician does not yet have that knowledge. Thus, competence is developed through the guidance and supervision of more knowledgeable colleagues.

Additionally, an organization's culture is based on the idea that more experienced colleagues are potential sources of new knowledge from whom individuals can learn new things through teaching, guidance, or observation. According to Participant 37 (physician), "Teaching is kind of an unwritten part of this job—that the information and knowledge will be shared forward." Hence, transferring lessons to younger colleagues is an integral part of the culture of performing everyday work tasks.

For physicians, the development of competence in social interactions with colleagues was also found to be an important practice. Particularly with special or challenging issues, individuals have discussions with colleagues about the situation and the potential options for supporting the development of their own competencies. After a discussion, individuals find it easier to make an overall assessment and, thus, a decision; this reflects the importance of communal discussion for their own competence and its development. Participant 38 (physician) explained:

First, you recognize that it is a special case [...] then you discuss it with colleagues and ponder different options. [...] It is nice to hear an experienced colleague's opinion about what kind of risks are involved in special cases, and you get different perspectives than [when] you just read the literature. When we have pondered the issue overall, it is easier to make an overall assessment, which is logical.

Competence was also seen to emerge in the performance of daily work tasks. Learning and competence development as part of everyday work is an integral part of the hospital's work culture. In addition to formal guidance and teaching situations, competence development situations are often everyday work scenarios that individuals face. Participant 44 (nurse) stated that one "can find the right answer or instruction from [the] intranet" and support from other colleagues. Hence, competence development as daily work was seen in social interactions with others and was linked to an individual's autonomy to ask for help.

In the hospital, competence also emerged as a communally shared phenomenon in which the competencies of everyone in a situation can be developed at the same time. Participant 38 (physician) stated:

Sure, there will be many basic operations, but there [are] also rarities. We can do together very

rare operations, which nobody will face very often during their career. So, at the same time, everyone's competence is developed when we operate together. It is important. The collegial support and the presence of colleagues, it is a very valuable thing.

This illustrates how competencies can be shared and developed for more than one person in the community by performing rare challenging tasks together. Thus, working together enables valuable and meaningful collegial support for competence development.

DESCRIPTIONS OF RELATEDNESS

Descriptions of relatedness were depicted in learning situations in which individuals support each other and work together on a project, either formally or informally, face to face or via digital communication tools. The sense of relatedness was also seen in peer-to-peer and pair work situations, as well as in apprentice model situations and when consulting colleagues. These collegial learning situations presented many descriptions of relatedness as a need to belong and “matter” to others, to feel connected in meaningful ways, and to feel supported while also experiencing that others need and value our support.

In the ICT organization, relatedness was presented as peer support from colleagues or larger teams. According to Participant 7 (developer), the strongest learning comes from peer support. He further explained that, “if there are challenging situations, the support and perspective comes from [people] who have been in the same situation before,” which creates a good sense of support on many levels. This support comes in the form of advice, help, and guidance from more experienced colleagues. The feeling of support and a sense of belonging to the wider work community allows individuals to feel that their work and challenges are meaningful to others.

The sense of relatedness could be seen as the possibility of leaning on the community and its members. Participants described how it is possible to ask for help from colleagues and that support for work tasks or challenging problems is always available. In the ICT organization, Participant 14 (developer) explained that the ability to lean on colleagues also occurs over online mediums, such as Slack, Skype, or Teams, through which colleagues can share, work, and complete tasks together.

The sense of relatedness was seen in encouragement and support within the work environment in a team or larger work community. In the ICT organization, an encouraging, supportive work environment means helping others, working together, and creating a culture in which individuals can ask for help. According to Participant 15 (developer), a “supportive work atmosphere” is also linked to “a good spirit within [the] team” through which people help one another.

Additionally, relatedness refers to the ability to work in a common direction through encouragement, peer support, and a good work environment by engaging in social interactions and sharing information. According to Participant 26 (developer), remote work poses a challenge to the ability to engage in social interactions in organizations, making it difficult to share tacit knowledge between persons, which is essential for creating a common direction.

Participant 26 also explained that the best way to work is with several people on the team. This makes it possible to work together and share ideas, allowing individuals to feel a sense of relatedness. The importance of the work community to working and learning also reflects how one cannot know everything by oneself, despite the freedom and autonomy emphasized in ICT organizations. Therefore, the existence of community and the sense of relatedness that individuals feel through community also support learning.

In the central hospital, relatedness was also presented through collegial support. A sense of relatedness occurs through and alongside completing daily work tasks together. Support is obtained from individuals who have been in similar situations before or from more experienced colleagues. Working together and receiving help are essential expressions of relatedness. The following response from Participant 56 (nurse) demonstrates how relatedness emerges in colleagues' support as teaching, guiding, or setting an example in challenging situations:

The situation would be new for me, or I have seen it sometimes, but I don't remember so well. Then, we collaborate so that the more experienced [person] teaches the new person, [is] present in the situation, [and] either operates or gives [guidance].

Moreover, the sense of relatedness is present when performing work tasks together. Daily work tasks are tackled with colleagues and under the guidance of colleagues. As Participant 36 (physician) explained, working with more “experienced colleagues” could be described as “mentoring.”

Relatedness also emerged in interviews with hospital staff as experienced colleagues showing faith and trust in those in the learner position. Therefore, the feeling that help and support are available if needed in learning situations is essential to a sense of relatedness. Creating faith and trust for learning also creates a safe atmosphere to try, which is the basis for learning to take place, as Participant 32 (physician) explained: “[With] younger colleagues who are here to learn, it [is] more like [an] apprentice model; along with daily work, learning takes place and information will be shared. It is mentoring even, giving them [the] confidence to try.”

Similarly, relatedness refers to the ability to lean on more experienced colleagues' competencies and knowledge. In the hospital, this means getting help easily and asking for help without hesitation. Participant 56 (nurse) confirmed this by stating that the work community enables learning and that there are physicians available to consult: "You kind of know that there is always someone to ask."

A sense of relatedness could also be found in the need to connect with others, discuss important things concerning work, and share one's own experiences with the community. According to Participant 36 (physician), work situations are less burdensome and more meaningful when there is the possibility of discussing and sharing ideas in social interactions with colleagues:

Let's say that, when we get to do and think together, it is not so burdensome anymore; it is more meaningful. [...] Although it is not a big issue, in rare situations, we will always discuss [...] and that kind of makes learning more meaningful because both can share [their] experiences and perspectives and read things. It is continuous learning when we discuss.

Therefore, a sense of relatedness was linked to a trusting, safe work atmosphere in which the experiences and perspectives of others are valued.

COMMONALITIES AND DIFFERENCES IN SELF-DETERMINATION BETWEEN THE ICT ORGANIZATION AND THE CENTRAL HOSPITAL

Generally, individuals' self-determination was described similarly in both organizations. However, several

differences could be seen in how autonomy, competence, and relatedness were described in collegial learning situations. This section describes these differences. Table 1 summarizes the findings regarding the three needs of self-determination in both organizations.

In both organizations, autonomy was seen as arising from self-awareness of one's own competence, which leads to the conscious choice to ask for help from the community, as well as the ability to help others. Similarly, individuals' autonomy over their abilities and choices was perceived as essential. In the ICT organization, individuals' conscious actions were found to be the precondition for participating in collegial learning situations and the ability to do so. Often, individuals first try to solve problems or current work tasks alone; then, if they do not succeed, they ask for help from others. Alternatively, in the hospital, autonomy was illustrated as the choice to share information with others, without the intention of solving the problem, and the need to discuss it with colleagues, without the intention of producing something that can be utilized at that moment. Furthermore, the willingness to participate in social interactions with others plays a natural and important role in work, which, in itself, creates value for employees and their competence development. However, in both organizations, individual autonomy was found to be a significant part of the nature of expert work.

In the ICT organization, competence was strongly linked to the individuals themselves. While individuals require knowledge of their own competence, they also require knowledge of the competence of others in the work community. The initiative taken to develop one's own competence relies on autonomous actions. Only after individuals take this initiative (ask for help) can competence emerge through collective competence

	ICT ORGANIZATION	CENTRAL HOSPITAL
Autonomy	The need for choice and self-endorsement of one's own actions, ownership, and volition	
Descriptions	<ul style="list-style-type: none"> - self-awareness of one's own understanding - conscious choice to ask for help - ability to help others 	<ul style="list-style-type: none"> - self-awareness of one's own understanding - conscious choice to ask for help - choice to share information with others - ability to help others - need to discuss with colleagues
Competence	The need to feel effective, be successful, and grow	
Descriptions	<ul style="list-style-type: none"> - knowledge of one's own competence - knowledge of others' competencies in the work community - competence development through working together on a daily basis 	<ul style="list-style-type: none"> - knowledge of one's own competence with the help of the community - competence development with the help of community - competence development through working together on a daily basis - sharing competence communally
Relatedness	The need to belong and matter to others, feel connected in meaningful ways, feel supported, and value support	
Descriptions	<ul style="list-style-type: none"> - peer support - ability to lean on colleagues - encouraging and supportive work environment - ability to create a common direction at work 	<ul style="list-style-type: none"> - collegial support - performing collectively - showing faith and trust - ability to lean on colleagues - need to connect with others

Table 1 Findings of autonomy, competence, and relatedness in the ICT organization and the central hospital.

development with colleagues. In the ICT organization, the individual's active role in competence development was emphasized. However, in the hospital, community was highlighted as a strong factor in revealing competence. Competence as knowledge of one's own competence and competence development was illustrated as a communal and collegial phenomenon. The identification and development of one's competence occur with help from the community, usually from more experienced colleagues. Competence development situations are also purposefully designed to benefit as many people as possible so that new knowledge can be shared throughout the community. In the hospital, the nature of work regarding consulting, multiprofessional collaboration, and competence development is based on the traditional apprentice model. Therefore, work and competence development during work tasks are completed together, and the community plays the role of supporter for individuals.

In both organizations, relatedness was illustrated as support—peer support in the ICT organization and consulting and multiprofessional support in the hospital. In the hospital, the sense of relatedness emerged strongly as collaboration on a daily basis due to work tasks rarely being performed completely alone or independently. In both organizations, relatedness was also linked to the work atmosphere. In the ICT organization, the sense of relatedness was linked to an encouraging and supportive teamwork atmosphere, while in the hospital, relatedness was demonstrated as showing faith and trust in the person in the learning position. In both the ICT organization and the hospital, relatedness refers to an ability to lean on colleagues' competencies if needed, which also shows an important element in creating a suitable atmosphere for learning. In addition, in the hospital, relatedness was linked to the need to connect with others and interact with colleagues. This was perceived as important for learning, making it less burdensome and more meaningful for individuals. In the ICT organization, relatedness was presented as an important element in creating a common direction at work.

DISCUSSION

This study helps increase the understanding of self-determination and its relation to collegial learning in expert work. We have qualitatively illustrated how the three basic psychological needs of self-determination—autonomy, competence, and relatedness—are fulfilled and thus defined in the context of collegial learning situations at work. Through this study, we contribute to the previous studies of SDT, not only from the individually oriented perspective, but also by exploring it in relation to the social context of collegial learning at work

emphasized in the field of adult education (Billett, 2014). The findings of this study confirm an understanding of self-determination and the three psychological needs as essential elements and requirements for learning (Bauer & Mulder, 2006) thus providing the motivation behind learning in modern expert work.

Studies on self-determination tend to understand learning as a positive outcome of an individual's self-determination (Hetzner et al., 2012), but the results of this study offer the understanding of collegial learning as a framework to fulfill employees' basic psychological needs in work organizations where learning is an essential part of daily work. Based on the findings, social interaction is an essential enabler for employees' sense of self-determination to be fulfilled in learning situations. Overall, the findings show that the basic psychological needs of self-determination can be fulfilled in learning situations in which employees participate in social interactions with colleagues (Billett, 2014). Thus, social and contextual conditions in collegial learning that either enhance or diminish employees' sense of self-determination are essential (Ryan & Deci, 2000).

The study found that the three needs of self-determination (Ryan & Deci, 2000) are highly overlapping and intertwined; thus, they are different features of the same phenomenon in both organizations. In recent years, the role of autonomy in the context of learning at work has been emphasized unilaterally (Noe & Ellingson, 2017) but has also been criticized. This study confirms the previous proposition that emphasis should be placed on relatedness and sociocultural factors, in addition to self-determination (Lemmetty, 2020). Individual activities emphasizing autonomy and freedom do not exclude the need for collegiality and social interaction in learning. Hence, the SDT utilized in this study was a suitable starting point, as it took into account not only autonomy but also the two other psychological needs (competence and relatedness) for employees' optimal development and learning (Ryan & Deci, 2000).

Through this study, we contribute to filling the need to explore self-determination in different learning environments (Hsu et al., 2019) and different work contexts (Gagné & Deci, 2005). The comparative research strategy (Greckhamer et al., 2018) produced interesting findings on self-determination in two organizations differing in industry and hierarchy. In general, the findings on self-determination in collegial learning situations were similar in both the central hospital and the ICT organization. In both organizations, autonomy as conscious choices and actions was seen as the choice to ask for help and to share work-related information that might help others. In the context of learning at work, autonomy does not refer to independence, solitude, or selfishness, but rather to feelings that may be included in collegial action (Ryan & Deci, 2000). Alternatively, in both organizations, competence was linked to the knowledge of one's own

competence and intentions to develop competence, as well as to the feeling of control over one's own work. Competence and competence development are required to complete daily tasks; individuals need to express their competence concerning work and gain new knowledge to develop their competence (Rigby & Ryan, 2018). In both organizations, more experienced colleagues play a major role in guiding and supporting competence development (Billett, 2014). Relatedness emerged in collegial learning situations as the strongest need for self-determination in both organizations. Essential to the fulfillment of relatedness in both organizations is the ability to lean on colleagues and get help from members of the work community, develop a positive atmosphere for learning, and have the opportunity to interact with members of the community. In both organizations, the sense of relatedness offers individuals meaningfulness in their work in the community (Rigby & Ryan, 2018).

The similar emergences of self-determination in both organizations are interesting, considering the previous perspectives on the relationship between self-determination and hierarchy (Lee & Edmondson, 2017) and the contextuality of learning (Collin, 2008). This offered the opportunity to consider the factors and practices that are shared between ICT organizations and hospitals, rather than the differences between them. Based on the findings, the forms and practices of learning are similar in both organizations, which indicates the fundamentally similar nature of expert work. It is perhaps possible that expert work—regardless of hierarchy or industry—provides opportunities for fulfilling basic psychological needs and, thus, for self-determination and motivation to emerge.

However, this study's findings also show a few differences in how self-determination occurs, particularly with regard to the different ways in which the three needs are emphasized and the needs are expressed. First, in the ICT organization, autonomy is emphasized as a prerequisite to participating in and forming collegial learning situations at work, as the nature of work is based on self-direction and autonomous work (Ha, 2015; Lemmetty, 2020). In the hospital, individual autonomy is not so strongly emphasized, but autonomy is targeted toward the idea that colleagues' sharing of information and asking for help are important and valuable practices in the community. Second, in terms of competence, in the ICT organization, individuals' own responsibility and activity are emphasized, while in the hospital, the community plays an important role in both identifying and developing competence. Third, in the hospital, the sense of relatedness relies on a work culture marked by multiprofessionalism, collaboration, and consulting (Pimmer et al., 2013; Stabel et al., 2022); therefore, mentoring, teaching younger colleagues, and providing support are inherent parts of the work culture. In contrast, in the ICT organization, a strong sense of relatedness

seems to be based on an organizational culture that consciously creates and builds communality.

This study does not consider self-determination as an entirely collective phenomenon but demonstrates the collegial and socially shared nature of self-determination in the context of learning at work. In the future, a focus on studying self-determination directly as a collective group-level phenomenon would be important. As the responsibility for learning has shifted from the organization to teams (Ellinger, 2005), collective and team-level learning is emphasized, especially in expert work. Therefore, exploring how group-level self-determination is constructed is important, as it could increase the understanding of collective self-determination in the context of learning in expert work. As certain studies have shown that self-determination has positive effects on people's well-being (Gomez-Baya & Lucia-Casademunt, 2018) and learning (Bauer & Mulder, 2006), in the future, it would be beneficial to study the individual and group situations in which all three basic psychological needs are fulfilled at the same time. In addition, it would be interesting to explore employees' and supervisors' self-determination separately and compare whether the illustrations of self-determination differ between these groups. Future research could also focus on which social and cultural factors in the social context of organizations, such as leadership, may enhance or hinder both individual- and group-level self-determination and, thus, learning at work.

ACKNOWLEDGEMENTS

We would like to thank the target organizations and the participants who voluntarily spent their time with us.

FUNDING INFORMATION

This work was supported by the Finnish Work Environment Fund (grant number: 200324).

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

All three authors have participated in the data collection process as well as research design process. Keronen has made the analysis of the study as well as wrote the result section. Keronen and Lemmetty have put together the theory and discussion sections. In all phases during the

research process the authors have discussed and shared their ideas collectively.

AUTHOR AFFILIATIONS

Sara Keronen  orcid.org/0000-0003-0994-2689

PhD student, University of Jyväskylä, Department of Education, PO Box 35, FI-40014 University of Jyväskylä, Finland

Soila Lemmetty, PhD  orcid.org/0000-0003-3367-8718

Postdoctoral Researcher, Docent, University of Eastern Finland, School of Educational Sciences and Psychology, Joensuu, Finland, PO box 111, 80101 Joensuu, Finland

Kaija Collin, PhD  orcid.org/0000-0001-5199-2095

Associate Professor, University of Jyväskylä, Department of Education, PO Box 35, FI-40014 University of Jyväskylä, Finland

REFERENCES

- Ashton, D. N.** (2004). The impact of organisational structure on organisational learning. *International Journal of Training and Development*, 8(1), 43–54. DOI: <https://doi.org/10.1504/MEJM.2019.097817>
- Auvinen, T., Riivari, E., & Sajasalo, P.** (2017). Lessons learned from traditional and “new-age” leadership. In A. Eskola (Ed.), *Navigating through changing times* (pp. 95–112). Routledge. DOI: <https://doi.org/10.4324/9781315164663-6>
- Baard, P. P., Deci, E. L., & Ryan, R. M.** (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, 34(10), 2045–2068. DOI: <https://doi.org/10.1111/j.1559-1816.2004.tb02690.x>
- Bauer, J., & Mulder, R. H.** (2006). Upward feedback and its contribution to employees’ feeling of self-determination. *Journal of Workplace Learning*, 18(7/8), 508–521. DOI: <https://doi.org/10.1108/13665620610693051>
- Beachboard, M. R., Beachboard, J. C., Li, W., & Adkison, S. R.** (2011). Cohorts and relatedness: Self-determination theory as an explanation of how learning communities affect educational outcomes. *Research in Higher Education*, 52(8), 853–874. DOI: <https://doi.org/10.1007/s11162-011-9221-8>
- Bell, B. S.** (2017). Strategies for supporting self-regulation during self-directed learning in the workplace. In R. A. Noe & J. E. Ellingson (Eds.), *Autonomous Learning in the Workplace* (pp. 117–134). Routledge. DOI: <https://doi.org/10.4324/9781315674131-7>
- Berings, M., Poell, R., & Gelissen, J.** (2008). On-the-job learning in the nursing profession: Developing and validating a classification of learning activities and learning themes. *Personnel Review*, 37(4), 442–459. DOI: <https://doi.org/10.1108/00483480810877606>
- Billett, S.** (2008). Learning throughout working life: A relational interdependence between personal and social agency. *British Journal of Educational Studies*, 56(1), 39–58. DOI: <https://doi.org/10.1111/j.1467-8527.2007.00394.x>
- Billett, S.** (2014). Mimesis: Learning through everyday activities and interactions at work. *Human Resource Development Review*, 13(4), 462–482. DOI: <https://doi.org/10.1177/1534484314548275>
- Bjørk, I. T., & Sørensen, A. L.** (2013). Exploring informal learning among hospital nurses. *Journal of Workplace Learning*, 25(7), 426–440. DOI: <https://doi.org/10.1108/JWL-01-2013-0003>
- Bontemps-Hommen, M. C. M. L., Baart, A. J., & Vosman, F. J. H.** (2020). Professional workplace learning: Can practical wisdom be learned? *Vocations and Learning*, 13(3), 479–501. DOI: <https://doi.org/10.1007/s12186-020-09249-x>
- Brooks, J. V., Gorbenko, K., & Bosk, C.** (2017). Interactional resources for quality improvement: Learning from participants through a qualitative study. *Quality Management in Health Care*, 26(2), 55–62. DOI: <https://doi.org/10.1097/QMH.000000000000128>
- Bunderson, J. S., & Boumgarden, P.** (2010). Structure and learning in self-managed teams: Why “bureaucratic” teams can be better learners. *Organization Science*, 21(3), 609–624. DOI: <https://doi.org/10.1287/orsc.1090.0483>
- Cerasoli, C. P., Alliger, G. M., Donsbach, J. S., Mathieu, J. E., Tannenbaum, S. I., & Orvis, K. A.** (2018). Antecedents and outcomes of informal learning behaviors: A meta-analysis. *Journal of Business and Psychology*, 33(2), 203–230. DOI: <https://doi.org/10.1007/s10869-017-9492-y>
- Chambers, C. R., Wehmeyer, M. L., Saito, Y., Lida, K. M., Lee, Y., & Singh, V.** (2007). Self-determination: What do we know? Where do we go? *Exceptionality*, 15(1), 3–15. DOI: <https://doi.org/10.1080/09362830709336922>
- Chen, K. C., & Jang, S. J.** (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behavior*, 26(4), 741–752. DOI: <https://doi.org/10.1016/j.chb.2010.01.011>
- Clarke, N.** (2005). Workplace learning environment and its relationship with learning outcomes in healthcare organizations. *Human Resource Development International*, 8(2), 185–205. DOI: <https://doi.org/10.1080/13678860500100228>
- Collin, K.** (2008). Development engineers’ work and learning as shared practice. *International Journal of Lifelong Education*, 27(4), 379–397. DOI: <https://doi.org/10.1080/02601370802213856>
- Collin, K., Herranen, S., Paloniemi, S., Auvinen, T., Riivari, E., Sintonen, T., & Lemmetty, S.** (2018). Leadership as an enabler of professional agency and creativity: Case studies from the Finnish information technology sector. *International Journal of Training and Development*, 22(3), 222–232. DOI: <https://doi.org/10.1111/ijtd.12130>
- Collin, K., Keronen, S., Lemmetty, S., Auvinen, T., & Riivari, E.** (2021). Self-organised structures in the field of ICT: Challenges for employees’ workplace learning. *Journal of Workplace Learning*, 33(2), 95–108. DOI: <https://doi.org/10.1108/JWL-10-2019-0124>

- Cronin, C.** (2014). Workplace learning—a healthcare perspective. *Education and Training*, 56(4), 329–342. DOI: <https://doi.org/10.1108/ET-03-2013-0039>
- de Hauw, S., & de Vos, A.** (2010). Millennials' career perspective and psychological contract expectations: Does the recession lead to lowered expectations? *Journal of Business and Psychology*, 25(2), 293–302. DOI: <https://doi.org/10.1007/s10869-010-9162-9>
- Deci, E. L., & Ryan, R. M.** (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology [Psychologie Canadienne]*, 49(3), 182–185. DOI: <https://doi.org/10.1037/a0012801>
- Deci, E. L., & Ryan, R. M.** (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford Handbook of Human Motivation* (pp. 85–107). Oxford University Press. DOI: <https://doi.org/10.5860/CHOICE.49-6579>
- Ellinger, A. D.** (2005). Contextual factors influencing informal learning in a workplace setting: The case of “reinventing itself company.” *Human Resource Development Quarterly*, 16(3), 389–415. DOI: <https://doi.org/10.1002/hrdq.1145>
- Frenkel, S. J., & Sanders, K.** (2007). Explaining variations in co-worker assistance in organizations. *Organization Studies*, 28(6), 797–823. DOI: <https://doi.org/10.1177/0170840607073079>
- Gagné, M., & Deci, E. L.** (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. DOI: <https://doi.org/10.1002/job.322>
- Gijbels, D., Raemdonck, I., Verweken, D., & van Herck, J.** (2012). Understanding work-related learning: The case of ICT workers. *Journal of Workplace Learning*, 24(6), 416–429. DOI: <https://doi.org/10.1108/13665621211250315>
- Gomez-Baya, D., & Lucia-Casademunt, A. M.** (2018). A self-determination theory approach to health and well-being in the workplace: Results from the sixth European working conditions survey in Spain. *Journal of Applied Social Psychology*, 48(5), 269–283. DOI: <https://doi.org/10.1111/jasp.12511>
- Greckhamer, T., Furnari, S., Fiss, P. C., & Aguilera, R. V.** (2018). Studying configurations with qualitative comparative analysis: Best practices in strategy and organization research. *Strategic Organization*, 16(4), 482–495. DOI: <https://doi.org/10.1177/1476127018786487>
- Ha, T. S.** (2015). Learning stories from IT workers: Development of professional expertise. *Studies in Continuing Education*, 37(1), 79–98. DOI: <https://doi.org/10.1080/0158037X.2014.967347>
- Hetzner, S., Heid, H., & Gruber, H.** (2012). Change at work and professional learning: How readiness to change, self-determination and personal initiative affect individual learning through reflection. *European Journal of Psychology of Education*, 27(4), 539–555. DOI: <https://doi.org/10.1007/s10212-011-0094-1>
- Holbeche, L.** (2015). *The agile organization: How to build an innovative, sustainable and resilient business*. Kogan Page.
- Hsieh, H. F., & Shannon, S. E.** (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. DOI: <https://doi.org/10.1177/1049732305276687>
- Hsu, H. C. K., Wang, C. V., & Levesque-Bristol, C.** (2019). Reexamining the impact of self-determination theory on learning outcomes in the online learning environment. *Education and Information Technologies*, 24(3), 2159–2174. DOI: <https://doi.org/10.1007/s10639-019-09863-w>
- Kyndt, E., Dochy, F., & Nijs, H.** (2009). Learning conditions for non-formal and informal workplace learning. *Journal of Workplace Learning*, 21(5), 369–383. DOI: <https://doi.org/10.1108/13665620910966785>
- Kyndt, E., Vermeire, E., & Cabus, S.** (2016). Informal workplace learning among nurses learning outcomes. *Journal of Workplace Learning*, 28(7), 435–450. DOI: <https://doi.org/10.1108/JWL-06-2015-0052>
- Lee, M. Y., & Edmondson, A. C.** (2017). Self-managing organizations: Exploring the limits of less-hierarchical organizing. *Research in Organizational Behavior*, 37, 35–58. DOI: <https://doi.org/10.1016/j.riob.2017.10.002>
- Lemmetty, S.** (2020). Self-learning is present every day—in fact, it's my job. Self-directed workplace learning in technology-based work. [Doctoral dissertation, University of Jyväskylä]. <http://urn.fi/URN:ISBN:978-951-39-8196-9>
- Liljedahl, M., Björck, E., Ponzer, S., & Bolander Laksov, K.** (2019). Navigating without a map: How medical students interact with clinical learning environments. *Studies in Higher Education*, 44(2), 275–286. DOI: <https://doi.org/10.1080/03075079.2017.1359822>
- Lucas, S. R., & Szatrowski, A.** (2014). Qualitative comparative analysis in critical perspective. *Sociological Methodology*, 44(1), 1–79. DOI: <https://doi.org/10.1177/0081175014532763>
- Malcolm, J., Hodkinson, P., & Colley, H.** (2003). The interrelationships between informal and formal learning. *Journal of Workplace Learning*, 15(7/8), 313–318. DOI: <https://doi.org/10.1108/13665620310504783>
- Manuti, A., Manuti, A., Pastore, S., Scardigno, A. F., Giancaspro, M. L., & Morciano, D.** (2015). Formal and informal learning in the workplace: A research review. *International Journal of Training and Development*, 19(1), 1–17. DOI: <https://doi.org/10.1111/ijtd.12044>
- Marsick, V. J.** (2009). Toward a unifying framework to support informal learning theory, research and practice. *Journal of Workplace Learning*, 21(4), 265–275. DOI: <https://doi.org/10.1108/13665620910954184>
- McConnell, M., Gu, A., Arshad, A., Mokhtari, A., & Azzam, K.** (2018). An innovative approach to identifying learning needs for intrinsic CanMEDS roles in continuing professional development. *Medical Education Online*, 23(1). DOI: <https://doi.org/10.1080/10872981.2018.1497374>
- Miles, M. B., Huberman, A. M., & Saldaña, J.** (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Mintzberg, H.** (1980). Structure in 5's: A synthesis of the research on organisation design. *Management*

- Science, 26(3), 322–341. DOI: <https://doi.org/10.1287/mnsc.26.3.322>
- Moe, N. B., Moe, N. B., Dingsøy, T., & Dybå, T.** (2008). Understanding self-organizing teams in agile software development. In *Proceedings of the Australian Software Engineering Conference (ASWEC)* (pp. 76–85). DOI: <https://doi.org/10.1109/ASWEC.2008.4483195>
- Nie, Y., Chua, B. L., Yeung, A. S., Ryan, R. M., & Chan, W. Y.** (2015). The importance of autonomy support and the mediating role of work motivation for well-being: Testing self-determination theory in a Chinese work organisation. *International Journal of Psychology, 50*(4), 245–255. DOI: <https://doi.org/10.1002/ijop.12110>
- Noe, R. A., & Ellingson, J. E.** (Eds.) (2017). *Autonomous Learning in the Workplace*. Routledge. DOI: <https://doi.org/10.4324/9781315674131>
- Olafsen, A. H., Niemiec, C. P., Halvari, H., Deci, E. L., & Williams, G. C.** (2017). On the dark side of work: A longitudinal analysis using self-determination theory. *European Journal of Work and Organizational Psychology, 26*(2), 275–285. DOI: <https://doi.org/10.1080/1359432X.2016.1257611>
- Pimmer, C., Pachler, N., & Genewein, U.** (2013). Contextual dynamics in clinical workplaces: Learning from doctor-doctor consultations. *Medical Education, 47*(5), 463–475. DOI: <https://doi.org/10.1111/medu.12130>
- Riera Claret, C., Sahagún, M. Á., & Selva, C.** (2020). Peer and informal learning among hospital doctors: An ethnographic study focused on routines, practices and relationships. *Journal of Workplace Learning, 32*(4), 285–301. DOI: <https://doi.org/10.1108/JWL-11-2018-0141>
- Rigby, C. S., & Ryan, R. M.** (2018). Self-determination theory in human resource development: New directions and practical considerations. *Advances in Developing Human Resources, 20*(2), 133–147. DOI: <https://doi.org/10.1177/1523422318756954>
- Ryan, R. M., & Deci, E. L.** (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. DOI: <https://doi.org/10.1002/jsfa.2740050407>
- Ryan, R. M., & Deci, E. L.** (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61*. DOI: <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Saks, K., & Leijen, Ä.** (2014). Distinguishing self-directed and self-regulated learning and measuring them in the E-learning context. *Procedia—Social and Behavioral Sciences, 112*, 190–198. DOI: <https://doi.org/10.1016/j.sbspro.2014.01.1155>
- Smet, K., Grosemans, I., De Cuyper, N., & Kyndt, E.** (2022). Outcomes of informal work-related learning behaviors: A systematic literature review. *Scandinavian Journal of Work and Organizational Psychology, 7*(1), 1–18. DOI: <https://doi.org/10.16993/sjwop.151>
- Stabel, L. S., McGrath, C., Björck, E., Elmberger, A., & Laksov, K. B.** (2022). Navigating affordances for learning in clinical workplaces: A qualitative study of general practitioners' continued professional development. *Vocations and Learning, 15*(3), 427–448. DOI: <https://doi.org/10.1007/s12186-022-09295-7>
- Stake, R. E.** (2008). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3rd ed., pp. 119–150). Sage.
- Takeuchi, H., & Nonaka, I.** (1986). New product development. *Harvard Business Review, 54*(1), 137–146.
- Tynjälä, P.** (2013). Toward a 3-P model of workplace learning: A literature review. *Vocations and Learning, 6*(1), 11–36. DOI: <https://doi.org/10.1007/s12186-012-9091-z>
- Vähäsantanen, K., & Eteläpelto, A.** (2017). Agency and learning in the work of software professionals. In Harteis, C. (Ed.), *The impact of digitalization in the workplace: An educational view* (pp. 161–179). Springer International Publishing. DOI: https://doi.org/10.1007/978-3-319-63257-5_11
- Varjus, S.-L., Leino-Kilpi, H., & Suominen, T.** (2011). Professional autonomy of nurses in hospital settings: A review of the literature. *Scandinavian Journal of Caring Sciences, 25*, 201–207. DOI: <https://doi.org/10.1111/j.1471-6712.2010.00819.x>
- Willems, A. S., & Lewalter, D.** (2012). Self-determination and learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 2993–2997). Springer. DOI: https://doi.org/10.1007/978-1-4419-1428-6_250

TO CITE THIS ARTICLE:

Keronen, S., Lemmetty, S., & Collin, K. (2023). Employees' Self-Determination in Collegial Learning Situations at Work: A Comparative Study of a Finnish ICT Organization and a Central Hospital. *Scandinavian Journal of Work and Organizational Psychology*, 8(1): 13, 1–16. DOI: <https://doi.org/10.16993/sjwop.192>

Submitted: 23 June 2022 **Accepted:** 16 June 2023 **Published:** 08 November 2023

COPYRIGHT:

© 2023 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.

Scandinavian Journal of Work and Organizational Psychology is a peer-reviewed open access journal published by Stockholm University Press.





II

CONSTRUCTION OF COLLECTIVE SELF-DETERMINATION IN DEVELOPMENT-ORIENTED GROUP DISCUSSIONS

by

Sara Keronen, Soila Lemmetty & Kaija Collin, 2024

Journal of Workplace learning, Vol 36(9), 88–105

<https://doi.org/10.1108/JWL-05-2024-0110>

Reproduced with kind permission by Emerald.

Construction of collective self-determination in development-oriented group discussions

Sara Keronen

Department of Education, University of Jyväskylä, Jyväskylä, Finland

Soila Lemmetty

School of Educational Sciences and Psychology, University of Eastern Finland, Joensuu, Finland, and

Kaija Marjukka Collin

Department of Educational Sciences, University of Jyväskylä, Jyväskylä, Finland

Abstract

Purpose – The purpose of this study is to explore the construction of collective self-determination in development-oriented group discussions. This paper provides empirical understanding of how collective self-determination is constructed in social interaction using certain communication styles.

Design/methodology/approach – The qualitative data were based on four development-oriented group discussions (totaling 180 min) of supervisors from Finnish central hospital and information and communication technology organization. Participants from hospitals worked as head nurses, while those from information technology organizations worked as leaders and project managers. The data were analysed through interaction and content analyses.

Findings – Based on the findings, collective self-determination is constructed in social interaction through speech sections in which individuals' different speech acts facilitate basic psychological needs of autonomy, competence and relatedness. In collective self-determination, the individual and the collective are emphasized at the same time, meaning that collective self-determination cannot occur without individual-level self-determination.

© Sara Keronen, Soila Lemmetty and Kaija Marjukka Collin. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

This work is supported by the Finnish Work Environment Fund (project number 200324 and 240024) and by the Finnish Cultural Foundation (project number 00240776). Authors would like to thank the target organizations and the participants who voluntarily spent their time with them.

Corrigendum: It has come to the attention of the publisher that article Keronen, S., Lemmetty, S. and Collin, K.M. (2024), "Construction of collective self-determination in development-oriented group discussions", <https://doi.org/10.1108/JWL-05-2024-0110> lists incorrect elements under the "relatedness" title in figure one. These three terms were: "Sharing knowledge and competencies; Giving meaningful rationale; and Providing choices and suggestions" and have been replaced with: "Showing sense of community and compassion; Encouraging and supporting each other; Considering, appreciating, and accepting other's perspectives". The publisher requests that all figures and tables are checked at submission and confirmed at proof stage.



Practical implications – Organizations and teams should focus on finding suitable ways to implement collective self-determination and consider the importance of social interaction and certain communication styles. Moreover, employees should be offered enough resources and support to be able to work in collectively self-determined manner.

Originality/value – The study offered an approach to understand self-determination and its construction in group discussions aiming at collective learning. Collective self-determination emphasizes the group and its ability to be autonomous, responsible and capable to learn and to orient toward common goals and tasks. As such, it extends the previous understanding of self-determination as collective-level phenomenon. More research is needed in the context of working life.

Keywords Collective self-determination, Self-determination theory, Group discussions, Workplace learning, ICT organization, Hospital

Paper type Research paper

1. Introduction

Due to continuous change and the increased amount of expert work, organizations have been forced to find new ways of organizing work to increase employees' learning and development and thus achieve a competitive advantage (Power and Waddell, 2004). Modern expert work, seen as continuous learning and development, requires autonomy, freedom and responsibility (Saks and Leijen, 2014; Noe and Ellingson, 2017). Employees are expected to be active, willing, able and interested in learning – in other words, be self-determined and have strong intrinsic motivation (Ryan and Deci, 2000). However, expert work is rarely completed alone. Learning emerges as a collective form in addition to individual practices. Cooperation, sharing expertise, teamwork and group situations with colleagues are essential to ensure the completion of daily work tasks (Lemmetty, 2020; Stabel *et al.*, 2022). Self-determination is not the only essential requirement of expert work; collective team-level self-determination is as well (Keronen *et al.*, 2023). Although autonomous and self-organized teams have been used in organizations in response to demands for continuous change and learning requirements (Lee and Edmondson, 2017), studies on collective self-determination in the context of learning in expert work are lacking (Keronen *et al.*, 2023). Therefore, the current study approaches self-determination at the collective level.

In the field of adult education, previous studies have shown that collegiality and social interaction are vital resources for learning at work, as learning occurs through participation in socially shared practices in the work community (Billett, 2014). In addition to individual-oriented perspectives, self-determination has been studied from a sociocultural perspective that emphasizes the collective nature of expert work (Lemmetty, 2020). These practices are essential enablers of self-determination and the fulfillment of basic psychological needs that intrinsically motivate employees (Keronen *et al.*, 2023). When enhancing people's basic psychological needs and their commitment to certain behaviors, autonomy-supportive communication styles are crucial (Martela *et al.*, 2021). When the responsibility of the work and learning has shifted from organizations to teams (Ellinger, 2005; Noe and Ellingson, 2017), the focus should be on self-determination as a collective activity (Lemmetty, 2020), not as individual abilities (Hetzner *et al.*, 2012). The essential question is how the team can orient itself in social interaction toward a common direction of learning, achieving goals and completing complex and problem-driven work tasks.

Research on self-determination has tended to focus on individual-oriented perspectives (Rigby and Ryan, 2018), although the fulfillment of basic needs not only relies on the individual's own activity but is also influenced by the demands, obstacles and affordances of the sociocultural context (Ryan and Deci, 2000). Thus, the motivational processes behind self-determination theory (SDT) at the individual level may also operate at the group level (Thomas *et al.*, 2017). Collective self-determination has been previously studied in the context

of indigenous people and democracy (Murphy, 2014; Zuehl, 2016) but not in the context of work (Keronen *et al.*, 2023). Martela *et al.* (2021) offered theoretical techniques for using autonomy-supportive communication styles to engage in certain behaviors, but empirical research on these communication techniques is needed. Moreover, SDT should be used more in organizational contexts (Gagné and Deci, 2005) and different learning environments (Hsu *et al.*, 2019). Therefore, this study explores self-determination from a collective perspective as a sociocultural phenomenon constructed through speech acts in social interactions. The study approaches the construction of collective self-determination in the context of development-oriented group discussions with supervisors from a central hospital and an information and communication technology (ICT) organization. This study contributes to previous research on self-determination by empirically exploring on the interpersonal level how basic psychological needs are enhanced by certain communication styles (see Martela *et al.*, 2021). Hence, the study aims to increase the understanding of self-determination as a collective-level phenomenon approached from adult education perspective.

2. Collective self-determination

SDT is based on three basic psychological needs that are essential for optimal development and well-being: autonomy, competence and relatedness (Ryan and Deci, 2000). Self-determination can be described as a perceived sense of autonomy and possibility of choice, need for knowledge and competence, need to belong in the community and meaningfulness (Rigby and Ryan, 2018). When the three needs are fulfilled, individuals can be assumed to be self-motivated, active, inspired (Ryan and Deci, 2000) and learning-oriented through personal initiative they take (Hetzner *et al.*, 2012). In other words, they have strong inner motivation. The three needs underlie proactivity, engagement, and thus certain behaviors (Rigby and Ryan, 2018). As noted above, research on basic psychological needs has tended to focus on individual-oriented perspectives (Rigby and Ryan, 2018). However, the fulfillment of these needs depends on the social and contextual conditions, opportunities and requirements that either facilitate or hinder people's self-motivation, performance and development (Ryan and Deci, 2000). In the context of learning at work, social interaction in the community enables basic psychological needs to be fulfilled on individual (Keronen *et al.*, 2023) and collective level. In social interaction, autonomy can be supported by offering certain limitations for behavior in autonomy-supportive ways, that is, by explaining why limits are necessary and giving a clear rationale (Martela *et al.*, 2021; Rigby and Ryan, 2018). Moreover, providing structure, feedback and guidance on how to adhere to the necessary rules supports the need for competence (Martela *et al.*, 2021). In addition, relatedness is supported by enhancing the sense of belongingness, connection, mutual bond and trust (Martela *et al.*, 2021; Rigby and Ryan, 2018).

From sociological perspective, collective self-determination is defined as a phenomenon in which people jointly control the institutions that structure their social world (Zuehl, 2016). In collective self-determination, the roles of autonomy and self-determined motivation stem from group membership rather than from individuals. Collective self-determination can be described as the freedom to decide what actions the group takes and why (Thomas *et al.*, 2017). Thus, behind collective self-determination is engagement in certain behaviors (see Martela *et al.*, 2021) as one unit. Collective self-determination can be approached as a group's collective capability to enhance freedom and well-being (Murphy, 2014). Although the phenomenon of collective self-determination has not been studied in adult education or the workplace context, the practices and features that manifest collective self-determination have already been used in organizations.

3. Self-organized, autonomous teams as manifestations of collective self-determination in the work context

In the organizational context, collective self-determination manifests as different team-level practices and processes through which employees at the team level work in a self-determined and self-organized manner toward their goals and tasks. The aim of these practices and processes, which usually use self-organization and lower hierarchical configurations (Lee and Edmondson, 2017), is to improve employees' work and learning (see Bunderson and Boumgarden, 2010; Power and Waddell, 2004). Different autonomous and self-organized teams are understood as examples of collective self-determination, as teams have autonomy, responsibility and more control over their own work and ongoing projects (Auvinen *et al.*, 2018; Laloux, 2014; Langfred, 2000) and thus have strong self-determination regarding daily work tasks (Wall *et al.*, 1986). Teams regulate their behavior when completing work tasks (Cohen and Ledford, 1994), for example, by setting goals, analyzing problems, making plans and evaluating their performance (Laloux, 2014). Higher autonomy and responsibility of work support intrinsic motivation behind employees' actions (Laloux, 2014), emphasizing the idea of SDT as basis for function of teams. They have high degree of independence, leadership, dedication and collation (Patanakul *et al.*, 2012), which requires increased communication among team members (Muthusamy *et al.*, 2005). Moreover, communication, coordination, mutual support, effort and cohesion have been found to define the self-organized team's quality and performance (Zaimovic *et al.*, 2021). Successful implementation requires self-organized team's ability to align their tasks goals and strategies (Nederveen Pieterse *et al.*, 2019).

Although self-organized and autonomous teams work largely on their own and have autonomy, they are not uncontrolled. Leadership is needed to avoid instability, ambiguity and prevent chaos, although at the same time leadership should not be controlling, diminishing creativity and spontaneity (Moe *et al.*, 2008). Leadership in these teams can be approached from a plural perspective as "power-with" leadership, in which the knowledge needed to complete the work tasks is held by individuals and teams instead of individual leaders. This refers to a model in which leadership is collectively everyone's responsibility and constructed through social interaction. (Salovaara and Bathurst, 2018). The self-organization of teams does not mean that there is no structure. There are practices and structures that indicate how teams should work, make decisions and share roles (Laloux, 2014). Clear structures are also needed to ensure that colleagues provide enough support for learning (Bunderson and Boumgarden, 2010) and that supervisors avoid unwanted outcomes, such as unclear responsibilities and outsourcing of or absence of responsibility (Bell, 2017; Collin *et al.*, 2021). In innovative work, self-organized teams with stronger capabilities, freedom and autonomy can perform better than other teams (Patanakul *et al.*, 2012) based on intensified commitment to the team (Muthusamy *et al.*, 2005). Although, teams with higher levels of structure (i.e. higher levels of specialization, formalization and hierarchy) can promote learning by creating a safe and predictable team environment where information is shared freely and conflicts are reduced. However, the different ways of self-organizing work do not mean leaving individuals or teams without support (Collin *et al.*, 2018) or structure. Instead, finding a balance between autonomy and support (Collin *et al.*, 2021) when implementing self-organized teams is essential.

4. Learning through group discussions as a context for collective self-determination

In this study, collective self-determination is explored in the context of development-oriented group discussions aimed at developing participants' competencies and knowledge through discussion, dialogue and shared meaning. Therefore, these group discussions are approached as collective learning situations. Learning through group discussions is essential also in participant's daily work environments at hospital and ICT organization, since learning and

social interaction can be seen intertwined rather than separate elements of expert work (Collin, 2008). In these both work environments, multiple practices and processes of learning through discussions are crucial, since the completion of daily work tasks is based on employees' expertise and at the team-level sharing competencies and working together. These kinds of practices and processes emphasize the importance of collective learning based on collegiality, social interaction and participation in socially shared practices (Billett, 2014).

In hospital, learning occurs in social interactions with colleagues (Brooks *et al.*, 2017; Stabel *et al.*, 2022) through one's own work, theory or guidance, reflections on work experiences and life outside of work (Berings *et al.*, 2008). Collaboration and giving feedback play a critical role in sharing of what has been learned (Kyndt *et al.*, 2016; Riera Claret *et al.*, 2020) when completion of everyday tasks is based on consulting and interprofessional teamwork (Pimmer *et al.*, 2013). In the ICT field, learning is linked to everyday work and framed by solving complex problems (Collin, 2008) and working with technologies (Vähäsantanen and Eteläpelto, 2017). Learning takes place either through interactions with colleagues and customers or independently as information retrieval (Gijbels *et al.*, 2012; Lemmetty, 2020), which requires employees' autonomy and control over their own learning processes (Bell, 2017; Frenkel and Sanders, 2007). Although learning in the ICT field takes independent forms, it should not be seen as totally autonomous or independent (Lemmetty, 2020), since the work is completed in projects that include multiple experts and customers requiring learning together and sharing competencies. Therefore, in both work organizations, learning as collective-level phenomenon relies on collegiality, community, group situations and teamwork (Lemmetty, 2020).

5. Research aim and question

The purpose of this study is to explore the construction of collective self-determination in development-oriented group discussions. Moreover, this study approaches collective self-determination in social interaction and through speech acts facilitating autonomy, competence and relatedness in these discussions. Thus, the following research question is posed:

How is collective self-determination constructed by speech acts in development-oriented group discussions?

6. Methodology

As the purpose is to explore collective self-determination in development-oriented group discussions, this study relies on understanding self-determination and learning as socially constructed phenomena. Hence, in this study, learning at the group level is approached as a sociocultural phenomenon, such as an interaction among the individual, others and the environment (Billett, 2014; Vygotsky, 1978). We understand learning occurring in interpersonal activities among people in a social learning system (John-Steiner and Mahn, 1996; Wenger, 1998) and interactional processes through which the basic psychological needs are either fulfilled or hindered (Ryan and Deci, 2000).

The aim of this study was to examine how the participants in the group construct collective self-determination through social interaction (Poole *et al.*, 1999) and look at how their behavior in the meaning-making process creates new knowledge and understanding (Burtis and Turman, 2006). The interaction analysis at the interpersonal level (McLeod *et al.*, 2010) was applied because the interest was in interactional activity. Particularly, we explored the underlying actions and meanings of speeches constructing collective self-determination. The interaction analysis allows to reveal dialogical details of the meaning-making process (Marková *et al.*, 2007) constructing collective self-determination in the group interaction. Moreover, content analysis (Hsieh and Shannon, 2005) was applied to understand the content of the discussions.

6.1 Data

The data for this study was collected as part of a larger research and development project in Finland aimed to produce understanding of sustainability of learning in expert work. Part of this project was to conduct a group coaching sessions as an intervention aimed to increase participants' knowledge of workplace learning in sustainable way and how it can be supported in supervisory work (Collin *et al.*, 2023). The data used in this study was collected from these group coaching sessions, which occurred as concrete development-oriented group discussions. The data consisted of audio recordings ($n = 180$ min) from four sessions – two at a central hospital and two at an ICT organization. These two organizations were chosen because daily work tasks in these rely on teamwork, project work, collaboration and employees' ability to communicate with each other in a multiprofessional manner. Moreover, the work can be described as expert work requiring continuous learning and development at individual and collective levels.

As the aim of the group coaching sessions was to increase the participants understanding of how to support workplace learning, all participants had supervisory roles that included employees' guidance. The participants from the ICT organization were team leaders and project managers, and the participants from the central hospital were physicians and head nurses. The group coaching sessions were conducted by two people, one facilitating the conversation and the other as a researcher, focusing more on taking notes and observing the situation. The first author conducted the hospital meetings. The role of the facilitator was to guide each session, instruct and facilitate the tasks. Group discussions conducted as face-to-face meetings, and either four or five participants attended the sessions. The content for the discussions was designed by the researchers of the project and was not part of the university's curriculum or of specific learning goals or certificates. At the beginning of each session, a short orientation for the current topic was provided by the facilitator, and then planned tasks were conducted through which the participants shared their own experiences, knowledge and competencies in group discussion aimed to achieve learning. Interaction and open conversation between the participants and between the facilitator and the participants were emphasized during the discussions. In both groups, the participants mostly knew each other, although they did not all work with each other on a daily basis.

6.2 Analysis

Before the systematic analysis, the audio recordings were transcribed. The analysis process, methods and data used are described in Table 1. below. In the first phase of the analysis, learning episodes were identified and reviewed to limit the data to those relevant to the study. In this study, an "episode" is defined as a coherent section of speech that can be distinguished from the rest of the discussion (Marková *et al.*, 2007) based on sections where participants create new knowledge and learn together through shared understanding and negotiations of meanings. First, the ends of the episodes were located by finding the point at which the participants made a conclusion or summary or when new knowledge and understanding occurred based on the preceding conversation. Then, the beginnings of the episodes were located by reading the transcripts from the end backward and locating the point at which participants started to discuss the current topic, and others actively brought their own perspectives and thoughts to the conversation. This phase required to focus on the content of the conversation, highlighting the content analytical approach of the analysis (Hsieh and Shannon, 2005). In learning episodes, individual participants bring their own knowledge and understanding of the topic; this can be understood as individual learning. After these perspectives are challenged and discussed together by other participants, they are either accepted, modified or rejected. At the end of an episode, conclusions or summaries can be

Table 1. Framework of the analysis

Phase of analysis	I Learning episodes	II Answering research question	
Analysis section	New knowledge and learning in the group	Initial analysis: Construction of learning episodes by speech sections illustrating autonomy, competence and relatedness	Subsequent analysis: facilitative speech acts
Data	Development-oriented group discussions	Learning episodes	Speech sections illustrating autonomy, competence and relatedness
Target of the analysis	Episodes	Speech sections	Speech acts
Analysis method	Classification into episodes based on the theme discussed (Marková <i>et al.</i> , 2007)	Interaction analysis (McLeod <i>et al.</i> , 2010) and Qualitative content analysis (Hsieh and Shannon, 2005)	
Basis	Data-based	Theory-driven	Data-based
Findings	Learning episodes	Speech sections illustrating autonomy, competence and relatedness	Speech acts facilitating autonomy, competence and relatedness in group interactions

Source: Authors' own work

understood as new knowledge emerging in the group – that is, collective learning. All these coherent sections of speeches, i.e. learning episodes, were separated from the rest of the data. Altogether, 16 learning episodes formed a basis for the second phase of the analysis, which answers the research question.

In the initial analysis of the second phase, speech sections illustrating autonomy, competence and relatedness were located and color-coded from the learning episodes in a theory-driven manner (Martela *et al.*, 2021; Ryan and Deci, 2000). These speech sections were part of learning episodes, consisted of multiple comments, and were formed by the analysis process. For instance, a section of the speech was interpreted to demonstrate competence when the conversation indicated that the participants' goal was to acquire and develop new knowledge and skills.

In the subsequent analysis of the second phase, the focus was on individual speech acts that facilitate autonomy, competence and relatedness in speech sections found in initial analysis. The speech sections were further divided into speech acts. Hence, the unit of analysis was speech act (McLeod *et al.*, 2010), and interaction analyses at the interpersonal level (McLeod *et al.*, 2010) and content analysis (Hsieh and Shannon, 2005) were applied. In data-driven location of the speech acts, individual speeches were approached as activity aimed to construct collective self-determination (see Burtis and Turman, 2006). Moreover, the focus was on how the information has been shared in the discussion, what is the tone of the speeches and what is the underlying function of the speeches in discussion. Hence, the way participants communicate in group was the focus on analysis (Poole *et al.*, 1999), and therefore, the behavior was analysed at the social interactional level (Burtis and Turman, 2006). Furthermore, the content of the conversation was examined at the same time to make sure the interpretation of the meaning and function of the speeches were understood

Table 2. Example of the interpretation of analysis process

Participant	Citation	Interpretation of the meaning and function of speech	Speech act
Participant 3:	<i>And that is our goal that one of our head nurses would always do a shift [at the department] during three weeks period, because that is where you get the information that oh lord this is how things work now</i>	<p>→ can be interpreted as a common and mutual goal since the participant uses the word “our” in speech and because the following participant continue providing instructions related to goal</p> <p>→ create structure to discussion since it expresses of what is expected or required behavior</p> <p>→ aims to engage and participate people to discussions through achieving this goal</p>	Setting goals
Participant 4:	<i>But you have kind of remind yourself that you don't stay, you must put it on your calendar that you actually go there, because they [visits at the department] are very useful</i>	<p>→ provides concrete instructions how working at the department would be possible and explains possible obstacles (limitation of time) for others to be considered</p> <p>→ by considering the instructions others can make a change as capable and competent people</p> <p>→ support competence by acknowledging the actions required to achieve the goals</p> <p>→ engage others to the goal and discussion by describing the positive benefits</p>	Providing instructions

Source: Authors' own work

correctly. Although the aim was not to determine specific themes, as is usually the case in content analysis. (Hsieh and Shannon, 2005) All speech acts were located and coded by describing their initial meaning and function in group discussion. For example, participants' comments asking to get more information or criticizing something were categorized under speech act of evaluating information and offering critical comments. Moreover, the speech acts of evaluating information and offering critical comments were understood to support competence since they offered construction and structure into conversation and support possibilities to participate. All speech acts were categorized under three categories: autonomy, competence and relatedness based on which psychological needs they are facilitating. Table 2 below shows an example of the speech section of competence including data citations and illustrates the interpretation process of speech acts from hospital's group discussion.

7. Findings

7.1 Construction of collective self-determination: speech sections illustrating autonomy, competence and relatedness

Collective self-determination was constructed in learning episodes by speech sections illustrating autonomy, competence and relatedness and the facilitating speech acts. The

learning episodes contained multiple speech sections, which varied during each episode. The length of the speech sections included several comment periods attended by one or more people. In addition, one comment attended by one person could consist of several sentences, for example, first illustrating competence and then changing to illustrate autonomy. In learning episodes, every speech section *illustrating* autonomy, competence and relatedness was important, since each had its own purpose and role in constructing collective self-determination, as seen in Figure 1. As illustrated, every speech section contained individuals' speech acts *facilitating* autonomy, competence or relatedness. The purpose of speech acts was to construct the group's common and shared practices and activities to promote interaction, creation of common direction and learning, and thus construct collective self-determination. In the following sections, we first describe every speech section illustrating either autonomy, competence or relatedness with data example. After every speech section, we describe the facilitative speech acts that describe the speech sections in more detail.

7.2 *Autonomy: supporting self-reliance and freedom of choice and action by sharing knowledge*

Speech sections illustrating autonomy consisted of participants' speech acts that shared knowledge and competencies, gave meaningful rationale and provided choices and suggestions. The learning episodes usually started with a speech section illustrating autonomy, aiming to bring up information, knowledge and expertise to conversation through one's own expertise. Moreover, aim was to deepen the groups' understanding; therefore, autonomy speech sections were the most frequent in the learning episodes. In addition, the speech acts in these speech sections overlapped, and the differences in speech acts were the most subtle. Participants' freedom and self-reliance were supported by autonomy speech sections. The citation below from a group discussion with the ICT organization illustrates a speech section of autonomy, as Participant 4 provides a rationale regarding the organization's brand and its visibility. After this, Participant 1 elaborates and deepens the conversation by explaining what might affect the brand's visibility on social media based on his/her own expertise:



Source: Authors' own work

Figure 1. Construction of collective self-determination by speech sections illustrating autonomy, competence and relatedness and the facilitating speech acts

Participant 4: So [company name] does not appear on the media platforms. Is it our marketing that causes us to not have the same kind of visibility as those kinds of interesting student brands?

Participant 1: I think this is partly because [company name] is quite fresh as a brand. [The previous name of the company] was not like that at all.

7.2.1 Speech acts facilitating autonomy. The aim of sharing knowledge and competence was for one participant to introduce their knowledge and understanding to the group for discussion, thus deepening their understanding of the topic. When participants shared knowledge and competencies, the topic is somehow important to the speaker, and it is based on the speaker's own experiences, perspectives or expertise, as the following citation shows. Participant 4 (hospital) uses the words "I see" to illustrate how the comments are based on his/her own experiences from work: "I see that you also need to have pure organization hard work. Sharing responsibilities, sharing tasks – so many times, you need to organize first before it [learning] starts to flow." The participant does not tell others how they should perform but let others review the comment and then agree or disagree, thus participating as capable individuals making their own conclusions.

Speech acts providing a meaningful rationale consisted of examples of the topic discussed or reasoning that could uncover the potential consequences of the issue or highlight why an issue was essential. Providing meaningful rationale broadened and deepened the conversation and raised issues that had not been previously addressed. Providing meaningful rationale supports autonomy and voluntary commitment, as the participants themselves could commit to arguments and perspectives as responsible actors after evaluating the information. The following citation represents speech act of giving meaningful rationale because Participant 1 (ICT) continued the previous conversation of the developmental discussions by justifying that they actually go through the current and previous work tasks as well as the future tasks: "Yes we go through what is going on currently, what kinds of work tasks and how stressful or time consuming they are and then we consider the goals we have set, what has happened last year, what we are doing right now and what is supposed to be done in the future." When others understand why some decisions have been made, they can evaluate it and thus make own conclusions. Giving meaningful rationale helps to understand the reasons behind conclusions.

Providing choices and suggestions regarding the topic under discussion offered new ideas and thoughts to all group members to ponder together. Choices and suggestions supported autonomy because they offered other possibilities to actively contribute to the decisions and thus be part of the meaning-making process. They were not presented as truth, guidelines or plans, although the main purpose was to influence the discussion. Instead, they suggested possible courses of action and supported participants' freedom of engagement, choice and action as competent people. Making suggestions and choices encourages others to engage in conversation and draw their own opinions. For example, participant 2 (hospital) suggests that they could have thematic events in their work organization, and by this suggestion she/he leaves room for other opinions and thus makes it possible to exchange ideas and receive other opinions: "But it could be this kind of thematic event, what we could [go through], not necessarily all [topics] mixed up, but such as for example event related to medicines."

7.3 Competence: supporting capability and participation by providing structure and guidance

Speech sections illustrating competence consisted of speech acts of providing feedback, evaluating information, providing critical comments, making concrete plans, setting goals or providing instructions. Aim of speech sections of competence was to support participants'

capabilities, offer opportunities for reflection and participation and provide guidance and structure for the discussion. Speech sections created structure and direct discussion since orientation was toward both the future and past at the same time. Speech sections illustrating competence offered checkpoints to ponder previous discussions and direct discussions toward future, if needed. In the following discussion from the hospital group, Participant 1 makes a critical comment aimed at evaluating the work and practices of the surgery unit. Discussion continues with Participant 5, asking a clarifying question to confirm that the topic was understood in the same way. After the question, the participants continued to try to understand the problem raised by Participant 1:

Participant 1: We have made some serious mistakes over the years when you thought about it. For example, we have eliminated one of the biggest policy lines, so that it has really changed.

Participant 5: What do you mean by that?

7.3.1 Speech acts facilitating competence. Speech acts providing feedback could be either positive or negative and focused on the issues discussed, for example, highlighting the pros and cons. In addition, participants usually provided arguments and reasoning to support their feedback. These types of speech acts had an evaluative tone and were directed at an issue raised earlier in the discussion. The following citation describes the speech act of providing feedback, since the participant refers directly to the previous comment by calling the participant by name and then continues explaining the positive aspects of the organization's employer image: "Kind of what you [name of the participant] said that the employer image is pretty strong and in my opinion it is something we should focus on significantly more, because things are actually pretty good here compared to lot of other companies our size, or smaller or bigger." (Participant 2, ICT). Competence is supported since specific feedback signals recognition and appreciation of efforts. Feedback can also be corrective, highlighting necessary changes.

Evaluating information allowed participants to ponder issues at a deeper level. Information was evaluated through critical comments or otherwise by taking a strong stance on the issue at hand or by asking specific or challenging questions. By this speech act, participants could obtain more information or confirm issues discussed previously. These critical comments and questions were unexpected and direct comments that were not multidimensional. They simplified or exacerbated issues evoking emotions in other participants and invited them to participate, thus facilitating their competence and participation. The following example facilitates competence because making a critical question participant offers other's possibilities to engage in conversation and participate by answering the question: "But are these [online courses] actually an improvement when compared to the old practices? Was there before any [induction process] at all?" (Participant 5, hospital). Evaluating information made participants question their perspectives and allowed them to speak directly and face problems. Participants could understand the issue at hand and use their competence and capability to make decisions. Without this kind of criticism, some important issues might not have been considered in the conversation.

Competence was facilitated by making concrete plans, setting goals and providing instructions through evaluation and in-depth reflection of information in the group. In this way, participants learn new things, develop themselves, influence the issue at hand or change their own behavior, supporting their sense of capability. Making plans, setting goals and providing instructions summarized the previously discussed issues and led the conversation to an end. By setting goals, participants could acknowledge challenges or problems by first identifying them and then providing an instruction on how the situation could be handled in a different way, as the following citation shows: "I also try to organize [the project cycle] so that there always would be the new person, who needs to go back through the basics again and after that takes responsibility of

induction process.” (Participant 4, ICT). This citation is an example of making goals and instructions based on previous comments, highlighting the aim of circulating people so that anyone does not have to take care of the process alone for too long. Participants provided others with instructions of what is expected or what is desirable behavior and how the goal could be achieved.

7.4 Relatedness: creating shared understanding and common ground by acknowledging others’ perspectives

Speech sections illustrating relatedness in the learning episodes consisted of speech acts showing a sense of community and compassion, encouraging and supporting others and considering the perspectives of others. Speech sections illustrating relatedness were difficult to distinguish from those illustrating autonomy or competence. Speech acts facilitating relatedness followed those facilitating autonomy or competence in the same or next sentence. Based on the following conversation, it was possible to interpret speech acts facilitating relatedness. Speech sections illustrating relatedness played an important role in constructing collective self-determination by creating a common and shared understanding and providing conclusions. Speech sections illustrating relatedness were essential because their aim was to confirm ideas discussed were understood in the same way and thus accepted, allowing participants to create a shared vision and foster collective learning.

The excerpt from the hospital’s group discussion below illustrates a section of relatedness because Participant 3 humorously replies to Participant 5 with a comment on how physicians’ particular working methods and behavior are reflected in nurses’ work. Other participants replied positively, reinforcing Participant 3’s comment. Through this kind of positive and relieving moment, participants create a sense of community and connection with each other with this specific group of people. After this positive moment of relatedness, participants were able to continue the conversation in depth:

Participant 5: Well, yes, or no. Yes, I identify [...] But from a different perspective, the doctor’s or physician’s work is different in a way that I do not have that kind of community, where there would be more of these so-called problems. It is kind of an expert organization where everyone works as they please, and then you have to figure it out.

Participant 3: It [the physician’s way of working] will be reflected back to us.

Participant 1: That is an excellent comment.

Participant 4: That is a good one: everyone does what they like.

7.4.1 Speech acts facilitating relatedness. Relatedness was facilitated through a sense of community and compassion in the conversation. Humorous and ironic comments which served as relief of tension usually evoked positive responses and allowed others to acknowledge these comments by joining it. Comments included jokes or humor only this group of people can understand because content was linked to their everyday work and field. This common understanding supports their belongingness to the group and connection to each other. For example, Participant 5 (hospital) explained how the [name of the building] “contributes to the lack of physical facilities to discuss with colleagues, share ideas, and thus learn together.” This comment can be understood as ironic since group previously discussed how they had moved to a new, larger hospital, but the facilities in new hospital didn’t offer places to hold discussions as a team. This speech act sends a message of “rowing the same boat” facilitating relatedness. After comments evoking positive emotions, participants deeper the conversation which can be understood as a sign of creating common ground and a

sense of belongingness. Comments were also an important sign to others that specifically this group of people can handle sensitive topics or problems.

Relatedness was facilitated by encouraging and supporting each other through making positive comments, praising others or offering other positive expressions. Supportive comments are understood as an important indicator for commenters that others value their opinions and ideas as trusted messengers. As the following citation shows, participant could, for example, indicate that the issue is important by encouraging: "Now we are on the right track." (Participant 4, ICT). Relatedness was facilitated through encouraging and supportive comments, since the participants created a positive and open atmosphere where everyone can participate, express their ideas and be part of the discussion and the community. These speech acts support relatedness since they created compassion between the participants by expressing enthusiasm, pursuing ideas expressed and praising each other.

The aim of considering, appreciating and accepting others' perspectives is to confirm ideas expressed were accepted and that all group members understood topics discussed in the same way. This enables group to make mutually shared decisions and conclusions. Accepting speech acts were also important, as they enable group to internally create shared and accepted ways of communicating. In the following example participant facilitates relatedness by listening others' opinions and taking them into account by respectfully saying that he/she understands the previous participant's point of view. After this, participant continues to provide a meaningful rationale for his/her opinion: "As such, I also understand that point of view if you see that it [training] does not fit his/her career path. Although I don't know the context of the training or what the options were that he/she would have wanted and what were offered to him/her." Participant 3 (ICT). By this speech act, other's opinions are not ignored, which creates trustful and respectful atmosphere, thus sense of relatedness, allowing participants to also offer different opinions. When everyone's opinion is valuable, participants are allowed to make mistakes and learn from them. Thus, relatedness is facilitated by openness and commitment to common and shared visions.

8. Discussion

This study has elaborated the understanding of self-determination as a collective-level phenomenon. Based on the findings, collective self-determination emphasizes the group and its ability to be autonomous, responsible and capable (Murphy, 2014) to learn and to orient toward common goals and tasks. Collective self-determination can be approached as freedom to decide what actions the group takes and why (Thomas *et al.*, 2017) to be able to develop their competence and knowledge, thus complete the work tasks. Furthermore, essential feature of collective self-determination is group's freedom to create these required actions to learn and complete the tasks through social interaction. Collective self-determination is constructed by speech sections and the facilitating speech acts of autonomy, competence or relatedness that describe the sections in deeper level. Participants used certain communication styles to support the group's autonomy and motivation to engage in certain behavior (Martela *et al.*, 2021) – that is collective self-determination. The findings of this study confirm the previous idea of the importance of collegial and collective learning situations relying on social interaction in supporting self-determination in individual (Keronen *et al.*, 2023) and collective level. In this study, the autonomy-supportive communication techniques have been contributed and elaborated empirically (Martela *et al.*, 2021) in the context of collective learning.

First, autonomy can be facilitated by sharing knowledge and competencies, giving meaningful rationale and providing choices and suggestions. The findings demonstrated that the meaning of these speech acts is to treat people as responsible and reasonable individuals

rather than subordinates who need to be controlled (Martela *et al.*, 2021). In line with previous understandings, autonomy-supportive communication means explaining why certain issues are important to consider and providing meaningful rationale (Martela *et al.*, 2021; Rigby and Ryan, 2018) for others to be reviewed. Second, competence can be facilitated by speech acts that provide feedback, evaluate information, offer critical comments, make concrete plans, set goals and provide instructions. The meaning of these competence-supportive speech acts is to provide structure and clarity regarding what is expected and how to achieve a certain behavior (Martela *et al.*, 2021). Moreover, aim is to support participants capability and participation in interaction as competent people. Although addressing key obstacles for behavioral change (Martela *et al.*, 2021) did not play a major role in supporting competence in this study, essential was to address possible conflicts and complex problems by criticizing and evaluating information. Third, the findings show that relatedness can be supported in interaction by showing a sense of community and compassion, encouraging and supporting others and considering others' perspectives. In line with previous studies, the sense of belongingness, connection, mutual bond and trust are essential in supporting relatedness (Martela *et al.*, 2021; Rigby and Ryan, 2018). Moreover, acknowledging others' perspectives demonstrated that people have a natural desire to be understood and to care for others (Martela *et al.*, 2021), which creates trustful, respectful and supportive atmosphere needed for learning and working in the group.

Based on the findings, collective self-determination is based on individuals' actions and initiatives in social interaction. In collective self-determination, the individual and the collective are both emphasized, meaning that group-level self-determination cannot occur without individuals and their actions. Behind collective self-determination is individual-level self-determination (see Keronen *et al.*, 2023), but the actions of individuals in collective self-determination are targeted at orientating others' behaviors instead of one's own, and the group and its actions are emphasized. However, every group working together cannot be considered automatically collectively self-determined. Based on the findings, a group can be seen as using collective self-determination when it makes decisions about work assignments and working methods (Cohen and Ledford, 1994), sets goals for actions, analyses possible problems occurring, makes plans and evaluates its own performance (Laloux, 2014). An essential feature of collective self-determination is group's autonomy and responsibility for its own work and the working methods (Auvinen *et al.*, 2018).

The balance between guiding and supporting autonomy and freedom is essential for collective self-determination (see Collin *et al.*, 2021). Based on the findings, it seems that clear and appropriate structures are needed to ensure enough support for learning from colleagues (Bunderson and Boumgarden, 2010) and supervisors. Support from both colleagues and leaders is needed to avoid unwanted outcomes that challenge work and learning (see Bell, 2017; Collin *et al.*, 2021). Supervisory work and structures are needed to confirm that collectively self-determined teams are in line with the organization and its strategy, but inside the individual teams, participants can regulate their work and behavior autonomously through social interaction. This refers to a new approach to structures instead of traditional structures following a rigid hierarchy. Thus, the results show how everyone in the group, rather than just an individual leader, can have the knowledge needed to complete work tasks and learn together (Salovaara and Bathurst, 2018). This leads to new practices and features of leadership emerging inside the group as collectively being everyone's responsibility. Moreover, supervisors need to find new ways to support and lead collectively self-determined teams. This means that coaching and training should be emphasized in supervisory work when supporting team's self-determination. As learning in expert work and employees' resources for self-determination might differ depending on the situation (Lemmetty, 2020), essential is to ensure that employees

in these kinds of teams have enough knowledge and resources to engage the behavior required to collective self-determination. Each speech section and its facilitative acts have their own meaning and function in construction of collective self-determination. This means that relying only on one communication style can lead teams to be too independent and far from the other teams and goals of the organization. Therefore, organizations and teams using collective self-determination should elaborate all these three needs in their actions as well as explore suitable ways for the certain context to implement collective self-determination.

Regarding the limitations of this study, it could be argued that the results might be context-related and therefore not transferable to other contexts. As the concept of collective self-determination has not been studied in the field of adult education or the context of working life, this perspective, as used in this study, is only one approach to explore the phenomenon. Moreover, the facilitators and researcher's role in development-oriented group discussion should be considered, although their role was not to guide the conversation or the learning but to facilitate the group. Therefore, the results might be different in real-life working situations depending, for example, on whether the official supervisor is present or not in the situation or depending on the combination of the group of people. An apparent limitation of the method was that group communication was analysed only using audio recordings; thus, facial expressions and gestures were excluded.

In the future, studying employees' experiences of working and learning in collectively self-determined teams would be essential to get their own experiences of the phenomenon. As employees' resources and capabilities for self-determination might differ depending on the situation and work tasks, collective self-determination could be expected to be also situational and contextual. Exploring the dynamics of the phenomenon in different organizational context, such as nonprofit organizations, education institutions or government agencies, would broaden the understanding of how these communication styles apply across different sectors. Understanding how collective self-determination operates in various settings could offer information to develop more effective team and leadership practices. Supporting practices and processes in a sociocultural context need to be explored in more detail in relation to collective self-determination. In addition, everyday learning and team-level situations could be explored qualitatively by using observation and ethnography. Using different methods would deepen the understanding of the emergence and occurrence of self-determination as a collective-level phenomenon. Using remote work and different online environments to complete daily work tasks creates new frameworks and challenges for teams' collective self-determination. Moreover, as the learning and completion of daily work tasks rely even more on collective and collegial practices, shared understanding and sharing competencies, collective self-determination, rather than individually oriented practices and processes, might be emphasized in the future. More research is needed to define and determine the phenomenon in the context of working life.

References

- Auvinen, T., Riivari, E. and Sajasalo, P. (2018), "Lessons learned from traditional and 'new-age' leadership", in Eskola, A. (Eds), *Navigating Through Changing Times*, Routledge, New York, NY, pp. 95-112.
- Bell, B.S. (2017), "Strategies for supporting self-regulation during self-directed learning in the workplace", in Noe, R.A. and Ellingson, J.E. (Eds), *Autonomous Learning in the Workplace*, Routledge, New York, NY, pp. 117-134.
- Berings, M., Poell, R. and Gelissen, J. (2008), "On-the-job learning in the nursing profession: developing and validating a classification of learning activities and learning themes", *Personnel Review*, Vol. 37 No. 4, pp. 442-459, doi: [10.1108/00483480810877606](https://doi.org/10.1108/00483480810877606).

- Billett, S. (2014), "Mimesis: learning through everyday activities and interactions at work", *Human Resource Development Review*, Vol. 13 No. 4, pp. 462-482, doi: [10.1177/1534484314548275](https://doi.org/10.1177/1534484314548275).
- Brooks, J.V., Gorbenko, K. and Bosk, C. (2017), "Interactional resources for quality improvement: learning from participants through a qualitative study", *Quality Management in Health Care*, Vol. 26 No. 2, pp. 55-62, doi: [10.1097/QMH.000000000000128](https://doi.org/10.1097/QMH.000000000000128).
- Bunderson, J.S. and Boumgarden, P. (2010), "Structure and learning in self-managed teams: why 'bureaucratic' teams can be better learners", *Organization Science*, Vol. 21 No. 3, pp. 609-624, doi: [10.1287/orsc.1090.0483](https://doi.org/10.1287/orsc.1090.0483).
- Burtis, J.O. and Turman, P.D. (2006), *Group Communication Pitfalls. Overcoming Barriers to an Effective Group Experience*, Sage, Thousand Oaks, CA.
- Cohen, S.G. and Ledford, G.E. Jr (1994), "The effectiveness of self-managing teams: a quasi-experiment", *Human Relations*, Vol. 47 No. 1, pp. 13-43, doi: [10.1177/001872679404700102](https://doi.org/10.1177/001872679404700102).
- Collin, K. (2008), "Development engineers' work and learning as shared practice", *International Journal of Lifelong Education*, Vol. 27 No. 4, pp. 379-397, doi: [10.1080/02601370802213856](https://doi.org/10.1080/02601370802213856).
- Collin, K., Herranen, S., Paloniemi, S., Auvinen, T., Riivari, E., Sintonen, T. and Lemmetty, S. (2018), "Leadership as an enabler of professional agency and creativity: case studies from the Finnish information technology sector", *International Journal of Training and Development*, Vol. 22 No. 3, pp. 222-232, doi: [10.1111/ijtd.12130](https://doi.org/10.1111/ijtd.12130).
- Collin, K., Keronen, S., Lemmetty, S., Auvinen, T. and Riivari, E. (2021), "Self-organised structures in the field of ICT: challenges for employees' workplace learning", *Journal of Workplace Learning*, Vol. 33 No. 2, pp. 95-108, doi: [10.1108/JWL-10-2019-0124](https://doi.org/10.1108/JWL-10-2019-0124).
- Collin, K., Lemmetty, S., Jaakkola, M. and Keronen, S. (2023), *Lähijohtaminen Kestävän Oppimisen Edistäjänä Työelämässä (JoKo): Tutkimushankkeen Loppuraportti [Leading Sustainable Learning at Work (JoKo): Report]*, University of Jyväskylä, doi: [10.17011/jyureports/2023/18](https://doi.org/10.17011/jyureports/2023/18).
- Ellinger, A.D. (2005), "Contextual factors influencing informal learning in a workplace setting: the case of 'reinventing itself company'", *Human Resource Development Quarterly*, Vol. 16 No. 3, pp. 389-415, doi: [10.1002/hrdq.1145](https://doi.org/10.1002/hrdq.1145).
- Frenkel, S.J. and Sanders, K. (2007), "Explaining variations in co-worker assistance in organizations", *Organization Studies*, Vol. 28 No. 6, pp. 797-823, doi: [10.1177/0170840707073079](https://doi.org/10.1177/0170840707073079).
- Gagné, M. and Deci, E.L. (2005), "Self-determination theory and work motivation", *Journal of Organizational Behavior*, Vol. 26 No. 4, pp. 331-362, doi: [10.1002/job.322](https://doi.org/10.1002/job.322).
- Gijbels, D., Raemdonck, I., Verweken, D. and Van Herck, J. (2012), "Understanding work-related learning: the case of ICT workers", *Journal of Workplace Learning*, Vol. 24 No. 6, pp. 416-429, doi: [10.1108/13665621211250315](https://doi.org/10.1108/13665621211250315).
- Hetzner, S., Heid, H. and Gruber, H. (2012), "Change at work and professional learning: how readiness to change, self-determination and personal initiative affect individual learning through reflection", *European Journal of Psychology of Education*, Vol. 27 No. 4, pp. 539-555, doi: [10.1007/s10212-011-0094-1](https://doi.org/10.1007/s10212-011-0094-1).
- Hsieh, H.F. and Shannon, S.E. (2005), "Three approaches to qualitative content analysis", *Qualitative Health Research*, Vol. 15 No. 9, pp. 1277-1288, doi: [10.1177/1049732305276687](https://doi.org/10.1177/1049732305276687).
- Hsu, H.C.K., Wang, C.V. and Levesque-Bristol, C. (2019), "Reexamining the impact of self-determination theory on learning outcomes in the online learning environment", *Education and Information Technologies*, Vol. 24 No. 3, pp. 2159-2174, doi: [10.1007/s10639-019-09863-w](https://doi.org/10.1007/s10639-019-09863-w).
- John-Steiner, V. and Mahn, H. (1996), "Sociocultural approaches to learning and development: a vygotskian framework", *Educational Psychologist*, Vol. 31 Nos 3/4, pp. 191-206, doi: [10.1207/s15326985ep3103&4_4](https://doi.org/10.1207/s15326985ep3103&4_4).
- Keronen, S., Lemmetty, S. and Collin, K. (2023), "Employees' self-determination in collegial learning situations at work: a comparative study of a Finnish ICT organization and a central hospital",

- Scandinavian Journal of Work and Organizational Psychology*, Vol. 8 No. 1, pp. 1-16, doi: [10.16993/sjwop.192](https://doi.org/10.16993/sjwop.192).
- Kyndt, E., Vermeire, E. and Cabus, S. (2016), "Informal workplace learning among nurses learning outcomes", *Journal of Workplace Learning*, Vol. 28 No. 7, pp. 435-450, doi: [10.1108/JWL-06-2015-0052](https://doi.org/10.1108/JWL-06-2015-0052).
- Laloux, F. (2014), *Reinventing Organizations: A Guide to Creating Organizations Inspired by the Next Stage in Human Consciousness*, Nelson Parker, Brussels.
- Langfred, C.W. (2000), "The paradox of self-management: individual and group autonomy in work groups", *Journal of Organizational Behavior*, Vol. 21 No. 5, pp. 563-585, doi: [10.1002/1099-1379\(200008\)21:5<563::AID-JOB31>3.0.CO;2-H](https://doi.org/10.1002/1099-1379(200008)21:5<563::AID-JOB31>3.0.CO;2-H).
- Lee, M.Y. and Edmondson, A.C. (2017), "Self-managing organizations: exploring the limits of less-hierarchical organizing", *Research in Organizational Behavior*, Vol. 37, pp. 35-58, doi: [10.1016/j.riob.2017.10.002](https://doi.org/10.1016/j.riob.2017.10.002).
- Lemmetty, S. (2020), *Self-Learning is Present Every Day – in Fact, It's my Job*", *Self-Directed Workplace Learning in Technology-Based Work*, University of Jyväskylä, Jyväskylä.
- Marková, I., Linell, P., Grossen, M. and Salazar Orvig, A. (2007), *Dialogue in Focus Groups: Exploring Socially Shared Knowledge*, Equinox Publishing, Equinox Pub, London.
- Martela, F., Hankonen, N., Ryan, R.M. and Vansteenkiste, M. (2021), "Motivating voluntary compliance to behavioural restrictions: self-determination theory-based checklist of principles for covid-19 and other emergency communications", *European Review of Social Psychology*, Vol. 32 No. 2, pp. 305-347, doi: [10.1080/10463283.2020.1857082](https://doi.org/10.1080/10463283.2020.1857082).
- McLeod, J.M., Kosicki, G.M. and McLeod, D.M. (2010), "Levels of analysis and communication science", in Berger, C.R., Roloff, M.E. and Roskos-Ewoldsen, D.R. (Eds), *The Handbook of Communication Science*, Sage, CA, pp. 183-200.
- Moe, N.B., Dingsøy, T. and Dybå, T. (2008), "Understanding self-organizing teams in agile software development", in 19th Australian conference on software engineering, pp. 76-85, doi: [10.5555/1395083.1395657](https://doi.org/10.5555/1395083.1395657).
- Murphy, M. (2014), "Self-determination as a collective capability: the case of indigenous peoples", *Journal of Human Development and Capabilities*, Vol. 15 No. 4, pp. 320-334, doi: [10.1080/19452829.2013.878320](https://doi.org/10.1080/19452829.2013.878320).
- Muthusamy, S.K., Wheeler, J.V. and Simmons, B.L. (2005), "Self-managing work teams: enhancing organizational innovativeness", *Organization Development Journal*, Vol. 23 No. 3, pp. 53-66.
- Nederveen Pieterse, A., Hollenbeck, J.R., van Knippenberg, D., Spitzmüller, M., Dimotakis, N., Karam, E.P. and Sleesman, D.J. (2019), "Hierarchical leadership versus self-management in teams: goal orientation diversity as moderator of their relative effectiveness", *The Leadership Quarterly*, Vol. 30 No. 6, doi: [10.1016/j.leaqua.2019.101343](https://doi.org/10.1016/j.leaqua.2019.101343).
- Noe, R.A. and Ellingson, J.E. (2017), "Autonomous learning in the workplace", in Noe, R.A. and Ellingson, J.E. (Eds), *Autonomous Learning in the Workplace*, Routledge, New York, NY, pp. 1-11.
- Patanakul, P., Chen, J. and Lynn, G.S. (2012), "Autonomous teams and new product development", *Journal of Product Innovation Management*, Vol. 29 No. 5, pp. 734-750, doi: [10.1111/j.1540-5885.2012.00934.x](https://doi.org/10.1111/j.1540-5885.2012.00934.x).
- Pimmer, C., Pachler, N. and Genewein, U. (2013), "Contextual dynamics in clinical workplaces: learning from doctor-doctor consultations", *Medical Education*, Vol. 47 No. 5, pp. 463-475, doi: [10.1111/medu.12130](https://doi.org/10.1111/medu.12130).
- Poole, M.S., Keyton, J. and Frey, L.R. (1999), "Group communication methodology", in Frey, L.R., Gouran, D.S. and Poole, M.S. (Eds), *Handbook of Group Communication Theory and Research*, Sage, Thousand Oaks, CA, pp. 92-112.
- Power, J. and Waddell, D. (2004), "The link between self-managed work teams and learning organisations using performance indicators", *The Learning Organization*, Vol. 11 No. 3, pp. 244-259, doi: [10.1108/09696470410533003](https://doi.org/10.1108/09696470410533003).

-
- Riera Claret, C., Sahagún, M.Á. and Selva, C. (2020), "Peer and informal learning among hospital doctors: an ethnographic study focused on routines, practices and relationships", *Journal of Workplace Learning*, Vol. 32 No. 4, pp. 285-301, doi: [10.1108/JWL-11-2018-0141](https://doi.org/10.1108/JWL-11-2018-0141).
- Rigby, C.S. and Ryan, R.M. (2018), "Self-determination theory in human resource development: new directions and practical considerations", *Advances in Developing Human Resources*, Vol. 20 No. 2, pp. 133-147, doi: [10.1177/1523422318756954](https://doi.org/10.1177/1523422318756954).
- Ryan, R.M. and Deci, E.L. (2000), "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being", *American Psychologist*, Vol. 55 No. 1, pp. 68-78, doi: [10.1002/jsfa.2740050407](https://doi.org/10.1002/jsfa.2740050407).
- Saks, K. and Leijen, Ä. (2014), "Distinguishing self-directed and self-regulated learning and measuring them in the e-learning context", *Procedia – Social and Behavioral Sciences*, Vol. 112, pp. 190-198, doi: [10.1016/j.sbspro.2014.01.1155](https://doi.org/10.1016/j.sbspro.2014.01.1155).
- Salovaara, P. and Bathurst, R. (2018), "Power-with leadership practices: an unfinished business", *Leadership*, Vol. 14 No. 2, pp. 179-202, doi: [10.1177/1742715016652932](https://doi.org/10.1177/1742715016652932).
- Stabel, L.S., McGrath, C., Björck, E., Elmberger, A. and Laksov, K.B. (2022), "Navigating affordances for learning in clinical workplaces: a qualitative study of general practitioners' continued professional development", *Vocations and Learning*, Vol. 15 No. 3, pp. 427-448, doi: [10.1007/s12186-022-09295-7](https://doi.org/10.1007/s12186-022-09295-7).
- Thomas, E.F., Amiot, C.E., Louis, W.R. and Goddard, A. (2017), "Collective self-determination: how the agent of help promotes pride, well-being, and support for intergroup helping", *Personality and Social Psychology Bulletin*, Vol. 43 No. 5, pp. 662-677, doi: [10.1177/0146167217695553](https://doi.org/10.1177/0146167217695553).
- Vähäsantanen, K. and Eteläpelto, A. (2017), "Agency and learning in the work of software professionals", in Harteis, C. (Eds), *The Impact of Digitalization in the Workplace: An Educational View*, Springer, Cham, Switzerland, pp. 161-179.
- Vygotsky, L.S. (1978), "Mind in society. The development of higher psychological processes", in Cole, M., John-Steiner, V., Scribner, S. and Souberman, E. (Eds), *Mind in Society*, Harvard University Press, Cambridge, MA, pp. 19-58.
- Wall, T.D., Kemp, N.J., Jackson, P.R. and Clegg, C.W. (1986), "Outcomes of autonomous workgroups: a long-term field experiment", *Academy of Management Journal*, Vol. 29 No. 2, pp. 280-304.
- Wenger, E. (1998), *Communities of Practice: Learning, Meaning, and Identity*, Cambridge University Press, Cambridge, doi: [10.1017/CBO9780511803932](https://doi.org/10.1017/CBO9780511803932).
- Zaimovic, T., Kozic, M., Efendić, A. and Džanić, A. (2021), "Self-organizing teams in software development – myth or reality", *TEM Journal*, Vol. 10 No. 4, pp. 1565-1571, doi: [10.18421/TEM104-10](https://doi.org/10.18421/TEM104-10).
- Zuehl, J. (2016), "Collective Self-Determination", Doctoral dissertation, Princeton University, ProQuest, Parkway.

Corresponding author

Sara Keronen can be contacted at: sara.e.keronen@jyu.fi

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com



III

CONCEPTIONS OF THE LEADING OF LEARNING IN SUPERVISORY WORK: A QUALITATIVE STUDY BASED ON A FINNISH TECHNOLOGY ORGANIZATION AND A CENTRAL HOSPITAL

by

Sara Keronen, Soila Lemmetty & Kaija Collin, 2025

International Journal of Training and Development, 1–13

<https://doi.org/10.1111/ijtd.70009>

Reproduced with kind permission by Wiley.

RESEARCH ARTICLE 

Conceptions of the Leading of Learning in Supervisory Work: A Qualitative Study Based on a Finnish Technology Organization and a Central Hospital

Sara Keronen¹  | Soila Lemmetty²  | Kaija Collin¹¹Department of Education, University of Jyväskylä, Jyväskylä, Finland | ²School of Educational Sciences and Psychology, University of Eastern Finland, Joensuu, Finland**Correspondence:** Sara Keronen (sara.e.keronen@juu.fi)**Received:** 5 November 2024 | **Revised:** 11 June 2025 | **Accepted:** 4 August 2025**Funding:** This study was supported by the Finnish Work Environment Fund (project numbers 200324 and 240024) and the Finnish Cultural Foundation (project number 00240776).**Keywords:** central hospital | coaching leadership | leading learning | learning-oriented leadership | self-determination | technology organization | workplace learning

ABSTRACT

The meaning of learning in knowledge-intensive work for competence development and motivation is significant. Supervisors play a major role as facilitators of learning, making individual- and team-level learning possible in organizations. Supervisors need to implement organizational-level strategies in practice and enhance employees' learning processes in daily problem-solving situations. To facilitate learning, supervisors act as coaches in helping employees develop themselves. However, supervisors have difficulties recognizing this role, and they might not have enough knowledge and competence on how to support adults' learning processes based on self-determination. We explore how supervisors in technology organization and central hospital in Finland conceptualize their role as leaders of learning in their own work contexts. The findings of the phenomenographic analysis were derived from supervisors' diaries ($N = 29$) and interviews ($N = 17$). The findings consist of four logically constructed categories of descriptions in which supervisors depicted leading as a practice that focuses on recognizing and strengthening individual motivations and organizational goals, supporting personnel in learning situations, facilitating collective learning situations and acting as a role model. Leading learning is tied to everyday work situations, emphasizing supervisors' presence and participation among personnel in daily work. The findings can be utilized towards creating a pedagogically suitable environment for learning and development in organizations. Thus, understanding the actions that facilitate learning is essential for developing supervisors' training and education to meet employees' learning needs. Additionally, we offer suggestions for future research.

1 | Introduction

Learning at work is significant for organizations' competitiveness and employee development and motivation. However, formal external courses and training to support learning and development alone (Lizier and Reich 2021) are not sufficient to meet the ongoing learning needs and requirements. Although

employees' autonomy, responsibility and freedom of work and learning have increased, these depend not only on individuals' own abilities and resources (Noe and Ellingson 2017) but also on the environment in which they are expected to occur and their supportive actions (see Deci et al. 2017; Rigby and Ryan 2018). In recent years, the responsibility for supporting employees' learning and development in knowledge-intensive

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *International Journal of Training and Development* published by Brian Towers (BRITOW) and John Wiley & Sons Ltd.

work has increasingly switched to supervisors and middle managers (Ellinger et al. 2003; Noe and Ellingson 2017; Torraco and Lundgren 2020). The role of supervisors as leaders of learning is important (Dawber 2019; Ellinger et al. 2011; E. Ellström and Ellström 2018; Torraco and Lundgren 2020; Warhurst 2013), as they act as a link between organizational and employee learning (Macneil 2001) for implementing organizational-level strategies and goals. Although employees are expected to take on more responsibility for their work and learning (e.g., Noe and Ellingson 2017) at individual and team levels, supervisors need to implement pedagogically suitable actions and processes to support everyday on-the-job learning (E. Ellström and Ellström 2018). However, supervisors might have difficulties recognizing this developmental role (Dawber 2019), as it is quite new (Huang and Hsieh 2015). Change from traditional managerial leadership to learning-focused and developmental actions in supervisory work remains unexplored (see Wallo et al. 2024). Therefore, there is a need for a systematic perspective of actions for facilitating learning in supervisory work (see Dawber 2019), especially in contexts requiring high autonomy and expertise.

Considering current intensified expertise and learning in working life, the supervisor's role is to focus on empowerment and strengthening employees' self-determination behind learning, that is, harnessing intrinsic motivation towards learning (Rigby and Ryan 2018) and continuous professional development (e.g., Ellinger 2005) to achieve both the organization's long-term goals and employees' well-being and engagement (Rigby and Ryan 2018). Combining coaching leadership with self-determination theory (SDT) offers a suitable perspective to explore the underlying processes of coaching on employees' motivation, performance (Gabriel et al. 2014) and development. Coaching leadership, with the aim of promoting learning in a sustainable way (Bond and Seneque 2012), offers many positive outcomes, such as employee engagement, performance (Agarwal et al. 2009; Weer et al. 2016) and satisfaction (Ellinger et al. 2003). The coaching perspective has been the dominant approach in leadership studies over the last few decades, but its examination in different contexts has been called for (Park et al. 2008). Most studies have focused on leaders' characteristics and features (Chong et al. 2016; Park et al. 2008), and qualitative research on how theoretical conceptualizations of coaching leadership emerge in practice is needed (Weer et al. 2016). With this study, we contribute to the call for empirical investigation of supervisors' coaching actions in supporting workplace learning.

Learning at work through everyday practices and processes (Collin 2006) requires multifaceted problem-solving, creativity and expertise (Lemmetty and Collin 2020). Studies have highlighted the meaning of autonomy, responsibility and freedom, especially in knowledge-intensive work, in learning based on employees' activities, engagement, willingness and capabilities (e.g., Noe and Ellingson 2017). Additionally, employees nowadays search for work that is meaningful and fulfils their internal goals and values (Lehtonen et al. 2022), which requires the satisfaction of basic psychological needs in work contexts (Gagné et al. 2022). Therefore, the importance of motivation and self-determination at the individual and collective levels (Keronen et al. 2024) should be considered when exploring

current working life from leadership (Forner et al. 2020; Rigby and Ryan 2018) and learning (Keronen et al. 2023) perspectives. Although supervisors' role as supporters of both learning (e.g., E. Ellström and Ellström 2018; Hughes 2004; Wallo et al. 2022, 2024) and self-determination (Forner et al. 2020; Matsuo 2018) have increasingly been studied, only a few studies have examined how the theoretical standpoints of self-determination theory can be applied in practice in supervisory work (Forner et al. 2020), especially from a supportive learning perspective. Overall, research on supervisors' facilitation of learning has increased, but studies examining the connections between coaching leadership, workplace learning (P.-E. Eilström and Kock 2008) and self-determination are still needed.

This study aims to fill these above-mentioned research gaps by empirically exploring supervisors' conceptions of their coaching leadership actions in supporting workplace learning based on basic psychological needs in their own work contexts. With the help of the phenomenographic methodology (Marton 1986), we reveal the variety of conceptions related to leading learning actions and describe the logical structures between the conceptions found. We define supervisors as persons who guide, support and lead other people at work. The participating supervisors came from two organizations—a Finnish central hospital and a Finnish technology organization. The tasks of all the participants are characterized as knowledge-intensive work in which continuous change and, thus, learning for professional development are present.

2 | Theoretical Background: Leading Learning in Knowledge-Intensive Work

2.1 | Supervisors' Developmental Leadership Actions for Enhancing Individual Autonomy, Developing Learning Skills and Creating Communitality

When facilitating learning in continuously changing knowledge-intensive work, organizations should transition from regulation-based leadership to developmental actions (Agarwal et al. 2009). This refers to adaptive, hands-on leadership, including participative behaviour from supervisors (Wallo et al. 2024). In contrast, learning is negatively affected when leaders are not engaged in learning or if leadership is authoritative and controlling (Ellinger 2005). Developmental actions focus on creating circumstances conducive to openness, variation and multifaceted thinking and on broadening employees' influence on their work (Döös et al. 2015; E. Ellström and Ellström 2018). Supervisors can create a supportive learning climate; afford resources for learning (Wallo et al. 2024); create a shared vision; help with information seeking, sharing and application; support learning by encouraging risk-taking and experimentation (Coetzer et al. 2019); and overall, support innovative learning and critical reflection (Wallo et al. 2013). However, different approaches and leadership practices depend on the situation and context (Wallo et al. 2024) and the nature of the learning. Crucial to this is whether the aim is to facilitate adaptive, performance-oriented learning (e.g., learning new work methods) or developmental, creative and innovative learning such as creating new solutions for ways of working (E. Ellström and Ellström 2018; Wallo et al. 2022). Overall,

supervisors' supportive learning actions, either direct or indirect (Coetzer et al. 2019), planned or spontaneous (Jeong et al. 2018), are strongly tied to work practices and learning opportunities in daily work (Wallo et al. 2022).

When supervisors are seen as coaches, educators and facilitators of learning (Ellinger et al. 2003), they can utilize coaching leadership (Dawber 2019). Coaching leadership aims to help employees develop themselves to improve their work performance (Park et al. 2008), thus learning-to-learn skills through a cooperative relationship between the supervisor and employee (Dawber 2019). Coaching practices concentrate on learning in strategic action and cultural change considering the developmental needs of individuals, teams and organizations (Bond and Seneque 2012). Integrated into a supportive organizational learning culture, these practices allow leaders to utilize everyday situations and learning opportunities for employees' development through daily interactions on the team level (Park et al. 2008). This kind of leadership supports individual learning through team-level practices (knowledge sharing and problem-solving) and team learning through individual reflection (Matsuo 2018). Significant skills for coaching leaders include teamwork competence, valuing people instead of tasks, acceptance of vagueness (Park et al. 2008), communication and support for employees' learning and development (Huang and Hsieh 2015). Moreover, coaching practices should also be approached from a collective perspective as group-level phenomena (Dawber 2019; Liu and Batt 2010).

However, utilizing coaching practices requires supervisors to recognize employees' individual needs, developmental goals and motivations as learners (Dawber 2019)—thus, the need for not only autonomy but also competence and relatedness (Rigby and Ryan 2018). Based on SDT, all three basic psychological needs describing employees' motivational processes and perspectives underlie growth, development and learning (Ryan and Deci 2020). Although self-determination is crucial for work and learning (see Keronen et al. 2023; Lemmetty 2020; Rigby and Ryan 2018) in knowledge-intensive work, the motivation behind learning is not seen as autonomous or dependent on only on individuals' own activity, skills and abilities but is influenced by the supportive actions in the environment (Deci et al. 2017; Rigby and Ryan 2018; Ryan and Deci 2020).

To support the need for autonomy, supervisors should offer a platform for employees to express their ideas and suggestions (Forner et al. 2020) by utilizing participative or consultative decision-making processes (Manganelli et al. 2018), engaging in negotiations and providing reasonable explanations for decisions (Forner et al. 2020). Moreover, a safe and supportive environment for building capabilities and skills supports employees' competence (Forner et al. 2020). In practice, leaders can create opportunities at work for learning and allow employees to learn through individual learning processes and paths (Forner et al. 2020), as well as autonomously by themselves (Dawber 2019). Leaders should support building relationships among employees so they can better understand and know others and should act as role models to encourage diversity and respect for others' experience. Hence, a sense of relatedness in the work community creates common ground (Forner et al. 2020).

Overall, supervisory actions that foster employees' intrinsic motivation are positively associated with employees' need satisfaction, which in turn leads to well-being and positive work behaviour (Slomp et al. 2024). When leaders' supportive actions are addressed to basic needs, employees can have a greater sense of autonomy in their workplace learning, foster connections with colleagues around learning and demonstrate greater learning abilities also through self-initiated behaviour (Hein and Urban 2025).

2.2 | Basic Psychological Needs as a Premise for Employees' Workplace Learning

Employees' self-determination underlying learning and development at work can be approached as a perceived sense of autonomy and possibility of choice, competence as having the needed knowledge and aim to develop knowledge and expertise and relatedness as support, need for belonging in the community and meaningfulness (Ryan and Deci 2020; Rigby and Ryan 2018). Through need satisfaction, employees are understood to be learning-oriented, active, engaged and proactive towards learning (Willems and Lewalter 2012). When employees are motivated, they express greater personal initiative and learning (Hetzner et al. 2012).

Workplace learning has been described as practice-based (Billett 2014), self-determined (Lemmetty 2020), problem-based, on-the-job learning (Janssens et al. 2017; Kyndt et al. 2016). It occurs through participation in socially shared practices in the work community (Billett 2020) and therefore manifests as shared collective activities among colleagues (Collin 2006). Therefore, organizational and social contexts have a remarkable impact on learning processes (Billett 2009). Workplace learning can be defined as learning for work and at work or during work tasks (Billett 2014). Learning derived from daily work processes includes both formal and informal learning activities (Manuti et al. 2015). Learning can be achieved through different individual-level (e.g., information retrieval and reflection) activities (Jeong et al. 2018) and collective-level (e.g., sharing competencies and guiding and teaching others) activities (Lemmetty and Collin 2020) that are intertwined rather than separate elements of learning at work (Manuti et al. 2015).

Although autonomy and self-determination are central parts of work and learning (Lemmetty 2020; Rigby and Ryan 2018) in knowledge-intensive work, learning can be problematic if it is too autonomous, independent and self-determined (Lemmetty 2020). Employees might become too independent, isolated from others or feel unsupported if their own competence and knowledge are not sufficient to overcome challenging work tasks and situations (Collin et al. 2021). An emphasis on individual self-determination or autonomy (Noe and Ellingson 2017) does not mean leaving employees alone and without support (e.g., Collin et al. 2018). Likewise, organizations need enough resources, support and opportunities for such learning (Billett 2020). Engagement and motivation for learning that benefit both individual employees' wellness and organizational performance require support from supervisors (Rigby and Ryan 2018) and affordances from the environment (Ryan and Deci 2020).

When workplace learning occurs as practice-based, autonomous tasks during daily work, it does not necessarily appear systematically guided or pedagogically supported. The learning process itself is not always anticipated (Billett 2020). Although studies have suggested that workplaces include pedagogical practices, guidance and processes (Billett 2014), implementing these daily practices is essential (Hetzner et al. 2012). Learning in the context of work can produce many kinds of outcomes, such as new knowledge, skills and competencies. Therefore, supervisors can comprehensively enable learning-supportive work practices, such as participation, interaction, problem-solving, creativity and development, by creating a suitable culture, practices and processes (Billett 2020; Lemmetty 2020). Hence, the multifaceted nature of learning in working life needs to be acknowledged (Wallo et al. 2024).

3 | Research Question

In this study, we examine the leading of learning in supervisory work in a Finnish central hospital and a Finnish technology organization. Our aim is to investigate supervisors' conceptions of leading learning and increase the understanding of the actions that help supervisors support learning that occurs at work among employees and work communities, requiring motivation, initiatives and self-determination. We thus ask the following research question: How do supervisors describe actions for leading learning in their own work contexts?

3.1 | Methods

This study examines supervisors' conceptions of leading learning in their own work contexts using a qualitative phenomenographic approach (Åkerlind 2005b; Marton 1986; Marton and Pong 2005). As the aim was to gain a comprehensive conceptualization of leading learning from supervisors, phenomenography as a structural framework for exploring the different ways or conceptions of how people in certain groups experience or understand a particular phenomenon (Marton 1986; Marton and Booth 1997) was a suitable choice. With the help of phenomenography, the qualitatively different ways of conceptualizing (Marton 1986) leading learning could be revealed.

3.1.1 | Participants and Empirical Data

The data were collected by individual semi-structured interviews (Kettunen and Tynjälä 2018) and diaries (Day and

Thatcher 2009). Written learning diaries ($N=29$) were collected from 17 supervisors in two organizations: a central hospital and a technology organization in Finland. In both organizations, some of the supervisors produced two learning diaries; however, the aim was not to collect longitudinal data. Interviews ($N=17$) collected from the same individuals reporting diaries and five from the hospital and 12 from the technology organization were interviewed (see Table 1). Altogether, data consist of 279 pages of transcriptions (Times New Roman, font 12, line space 1,5). These two organizations were selected because learning is eminently included in the work of both. The data from the learning diaries consisted of answers to the specific following questions: What does leading learning mean to you? How would you describe it? How is it manifested in practice (please give an example)? The lengths of the diaries varied from half a page to over one page and consisted of multiple sentences offering detailed descriptions of supervisors' conceptions and experiences of leading of learning in their work contexts. The individual, semi-structured interviews emphasized open conversation between the interviewer and the interviewee. The themes discussed included competence development, workplace learning and supervisory work. The following are examples of questions from the interviews: How would you describe the learning situations at work or for work? How often are learning situations discussed in your community? Do you have a role where you guide, support or lead others' work? How do you define a supervisory role (what does it mean to you)?

The first participating organization was in healthcare—a medium-sized hospital with approximately 2500 employees. The participating personnel were from the operational unit and comprised both nurses and physicians. The hospital is a multifaceted environment for learning research because many kinds of learning situations with patients require a new kind of guidance, in addition to a more traditional apprentice model, to avoid inefficient training and incorrect learning results. The second organization was a medium-sized technology company with over 450 employees. The company serves Finnish clients from industries and the public sector, as well as international organizations from over 30 countries. The personnel work, for example, as software developers, information technology experts and knowledge management specialists. Digitalization and the rapid development of technologies trigger the continuous need to update employees' competencies. Moreover, teamwork and leadership practices have been developed to support learning, and virtual communication channels and remote work conditions are typical parts of everyday interactions and work.

TABLE 1 | Data of the study.

Organization	Technology organization		Central hospital	
	Diaries	Interviews	Diaries	Interviews
Data collection method	Diaries	Interviews	Diaries	Interviews
Number of diaries	20	—	9	—
Total number of participants	12		5	
Total amount of transcriptions	17 pages	177 pages	9 pages	76 pages
Data collection time	Winter and Spring 2022			

3.1.2 | Data Analysis

Phenomenographic analysis was conducted following the guidelines and examples provided by Åkerlind (2005b) and Marton (1986), as the aim was to reveal the supervisors' different ways of conceptualizing a certain phenomenon—leading learning in supervisory work. As phenomenography is a data-driven approach (Marton and Booth 1997), we did not utilize theories to guide the analytical process or create a basis for developing categories (Kettunen and Tynjälä 2018) of leading learning. All interviews were transcribed before the analysis began and merged with diaries to be analysed together throughout the whole analysis process.

The analysis process started with reading through the whole data set to obtain an overall picture of the variations in the different conceptions related to leading learning and maintain a high degree of openness to possible meanings (Åkerlind 2005b). The analysis was conducted in two phases. First, all meanings describing the leading of learning were identified based on supervisors' descriptions by marking and segmenting the transcripts (Marton and Pong 2005). Focusing on the similarities and differences of the meanings enabled identification of all variations or agreements expressed (Kettunen and Tynjälä 2018). After all meanings were located, a draft set of descriptive categories was developed, defined and named. This was achieved by comparing the identified similarities and differences between the meanings to determine the qualitative distinct characteristics between them (Kettunen and Tynjälä 2018). This meant that each category illustrated a unique way of approaching leading learning, and thus, the categories are distinguishable from one another, even though the focus was on describing the conceptions of the same leading process. For example, all meanings related to individual learning and motivation were grouped together, because the conceptions focused on describing employees' individual learning and harnessing motivation towards learning. Headlining the first-level descriptive categories also helped to develop and name the draft set.

In the second phase of the analysis, an actual system of categories of descriptions was created by delineating the logical relationships among the categories (Kettunen and Tynjälä 2018). By examining the main features of each category and the qualitative similarities and differences among them (Marton 1986), the initial categories were further elaborated, fixed and defined (Kettunen and Tynjälä 2018). When reading and classifying meanings, we not only sorted the data but also looked for structurally significant and qualitative differences clarifying the meanings (Marton 1986). To determine the logical relationship between the categories (Kettunen and Tynjälä 2018), we focused on supervisors' own descriptions of the phases and structures of leading learning, which they described as a process in their diaries and interviews. Based on this, it was possible to distinct one approach to leading learning from another, and then form categories based on the progression towards a complex, comprehensive and complementary understanding (Åkerlind 2005a) of leading learning actions. The final set consisted of four different categories of leading learning that included descriptions of the phenomenon as a range of meanings within a group (Åkerlind 2005b) of supervisors.

The final qualitatively constructed set of categories of descriptions and the structure of the descriptions were confirmed by calculating all meanings from the diaries and interviews.

4 | Findings

The findings consisted of a logical set of categories for describing the leading of learning as a process from a practice perspective. Hierarchically structured Table 2 describes the supervisors' conceptions of leading learning and the qualitative variations in the categories. We approached the leading of learning from supervisors' daily work experiences and asked them to describe the phenomenon in their own work contexts. Based on the findings, in supervisory work, learning is led through individual-, group- and organization-level practices. The supervisors described the leading of learning as activities tied to daily work and learning that notice and strengthen individual motivations and organizational goals, provide support for personnel in learning situations and enable the sharing of competencies and leading by example. Next, the categories of conceptions are described according to their structural order.

4.1 | Leading Learning by Strengthening and Directing Individual Motivation in Alignment With Organizational Goals

The participating supervisors understood strengthening personnel's motivations and competencies as a point of departure for leading learning. In their descriptions, leading learning meant helping employees find and recognize their own motivating issues, strengths and aims. Motivation was perceived as the primary condition for learning, with most supervisors explaining that the first step in leading learning is finding, strengthening and directing individual motivation.

When one's own motivation is high enough, you can guide and support [the employee] on the learning path.

(Supervisor, technology organization, diary 4)

In addition to strengthened motivation and other individual factors, supervisors also considered the direction of such factors important from the perspective of the organization's human resource development strategy and goals. A discussion about the similarities between an employee's and the organization's goals is important, as is finding the means to harness the employee's motivation to achieve the organizational goals.

Some have strengths in certain things, others in other things, but the overall competence is what matters. The different qualities of people can be combined into one overall competence that serves us [the organization] the best.

(Supervisor, technology organization, interview 6)

Leading learning should thus also include communication between supervisors and employees about the organization's goals. Similarly, communicating organizational goals alone does not work without considering employee motivation. A supervisor's role is to act as the employee–organization interface by treating

TABLE 2 | Supervisors' conceptions of leading learning as a process: Descriptive categories and dimensions of qualitative variations.

Categories	
Dimensions of variation	Leading learning by strengthening and directing individual motivation in alignment with organizational goals
Approach to leading	Leading learning through everyday situations as learning situations
Actions of leading	Leading learning through collective learning among the work community
Supervisor's role	Leading learning by being an example and present
Approach to learning	Leading learning through collective learning among the work community

Individual- and organization-focused	Individual-, team- and community-focused	Individual-, team- and community-focused
Motivating individuals for learning and integrating individuals' goals and skills into organizational goals	Enabling interactive situations and creating a learning-supportive environment and climate in the work community	Being an example and present, and inspiring learning
Motivating	Enabling	Guiding
Individual learning and motivation	Collective learning	Learning by modelling
Facilitating	Enabling	Guiding
Learning-to-learn	Collective learning	Learning by modelling

them equally. The supervisor's job is to deliver information from top management to the employees and vice versa, listen to employees' wishes and needs and acknowledge organizational goals. Consequently, the aim of leading learning is to produce value for both the employee and the organization more broadly.

My role as supervisor is to be close to the personnel, but like between a rock and a hard place, we are aware of and hear the thoughts of personnel, and we take personnel's thoughts to the higher level of management, and also, we receive instructions from higher management regarding things that need to be implemented in the field. We are in the middle—we listen to the personnel but also higher management. We try to work in the middle of them to bring the perspectives of both.

(Supervisor, hospital, interview 5)

This category strongly approaches learning from the individual level. In the depictions, this included individual goals, motivations, skills and attitudes towards learning. According to the supervisors, knowing their team members is important for supporting individual learning.

Learning is individual; people learn in different ways, and their learning skills' and motivations' effect on how to learn is the most optimal for different learners. Knowing personnel and considering and supporting their individual features enhance learning.

(Supervisor, hospital, diary 2)

Supervisors also explained that finding the interfaces of individuals' motivation and organizational goals and achieving organizational goals mean evaluating employees' competencies so they can complete current work tasks and define which will be needed in the future. In the central hospital, this was described as important to having competent and qualified nurses in the future. In the technology organization, ensuring employee competency was mentioned as important for achieving goals and organizational strategies.

You always have to look at and define the competencies that can be found from the employees so that you can find a team that can take on these projects.

(Supervisor, technology organization, interview 1)

Although individuality was important in the descriptions of this category, ideas of community and shared expertise were also mentioned. Collective learning and individual learning are intertwined; when individual motivation is strong, group-level learning is also possible.

You can't force learning. If you force someone to learn, it is not fruitful at all. In half a year, there may be a situation where you don't remember anything about this forced learning. But if you can find the sphere [that] really motivates, learning can be broader than expected and can be shared with many people.

(Supervisor, technology organization, diary 4)

Leading learning progresses from the individual level to the community level in both organizations. Then, the supervisor's task entails both enhancing individual learning and securing group learning. Conceptualizing the process of leading from individuals to groups creates the grounds for understanding the connections between the first and latter categories.

4.2 | Leading Learning Through Everyday Situations as Learning Situations

According to the second category of conceptions, the leading of learning manifests in supervisory work as noticing potential learning situations, making these situations visible and utilizing them. This category emphasizes that learning is embedded in everyday work processes; therefore, it might be difficult to be aware of it. Understanding learning develops through observing different situations at work and verbalizing them. Supervisors play an essential role in this process.

Leading learning is the process of finding everyday learning situations and the capability to benefit from these situations in the most optimal ways for everyone. Around the same theme, it may be possible to find things that require development. Learning support should be directed toward such needs.

(Supervisor, technology organization, diary 3)

When work situations are approached as learning situations, they can also be utilized accordingly. The supervisors cited concrete examples of how learning situations are utilized at work. One participant from the technology field wrote about a particular learning situation that they faced in their learning diary:

We are planning a new part of the old system that will utilize the same information as the rest of the system but is not dependent on the application itself.

The participant continued to describe two possible options to lead the situation:

Option 1. The development team is led to accomplish the new part with the help of old technologies, although we know that their life cycle might be limited and their structure complicated compared with modern tools. In this option, there won't be much learning, and the team's effort concentrates on the repetition of the "same old" and basic doing.

Option 2. The supervisor provides the opportunity to examine whether this application could be done with totally new methods. Although the outcome is not to introduce these new methods after all, we can have more understanding of why it is worth continuing with older ones. Even better if this short examination results in changes in technologies. We can also have better cost-efficiency, more meaningful doing, and better performance.

(Supervisor, technology organization, diary 12)

The aim of noticing and making learning situations visible is to guide employees to independently recognize and utilize the possibilities of these situations in their daily jobs. Thus, another important role of the leader is to articulate and explain the benefits of learning.

Things are not always so simple, and it is sometimes difficult to see the instant benefits of learning. Then, more dialogue and explaining things are important to try to understand the big picture.

(Supervisor, hospital, diary 2)

When guiding learning situations, individual perspectives, described in the previous category, also need to be considered. Some teams and individuals become more easily competent in utilizing work situations as learning resources. In turn, others may need more support and guidance. Therefore, supervisors should encourage employees to pursue self-determination and independent thinking. In their diaries and interviews, the supervisors described doing exactly like this. Recognizing everyday learning situations can be understood as the basis for the next category, allowing employees to share their daily learning situations with colleagues.

4.3 | Leading Learning Through Collective Learning Among the Work Community

In the descriptions, various collective, interactive and collaborative situations of sharing tacit knowledge were mentioned as important learning resources for individuals and teams. Discussions among team members, collegial support and sharing both good and poor practices were said to be functional practices for transferring learned things to one another. In teams, different fields of specialization can offer a variety of areas of expertise. Therefore, sharing competencies is vital for the whole team's learning.

We do not individualize working to anyone; instead, we work in a team, and thus, teams contain experts in different skill levels [...]. In that way, we are able to share knowledge as well and thereby increase the competencies of others.

(Supervisor, technology organization, interview 8)

In supervisory work, it is important to guide employees towards different interactional situations and enable these kinds of situations in their daily jobs. The apprentice setting (where the more experienced worker guides the less experienced one) and pair and group work guided by the supervisor were mentioned as examples.

They [new employees] are encouraged to ask—and I think this is one of the cornerstones of learning! There are no stupid questions, and everyone has sometimes thought of very similar issues. Let's utilize colleagues' know-how and share it.

(Supervisor, technology organization, diary 7)

They [employees] learn from colleagues; we always encourage you to take the colleague with you when facing a

new situation at work and to go through the situation with the colleague, and then, next time, you know how to do it by yourself, and then, you teach it to the next one.

(Supervisor, hospital, interview 3)

Many supervisors recognized that the motivation to learn must occur at the individual level, but only when knowledge, new understanding and competence are shared can leading learning take place among the community.

I think the most important thing in working life is that, if you have learned something well, it would be good to transfer it to at least one, but if possible, to more people. This makes your competence visible, and it guides others to learn as well.

(Supervisor, technology organization, diary 1)

In this category, creating a culture and work climate that values and supports learning in daily work was also mentioned as an important resource and premise for enabling individual and collective learning in both organizations. When supervisors encourage employees to collective learning through sharing everyday learning situations, this category intersects with the previous categories, as interactional situations with colleagues may help employees to recognize learning situations also independently. Supervisors recognized the importance of a learning-supportive culture in supporting learning and integrating learning as an essential part of everyday work. Supervisors explained that a culture and work climate that supports and values learning is inspiring and encourages experimentation and a positive attitude for learning. A learning-supportive culture and work climate were said to create frames and systems in which learning and leading learning can emerge at the individual and collective levels. Creating and maintaining a culture that values and enables continuous learning and development was mentioned as one role of supervisors.

In my opinion, leading learning means creating that kind of organizational culture where employees' learning and development at the individual and team levels are more than acceptable. Supportive structures and management systems for learning and supporting learning must be created within the organization, and these structures and systems must be maintained and developed. [...] They [supervisors] can nurture culture and opportunities for learning with teams and individuals.

(Supervisor, technology organization, diary 8)

The idea of creating an inspiring, encouraging, experimenting, positive learning culture and supportive work climate creates a connection between this category and the next category.

4.4 | Leading Learning by Being an Example and Present

Leading learning was also described as setting an example, being a model and a conscious presence. Setting an example means providing active guidance in everyday practice.

You can act in a way that others can learn from your example and cause learning experiences at the same time. In practice, it means that you tell others how to do things and what is worth avoiding.

(Supervisor, technology organization, diary 1)

Additionally, leading by example is related to the supervisor's own expertise and enthusiasm, which can be transmitted to the personnel. In this regard, the supervisor's own interest and engagement in learning and continuous development are vital. Therefore, this category overlaps with the first one if employees draw supervisors' enthusiasm and continuous development as a resource of personal inspiration, leading to engagement and motivation in learning.

It is always best to lead by example from the start. If you aim to continuously develop and learn yourself, it sets an example for others. Supervisors must have a passion for the task at hand. Enthusiasm will be transmitted and help others exceed themselves. The will to learn more challenges them to face more difficult situations. The capability to learn from mistakes is important, too.

(Supervisor, hospital, diary 1)

The supervisor's presence is also essential. For example, the orientation process was said to emphasize guidance, example and presence in leading learning. Especially in the hospital, being present, listening and being accessible daily for employees were emphasized at both the individual and team levels, as these actions help support employees' well-being at work.

The role of the supervisor is to welcome the new employee and, after the initial orientation, act as an explainer of the orientation process, goal setter, encourager, and motivator. [...] Being present and accessible daily enables problems and challenges to be noticed and dealt with.

(Supervisor, hospital, diary 7)

4.5 | Logical System of Categories

In this study, the founded categories constituted a logical structure (Kettunen and Tynjälä 2018) based on how the supervisors perceived the phase and the progress of leading learning and how often each description was mentioned in the data. Based on a qualitative substantive understanding of the four different categories, connections can be found between each category, as categories represent the overlapping features of the same leading learning process. Thus, based on the qualitative differences of the descriptions, there were clearly four different categories that constituted a logical set. Based on these four categories, learning-oriented leadership can be approached as a process in which every category is important and thus complement each other towards comprehensive understanding of leading learning.

First, noticing each employee as an individual learner is the basis for leading learning. This means strengthening individual needs, skills and motivations in relation to the organization's

goals. The second category includes observing, making visible and utilizing different everyday situations as learning moments to enhance learning at the individual and collective levels. The focus is on facilitating employees in learning-to-learn processes. These two categories are related to the idea that, in supervisory work, individuals' motivational factors and skills must be considered first before expecting employees to participate in collective learning situations. In the third category, leading learning focuses on collective action. The supervisor's task is to create and enable situations in which knowledge sharing and interaction are possible among employees, thus aiming for collective learning among the work community. The fourth category shows how leading learning involves learning from the supervisor's example. This category clearly emerged from the data but was the smallest in relation to the other categories. Exemplary working, modelling, listening and being present and accessible are not only essential roles and tasks of the supervisor but also complementary to the other categories.

According to this study, leading learning takes place at the individual and community levels. Based on the categories and the structure created from our data-driven analysis, there are two approaches to connecting the individual and collective levels. First, supervisors described that, in leading learning as a process, individual learners should first be motivated to learn by understanding their own needs and skills. Different learning situations can then be utilized and shared collaboratively. In addition to individual perspectives (motivations, skills, understanding and aims), organizational goals need to be considered as points of departure for individual learners to achieve the desired organizational learning outcomes. From this perspective, leading learning also considers organizational-level strategies and aims.

5 | Discussion

Based on the findings, leading learning requires supervisors' daily active participation and can be understood as practice-based hands-on leadership (Wallo et al. 2024). Supervisors' facilitative actions are strongly tied to personnel's everyday work practices and become visible through learning opportunities in daily work (Wallo et al. 2022). Leading learning is a process that entails the individual, collective and organization levels (Jeong et al. 2018) and in which supervisors act as a link between individuals and the organization (Macneil 2001). Supervisors strengthen individual motivation and skills, find interfaces with organizational-level learning goals, help utilize learning situations, enable collegiality and knowledge sharing and are present and an example in employees' everyday work. In practice, supervisors utilize coaching leadership (Bond and Seneque 2012; Park et al. 2008) aiming to help employees develop themselves as autonomous, self-determined learners (Gabriel et al. 2014; Rigby and Ryan 2018). Through coaching, supervisors can utilize everyday situations as learning situations at both the individual and team levels (Park et al. 2008). Hence, not only knowledge of adult learning processes becomes central in leading learning (E. Ellström and Ellström 2018) but also recognition of how to support need satisfaction (Deci et al. 2017) behind learning and development (see Keronen et al. 2023). Through these supportive actions, supervisor's job is

to create a pedagogically suitable environment for learning and development in knowledge-intensive work (Billett 2020). Moreover, leading learning integrates coaching leadership into self-determination (Gabriel et al. 2014) and thereby considers the individual's motivational processes and need satisfaction behind learning (Deci et al. 2017; Manganello et al. 2018).

In both organizations, the supervisors recognized that the process of leading learning begins at the individual level by motivating employees in individual-level learning. The perspective of employees' self-determination seems to support supervisors' descriptions of strengthening and directing individual motivation and skills as the first phase of leading learning (see Rigby and Ryan 2018). Discovering individual motivational processes supports employees' sense of autonomy (Forner et al. 2020). Enabling employees' autonomy by integrating organizations' goals and strategies is particularly important, as employees cannot always complete work tasks and learn solely according to their preferences. Previous studies have found that employees can still feel a sense of autonomy if they receive reasonable explanations for required behaviour (Forner et al. 2020). The supervisors approach learning from the individual-organization interface and not only from individual learning needs. From the strategic management perspective, this is important because strategy ties organizational (e.g., Ferreira et al. 2020) and workplace learning together (Billett 2020).

The findings of this study provide evidence of leading learning based on an individual approach and moving towards a collective level. Some studies have suggested that collective practices should be emphasized when a group's social interaction and communication enable an individual's performance at work (Liu and Batt 2010). However, the findings of the current study support the previous understanding that individual-level learning and collective-level learning are intertwined in the process of leading learning and can be understood as complementing each other (Matsuo 2018). Additionally, making learning situations visible and helping and guiding employees to recognize and utilize them in daily work (Wallo et al. 2022) support personnel's learning-to-learn skills and their sense of having all needed capabilities, and to develop their competencies at work (Ryan and Deci 2020) also autonomously by themselves (Forner et al. 2020). Based on self-determination theory, creating learning situations supports employees' need for competence (Forner et al. 2020) and having greater learning abilities (Hein and Urban 2025).

Supervisors also recognized that leading learning not only involves individual learning but also occurs at the team level by enabling collective learning, interaction and expertise sharing in the work community. This perspective is important because learning emerges as a collective and shared phenomenon in the work community (Billett 2014). This finding is also associated with employees' need for relatedness and meaningfulness in the community, which previous research has linked to a sense of self-determination (Ryan and Deci 2020). Supervisors make tacit knowledge visible and recognizable (Bond and Seneque 2012; Dawber 2019) and strengthen social interaction and knowledge sharing (Liu and Batt 2010), which help employees to create common ground and establish interpersonal relationships (Forner et al. 2020). Knowledge of other's

competencies and understanding in the community is central to utilizing the diverse knowledge potential in learning and completing complex work tasks (see Forner et al. 2020).

In the technology organization, supervisors emphasize integrating learning processes into daily work practices, which need to be made visible and supported strategically to produce performance. Instead, in the hospital, leading learning focused mainly on collective learning processes and enabling interaction between employees. Due to the nature of work in hospital based on strong collaboration, consulting and multiprofessional teamwork (Pimmer et al. 2013; Riera Claret et al. 2020; Stabel et al. 2022), supervisors might assume that learning occurs and rely on it taking place during these collective situations. However, especially in the hospital context, previous studies have stressed that learning might emerge as reactive and unexpected, which indicate requiring even stronger recognition of daily work situations as learning situations framing employees' learning possibilities (Cuyvers et al. 2024).

Lastly, leading learning requires participative behaviour and being present in employees' daily work situations (Wallo et al. 2024). In the hospital context, this means that supervisors also had to consider the emotional aspects and strain of the work when offering support for learning. In both organizations, by being an example and role model, supervisors can inspire learning and create a learning-supportive environment and work climate (Forner et al. 2020), where learning is a valuable part of knowledge-intensive work.

Overall, creating a culture and work climate that values and supports learning (Wallo et al. 2024) is an essential resource for both individual and collective learning. Hence, the social and cultural practices in organizations and work communities are essential in enhancing or diminishing the leading of learning and the motivation behind learning (Ryan and Deci 2020). The findings were strongly associated with self-determination, which is an important point of departure for leading learning, as long-term goals in organizations can be achieved by focusing on the fulfilment of employees' basic psychological needs, which in turn enhance employees' learning (Hetzner et al. 2012), motivation, engagement and organizational loyalty (Rigby and Ryan 2018).

The data-driven approach to phenomenography offered a functional methodology for understanding supervisors' various practice-based conceptions of learning-oriented leadership actions. The findings provide an understanding of supervisors' leading learning process from a comprehensive perspective through four categories addressing employees' basic psychological needs behind learning and development. From a practice perspective, the findings illustrate the complex and various processes of leading learning and addresses also the tensions of the real-world complexity of learning-oriented leadership. As employees' learning goals and interests may differ from those of the organization, supervisors' role balancing between employees' autonomy and organizational goals or departmental priorities can produce tension, challenges and conflict of interest and values. Hence, supervisors need support and guidance from their own supervisors and training and education offered by the human resource development department (Wallo et al. 2024).

Although in this study, supervisors understood the leading learning progressing through four categories in both organizations, there were some context-related nuances and differences in what was emphasized in each category. Previous studies have also highlighted leadership facilitating learning as context-related (Wallo et al. 2024). Thus, organizations' environment, nature of work, resources, culture and hierarchy should be considered first to conduct suitable leading learning actions.

Despite its contributions, this study is not without limitations. We utilized only empirical data based on supervisors' own conceptions and experiences from their own work contexts, and the data did not consist of supervisors' descriptions from different organizational levels. Additionally, we did not utilize an external perspective or explore the observable behaviour of leading learning, which may limit the understanding of how effectively supervisors enact these leading learning actions in practice. To ensure dependability in data collection, we utilized open-ended questions, allowing to focus on participants' expression of *how* they experience the phenomenon (Collier-Reed et al. 2009). Although, when discussing about the reliability and validity of the phenomenographic research, it is important to point out that the primary aim is not to produce understanding and based on this, make claims about the truth itself (Åkerlind 2005b), research should instead consider differences and changes in meaning in terms of how individuals describe the phenomenon (Kettunen and Tynjälä 2018). We have ensured communicative validity by providing accurate descriptions of the procedures (Kettunen and Tynjälä 2018), by describing the phases of the analysis process accurately and representing the categories of leading learning with illustrative data excerpts. We have also utilized multiple data sources to strengthen the trustworthiness of the findings (Collier-Reed et al. 2009). However, findings might be context-related and might not apply to every organization, especially in different fields, as supervisors might understand the concept differently. A sample size consisting of 17 interviews and 29 diaries is typical for phenomenographic research (see Kettunen and Tynjälä 2018) and collected data were rich and detailed, focusing on depth of understanding.

In this study, we did not separate hybrid/remote work from face-to-face work by encouraging supervisors to consider either one of them during interviews or when reporting diaries. However, we acknowledge that especially in technology organizations, remote/hybrid work is utilized daily, whereas compared to the central hospital, work is mostly completed at a physical workplace while taking care of patients. The location of the work might have implications on supervisors' conceptions of leadership actions supporting learning. This limitation can be addressed in future studies by exploring leading learning in different work contexts, such as hybrid and remote contexts, as well as in different work organizations. Moreover, recognizing other supervisors' roles, practices and conceptions and employees' own perspectives is important. When organizations utilize even more self-organized and autonomous teams and collective-level self-determination in completing complex work tasks, the individual-collective level relationship and collective-level practices should be investigated in more detail. Lastly, utilizing the research methodology (e.g., ethnography and observation) in a multifaceted way would provide a deeper

understanding and reveal different leading styles and structural and cultural issues that might affect leading actions. These perspectives would also help reveal problems and challenges in leading learning that our study has not touched upon.

Acknowledgements

This study was supported by the Finnish Work Environment Fund (project numbers 200324 and 240024) and the Finnish Cultural Foundation (project number 00240776). The authors would like to thank the target organizations and the participants who voluntarily spent their time with us. Open access publishing facilitated by Jyväskylä yliopisto, as part of the Wiley - FinELib agreement.

Ethics Statement

An ethical pre-assessment was conducted in connection with the participation of the hospital organization before the start of the study (1810/13.00.04.00/2020), and the study was approved by University of Jyväskylä, Human Sciences Ethics Committee. Regarding the participation of a technology organization, a separate ethical evaluation was not considered necessary. All stages of the study were conducted in accordance with research ethics regulations and practices.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- Agarwal, R., C. M. Angst, and M. Magni. 2009. "The Performance Effects of Coaching: A Multilevel Analysis Using Hierarchical Linear Modeling." *International Journal of Human Resource Management* 20, no. 10: 2110–2134. <https://doi.org/10.1080/09585190903178054>.
- Åkerlind, G. S. 2005a. "Learning About Phenomenography: Interviewing, Data Analysis and Qualitative Research Paradigm." In *Doing Developmental Phenomenography*, edited by J. A. Bowden and P. Green, 63–73. RMIT University Press.
- Åkerlind, G. S. 2005b. "Variation and Commonality In Phenomenographic Research Methods." *Higher Education Research and Development* 24, no. 4: 321–334. <https://doi.org/10.1080/07294360500284672>.
- Billett, S. 2009. "Personal Epistemologies, Work and Learning." *Educational Research Review* 4, no. 4: 210–219. <https://doi.org/10.1016/j.edurev.2009.06.001>.
- Billett, S. 2014. "Mimesis: Learning Through Everyday Activities and Interactions at Work." *Human Resource Development Review* 13, no. 4: 462–482. <https://doi.org/10.1177/1534484314548275>.
- Billett, S. 2020. *Learning in the Workplace: Strategies for Effective Practice*. Routledge.
- Bond, C., and M. Seneque. 2012. "Conceptualizing Coaching as an Approach to Management and Organizational Development." *Journal of Management Development* 32, no. 1: 57–72. <https://doi.org/10.1108/02621711311287026>.
- Chong, C. W., Y. Y. Yuen, B. C. Tan, Z. A. Zarim, and N. A. Hamid. 2016. "Managerial Coaches, Are They Ready? The Case of Malaysian Telecommunications Industry." *Learning Organization* 23, no. 2–3: 121–140. <https://doi.org/10.1108/TLO-03-2015-0016>.
- Coetzer, A., A. Wallo, and H. Kock. 2019. "The Owner-Manager's Role as a Facilitator of Informal Learning in Small Businesses." *Human Resource Development International* 22, no. 5: 420–452. <https://doi.org/10.1080/13678868.2019.1585695>.
- Collier-Reed, B. I., Å. Ingerman, and A. Berglund. 2009. "Reflections on Trustworthiness in Phenomenographic Research: Recognising Purpose,

Context and Change in the Process of Research." *Education as Change* 13, no. 2: 339–355. <https://doi.org/10.1080/16823200903234901>.

Collin, K. 2006. "Connecting Work and Learning: Design Engineers' Learning at Work." *Journal of Workplace Learning* 18, no. 7–8: 403–413. <https://doi.org/10.1108/13665620610692971>.

Collin, K., S. Herranen, S. Paloniemi, et al. 2018. "Leadership as an Enabler of Professional Agency and Creativity: Case Studies From the Finnish Information Technology Sector." *International Journal of Training and Development* 22, no. 3: 222–232. <https://doi.org/10.1111/ijtd.12130>.

Collin, K. M., S. Keronen, S. Lemmetty, T. Auvinen, and E. Riivari. 2021. "Self-Organised Structures in the Field of ICT: Challenges for Employees' Workplace Learning." *Journal of Workplace Learning* 33, no. 2: 95–108. <https://doi.org/10.1108/JWL-10-2019-0124>.

Cuyvers, K., C. Van Oostveen, M. D. Endedijk, and V. Struben. 2024. "Nurses' Self-Regulated Learning in Clinical Wards: Important Insights for Nurse Educators From a Multi-Method Research Study." *Nurse Education Today* 137, Article: 106179. <https://doi.org/10.1016/j.nedt.2024.106179>.

Dawber, T. 2019. "The Manager as Coach and Facilitator of Development for Employees in Information Technology (IT)." Supplement, *International Journal of Evidence Based Coaching and Mentoring*, no. Special Issue 13: 32–48. <https://doi.org/10.24384/pkeh-xp84>.

Day, M., and J. Thatcher. 2009. "'I'm Really Embarrassed That You're Going to Read This': Reflections on Using Diaries in Qualitative Research." *Qualitative Research in Psychology* 6, no. 4: 249–259. <https://doi.org/10.1080/14780880802070583>.

Deci, E. L., A. H. Olafsen, and R. M. Ryan. 2017. "Self-Determination Theory in Work Organizations: The State of a Science." *Annual Review of Organizational Psychology and Organizational Behavior* 4: 19–43. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>.

Döös, M., P. Johansson, and L. Wilhelmson. 2015. "Beyond Being Present: Learning Oriented Leadership in the Daily Work of Middle Managers." *Journal of Workplace Learning* 27, no. 6: 408–425. <https://doi.org/10.1108/JWL-10-2014-0077>.

Eilström, P.-E., and H. Kock. 2008. "Competence Development in the Workplace: Concepts, Strategies and Effects." *Asia Pacific Education Review* 9, no. 1: 5–20.

Ellinger, A. D. 2005. "Contextual Factors Influencing Informal Learning in a Workplace Setting: The Case of 'Reinventing Itself Company'." *Human Resource Development Quarterly* 16, no. 3: 389–415. <https://doi.org/10.1002/hrdq.1145>.

Ellinger, A. D., A. E. Ellinger, D. G. Bachrach, Y. L. Wang, and A. B. Elmadağ Baş. 2011. "Organizational Investments in Social Capital, Managerial Coaching, and Employee Work-Related Performance." *Management Learning* 42, no. 1: 67–85. <https://doi.org/10.1177/1350507610384329>.

Ellinger, A. D., A. E. Ellinger, and S. B. Keller. 2003. "Supervisory Coaching Behavior, Employee Satisfaction, and Warehouse Employee Performance: A Dyadic Perspective in the Distribution Industry." *Human Resource Development Quarterly* 14, no. 4: 435–458. <https://doi.org/10.1002/hrdq.1078>.

Ellström, E., and P. E. Ellström. 2018. "Two Modes of Learning-Oriented Leadership: A Study of First-Line Managers." *Journal of Workplace Learning* 30, no. 7: 545–561. <https://doi.org/10.1108/JWL-03-2018-0056>.

Ferreira, J., J. Mueller, and A. Papa. 2020. "Strategic Knowledge Management: Theory, Practice and Future Challenges." *Journal of Knowledge Management* 24, no. 2: 121–126. <https://doi.org/10.1108/JKM-07-2018-0461>.

Förner, V. W., M. Jones, Y. Berry, and J. Eidenfalk. 2020. "Motivating Workers: How Leaders Apply Self-Determination Theory In Organizations."

- Organization Management Journal* 18, no. 2: 76–94. <https://doi.org/10.1108/OMJ-03-2020-0891>.
- Gabriel, A. S., C. M. Moran, and J. B. Gregory. 2014. “How Can Humanistic Coaching Affect Employee Well-Being and Performance? An Application of Self-Determination Theory.” *Coaching* 7, no. 1: 56–73. <https://doi.org/10.1080/17521882.2014.889184>.
- Gagné, M., S. K. Parker, M. A. Griffin, et al. 2022. “Understanding and Shaping the Future of Work With Self-Determination Theory.” *Nature Reviews Psychology* 1, no. 7: 378–392. <https://doi.org/10.1038/s44159-022-00056-w>.
- Hein, V., and K. Urban. 2025. “The Relationship Between Perceived Leader Support and Autonomous Motivation to Learn in the Workplace.” *Vocations and Learning* 18, no. 1: 16. <https://doi.org/10.1007/s12186-025-09370-9>.
- Hetzner, S., H. Heid, and H. Gruber. 2012. “Change at Work and Professional Learning: How Readiness to Change, Self-Determination and Personal Initiative Affect Individual Learning Through Reflection.” *European Journal of Psychology of Education* 27, no. 4: 539–555. <https://doi.org/10.1007/s10212-011-0094-1>.
- Huang, J. T., and H. H. Hsieh. 2015. “Supervisors as Good Coaches: Influences of Coaching on Employees’ in-Role Behaviors and Proactive Career Behaviors.” *International Journal of Human Resource Management* 26, no. 1: 42–58. <https://doi.org/10.1080/09585192.2014.940993>.
- Hughes, C. 2004. “The Supervisor’s Influence on Workplace Learning.” *Studies in Continuing Education* 26, no. 2: 275–287. <https://doi.org/10.1080/158037042000225254>.
- Janssens, L., K. Smet, P. Onghena, and E. Kyndt. 2017. “The Relationship Between Learning Conditions in the Workplace and Informal Learning Outcomes: A Study Among Police Inspectors.” *International Journal of Training and Development* 21, no. 2: 92–112. <https://doi.org/10.1111/ijtd.12095>.
- Jeong, S., S. J. Han, J. Lee, S. Sunalai, and S. W. Yoon. 2018. “Integrative Literature Review on Informal Learning: Antecedents, Conceptualizations, and Future Directions.” *Human Resource Development Review* 17, no. 2: 128–152. <https://doi.org/10.1177/1534484318772242>.
- Keronen, S., S. Lemmetty, and K. Collin. 2023. “Employees’ Self-Determination in Collegial Learning Situations at Work: A Comparative Study of a Finnish ICT Organization and a Central Hospital.” *Scandinavian Journal of Work and Organizational Psychology* 8, no. 1: 1–16. <https://doi.org/10.16993/sjwop.192>.
- Keronen, S., S. Lemmetty, and K. M. Collin. 2024. “Construction of Collective Self-Determination in Development-Oriented Group Discussions.” *Journal of Workplace Learning* 36, no. 9: 88–105. <https://doi.org/10.1108/JWL-05-2024-0110>.
- Kettunen, J., and P. Tynjälä. 2018. “Applying Phenomenography in Guidance and Counselling Research.” *British Journal of Guidance & Counselling* 46, no. 1: 1–11. <https://doi.org/10.1080/03069885.2017.1285006>.
- Kyndt, E., E. Vermeire, and S. Cabus. 2016. “Informal Workplace Learning Among Nurses: Organisational Learning Conditions and Personal Characteristics That Predict Learning Outcomes.” *Journal of Workplace Learning* 28, no. 7: 435–450. <https://doi.org/10.1108/JWL-06-2015-0052>.
- Lehtonen, E. E., P. Nokelainen, H. Rintala, and I. Puhakka. 2022. “Thriving or Surviving at Work: How Workplace Learning Opportunities and Subjective Career Success Are Connected With Job Satisfaction and Turnover Intention.” *Journal of Workplace Learning* 34, no. 1: 88–109. <https://doi.org/10.1108/JWL-12-2020-0184>.
- Lemmetty, S. 2020. *Self-Directed Workplace Learning in Technology-Based Work Self-Directed Workplace Learning in Technology-Based Work* [Doctoral dissertation, University of Jyväskylä]. JYX Digital Repository. <http://urn.fi/URN:ISBN:978-951-39-8196-9>.
- Lemmetty, S., and K. Collin. 2020. “Self-Directed Learning as a Practice of Workplace Learning: Interpretative Repertoires of Self-Directed Learning in ICT Work.” *Vocations and Learning* 13, no. 1: 47–70. <https://doi.org/10.1007/s12186-019-09228-x>.
- Liu, X., and R. Batt. 2010. “How Supervisors Influence Performance: A Multilevel Study of Coaching and Group Management in Technology-Mediated Services.” *Personnel Psychology* 63, no. 2: 265–298. <https://doi.org/10.1111/j.1744-6570.2010.01170.x>.
- Lizier, A. L., and A. Reich. 2021. “Learning Through Work and Structured Learning and Development Systems in Complex Adaptive Organisations: Ongoing Disconnections.” *Studies in Continuing Education* 43, no. 2: 261–276.
- Macneil, C. 2001. “The Supervisor as a Facilitator of Informal Learning in Work Teams.” *Journal of Workplace Learning* 13, no. 6: 246–253. <https://doi.org/10.1108/EUM000000005724>.
- Manganelli, L., A. Thibault-Landry, J. Forest, and J. Carpentier. 2018. “Self-Determination Theory Can Help You Generate Performance and Well-Being in the Workplace: A Review of the Literature.” *Advances in Developing Human Resources* 20, no. 2: 227–240. <https://doi.org/10.1177/1523422318757210>.
- Manuti, A., S. Pastore, A. F. Scardigno, M. L. Giancaspro, and D. Morciano. 2015. “Formal and Informal Learning in the Workplace: A Research Review.” *International Journal of Training and Development* 19, no. 1: 1–17. <https://doi.org/10.1111/ijtd.12044>.
- Marton, F. 1986. “Phenomenography: A Research Approach to Investigating Different Understandings of Reality.” *Journal of Thought* 21, no. 3: 28–49. <https://www.jstor.org/stable/42589189>.
- Marton, F., and S. Booth. 1997. *Learning and Awareness*. Routledge.
- Marton, F., and W. Y. Pong. 2005. “on the Unit of Description in Phenomenography.” *Higher Education Research & Development* 24, no. 4: 335–348. <https://doi.org/10.1080/07294360500284706>.
- Matsuo, M. 2018. “How Does Managerial Coaching Affect Individual Learning? The Mediating Roles of Team and Individual Reflexivity.” *Personnel Review* 47, no. 1: 118–132. <https://doi.org/10.1108/PR-06-2016-0132>.
- Noe, R. A., and J. E. Ellingson. 2017. “Autonomous Learning in the workplace: An introduction.” In *Autonomous Learning in the Workplace*, edited by J. E. Ellingson and R. A. Noe, 1–11. Routledge. <https://doi.org/10.4324/9781315674131>.
- Park, S., G. N. Mclean, and B. Yang. 2008. *Revision and Validation of an Instrument Measuring Managerial Coaching Skills in Organizations*. Academy of Human Resource Development Conference, Panama City, FL (ERIC Document Reproduction Service No. ED 501 617).
- Pimmer, C., N. Pachler, and U. Genewein. 2013. “Contextual Dynamics in Clinical Workplaces: Learning From Doctor-Doctor Consultations.” *Medical Education* 47, no. 5: 463–475. <https://doi.org/10.1111/medu.12130>.
- Riera Claret, C., M. Á. Sahagún, and C. Selva. 2020. “Peer and Informal Learning Among Hospital Doctors: An Ethnographic Study Focused on Routines, Practices and Relationships.” *Journal of Workplace Learning* 32, no. 4: 285–301. <https://doi.org/10.1108/JWL-11-2018-0141>.
- Rigby, C. S., and R. M. Ryan. 2018. “Self-Determination Theory in Human Resource Development: New Directions and Practical Considerations.” *Advances in Developing Human Resources* 20, no. 2: 133–147. <https://doi.org/10.1177/1523422318756954>.
- Ryan, R. M., and E. L. Deci. 2020. “Intrinsic and Extrinsic Motivation From a Self-Determination Theory Perspective: Definitions, Theory, Practices, and Future Directions.” *Contemporary Educational Psychology* 61, Article: 101869. <https://doi.org/10.1016/j.cedpsych.2020.101860>.
- Slemp, G. R., J. G. Field, R. M. Ryan, V. W. Forner, A. Van den Broeck, and K. J. Lewis. 2024. “Interpersonal Supports for Basic Psychological Needs

- and Their Relations With Motivation, Well-Being, and Performance: A Meta-Analysis." *Journal of Personality and Social Psychology* 127, no. 5: 1012–1037. <https://doi.org/10.1037/pspi0000459.supp>.
- Stabel, L. S., C. McGrath, E. Björck, A. Elmberger, and K. B. Laksöv. 2022. "Navigating Affordances for Learning in Clinical Workplaces: A Qualitative Study of General Practitioners' Continued Professional Development." *Vocations and Learning* 15, no. 3: 427–448. <https://doi.org/10.1007/s12186-022-09295-7>.
- Torraco, R. J., and H. Lundgren. 2020. "What HRD is Doing—What HRD Should Be Doing: The Case for Transforming HRD." *Human Resource Development Review* 19, no. 1: 39–65. <https://doi.org/10.1177/1534484319877058>.
- Wallo, A., E. Ellström, and H. Kock. 2013. "Leadership as a Balancing Act Between Performance- and Development-Oriented: A Study of Managers' and Co-Workers' Understanding of Leadership in an Industrial Organisation." *Organization Development Journal* 3, no. 34: 222–237. <https://doi.org/10.1108/01437731311326666>.
- Wallo, A., H. Kock, C. Reineholm, and P. E. Ellström. 2022. "How Do Managers Promote Workplace Learning? Learning-Oriented Leadership in Daily Work." *Journal of Workplace Learning* 34, no. 1: 58–73. <https://doi.org/10.1108/JWL-11-2020-0176>.
- Wallo, A., D. Lundqvist, and A. Coetzer. 2024. "Learning-Oriented Leadership in Organizations: An Integrative Review of Qualitative Studies." *Human Resource Development Review* 23, no. 2: 230–275. <https://doi.org/10.1177/15344843241239723>.
- Warhurst, R. 2013. "Hard Times for HRD, Lean Times for Learning? Workplace Participatory Practices as Enablers of Learning." *European Journal of Training and Development* 37, no. 6: 508–526. <https://doi.org/10.1108/EJTD-12-2012-0082>.
- Weer, C. H., M. S. DiRenzo, and F. M. Shipper. 2016. "A Holistic View of Employee Coaching: Longitudinal Investigation of the Impact of Facilitative and Pressure-Based Coaching on Team Effectiveness." *Journal of Applied Behavioral Science* 52, no. 2: 187–214. <https://doi.org/10.1177/0021886315594007>.
- Willems, A. S., and D. Lewalter. 2012. "Self-Determination and Learning." In *Encyclopedia of the Sciences of Learning*, edited by N. M. Seel, 2993–2997. Springer. https://doi.org/10.1007/978-1-4419-1428-6_250.