

Organizational learning starting points and presuppositions: a case study from a hospital's surgical department

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surgical
department

Marianne Jaakkola

Department of Education, University of Jyväskylä, Jyväskylä, Finland

Soila Lemmetty

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

Kaija Collin

Department of Education, University of Jyväskylä, Jyväskylä, Finland, and

Minna Ylönen and Teuvo Antikainen

Central Finland Health Care District, Jyväskylä, Finland

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Abstract

Purpose – This study aims to increase the understanding of the starting points and presuppositions of organizational learning (OL) processes in a hospital's surgical department based on the existing theory of OL and to make visible the practical possibilities of the theory in this context.

Design/methodology/approach – The study was conducted as a case study. The data were collected from personnel of the hospital's surgical department and consisted of 26 thematic interviews. The data were analyzed using qualitative theory-driven content analysis.

Findings – This study found different starting points for both employee-oriented and organization-oriented learning processes that could potentially progress to different levels of the organization: from individuals to a wider group or from a large group to an individual. The starting point of employee-oriented learning processes was depicted as everyday life problems or situations or was based on the person's interest. The starting points of organization-oriented learning processes were described as achieving or maintaining the organization's expected skill levels, pursuing continuous development or pursuing the organization's specific development needs. Different kinds of presuppositions were also located within the OL processes.

Originality/value – This study produced new practice-based knowledge about the starting points of OL processes and their presuppositions. In health-care organizations, learning is especially important

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Since submission of this article, the following authors have updated their affiliations: Marianne Jaakkola is at the Jyväskylä University School of Business and Economics, Jyväskylä, Finland; Minna Ylönen and Teuvo Antikainen are at the Wellbeing Services County of Central Finland, Jyväskylä, Finland.



due to intensive and complex changes, and this study provides empirical evidence on how to enhance learning.

Keywords Organizational learning, Case study, Health care, Qualitative research

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Introduction

Organizational learning (OL), which highlights the processes of change through which an organization develops (Hammoud, 2020), is meaningful for creating sustainable competitiveness (Thomas & Allen, 2006; Yang, Watkins, & Marsick, 2004). An organization's capability to learn is a prerequisite for the innovativeness and efficiency that produce success. In the health-care field, OL is especially important due to intensive and complex changes (Lyman, Horton, & Oman, 2021), such as digitalization and the development of health-care recommendations, practices and, recently, the COVID-19 pandemic. Thus, learning at work is inevitably an intrinsic part of working and is present everywhere (Brandt & Elkjaer, 2011).

Employees' role in OL is significant because without individuals the organization does not learn (Senge, 1990). OL is enabled where the organization facilitates its members to learn and where employees actively participate. In addition, employees' learning is interdependent with the changes in an organization (Tynjälä, 2022). Individual learning and OL are linked by a shared forum, and converting individual learning into OL requires collaborative reflection, shared maps, organizational memory (Tynjälä, 2022) and it occurs in teams' collective experiences (Argote & Miron-Spektor, 2011). Thus, OL requires learning from individuals and groups (Brandt & Elkjaer, 2011) and also refers to broader processes than the individual processes of change and development (Crossan, Lane, & White, 1999). This is due to OL's aim of achieving not only individual goals but also the strategic objectives of the organization. Several studies conducted in hospitals have viewed learning primarily as a tool for achieving some organizational goals, such as cost efficiency, patient safety, effectiveness of care and enhanced quality of care (see, e.g. Rydenfält, Odenrick, & Larsson, 2017). However, it is also important to examine organizational processes directly from the learning perspective rather than to see learning only as an instrument for organizational strategies. Studying learning processes makes it possible to understand the theory and practice of OL in the specific field of health care (Lyman, Hammond, & Cox, 2018). The overall view of learning is biased toward individual learning and the individual's capability to learn and create knowledge. Thus, research has not always considered the structures, practices and communication that affect learning within an organization (Thomas & Allen, 2006).

Although OL has been studied for decades (Crossan et al., 1999; Do & Mai, 2020), it has been observed as mostly theoretical, and researchers have acknowledged the lack of empirical studies (Brandt & Elkjaer, 2011). OL can be described as a context-dependent phenomena and especially OL in the hospital context calls for more profound research (Lyman, Jacobs, Hammond, & Gunn, 2019). Research on organizations and learning is interprofessional. Several research fields, such as economics, psychology, sociology and organization studies, use the theory of OL and participate in creating and developing it (Argote & Miron-Spektor, 2011). The challenge in describing and defining OL is its broad interprofessional nature, which also challenges the mutual understanding of the theme (Hammoud, 2020). Owing to the differences between organizations, more context-based studies are needed to enable broader applications of the theory (Mak & Hong, 2020).

Hospitals are interprofessional and complex organizations, which makes them an interesting context for examining OL. Hospitals are training organizations that offer a wide range of training opportunities for their employees. In addition to these formal learning situations, incidental learning, which is not directly linked to formal training, is an important but less studied phenomenon in hospitals (Lyman et al., 2018). Incidental learning can be defined "as occurring

when doing something for which the primary purpose is not learning such as learning coincident with solving a problem in one's work" and therefore novel circumstances provides a field for learning (Watkins & Marsick, 2021 p. 89). As OL is a process of continuous change, the ways in which individuals and groups learn in everyday life, including outside training, are essential. Therefore, this study is particularly interested in OL processes that are not driven by specific training objectives or structures but by the opportunities and conditions offered by the work environment. Understanding these kinds of OL processes in the hospital context could be useful (see, e.g. [Sujan, 2015](#)) for achieving practical benefits and bringing to light existing but often invisible practices. Research on health-care organizations' learning is needed to understand the contextual and situational elements present in the learning process ([Lyman et al., 2018](#)).

This case study meets the needs for contextual examination of the daily processes of a health-care organization's surgical department. We draw out descriptions of OL processes from personnel in the hospital surgical department, structure and specify their starting points and examine the presuppositions of OL that occur in the descriptions. This elaborates the OL theory by detecting what is behind the intuiting and institutionalizing stages of the OL processes in [Crossan et al. \(1999\)](#) framework. Thus, the aim is to apply the theory of the OL process (see [Crossan et al., 1999](#)) through empirical research in the field and, as a result, advance our understanding of the different starting points of learning processes in the surgical department context and outline the contextual and situational factors involved in the learning process to achieve practical benefits.

Next, we present the concept and theory of OL behind our study and related previous research regarding the health-care context. We describe the aim of the study and the research questions and present the results of the analysis. Finally, we reflect on our findings in relation to existing knowledge and discuss the study's limitations, practical and societal contributions and suggestions for further research.

Theoretical starting points: three perspectives on organizational learning

The concepts of organizational-level learning refer to the idea of an organization being a multilevel social construct ([Popova-Nowak & Cseh, 2015](#)) that has the capability to change, learn and develop as individuals and groups ([Yang et al., 2004](#)). In addition to the concept of OL, studies have used concepts such as learning organization and workplace learning ([Do & Mai, 2020](#); [Örtenblad, 2001](#); [Sun & Scott, 2003](#); [Thomas & Allen, 2006](#)). In this study, the theory and concept of OL are applied because they provide analytically appropriate premises for examining the combination of organization and learning. OL is "change in the organization's knowledge that occurs as a function of experience" ([Argote, 2011](#)) – that is, changes in cognitions and actions ([Easterby-Smith, Crossan, & Niccolini, 2000](#)). OL research calls for applicability, as the aim is to create research-based guides and models to apply to practice ([Basten & Haamann, 2018](#); [Mak & Hong, 2020](#); [Thomas & Allen, 2006](#)). According to previous theories and literature ([Crossan et al., 1999](#); [Do & Mai, 2020](#); [Hammoud, 2020](#)), in defining OL, we can locate three central perspectives: the change of the organization, the process that expands different levels in the organization and organizations' support and frames for learning processes. Next, we will describe these three approaches in more detail.

In an organization's learning process, different knowledge and skills are based on individual or collective organizational experiences through which changes occur ([Argote & Miron-Spektor, 2011](#); [Yang et al., 2004](#)). [Crossan et al. \(1999\)](#) describe OL as a process of change that occurs in minds and actions on the individual level and is shared. This is a prerequisite for the whole organization to develop toward the change and strategic goals. Change can be seen as a continuous state that enables learning in organizations; thus, organizations learn because change is achieved. The need for change switches on learning processes, retains them and moves them forward. Therefore, OL theories typically see

learning as a process of change through which an organization develops (Hammoud, 2020). In organizations with a goal of change, learning processes include interactions between individuals and communities on different organizational levels (Popova-Nowak & Cseh, 2015). The literature typically presents three OL levels that are not separate from each other: individual, group and organizational (Crossan et al., 1999). The movement, transfer and development of the process is essential in OL (Sun & Scott, 2003). The core idea of OL is that the learning process goes through all three levels described. Thus, it differs from, for example, the concept of workplace learning, which refers especially to the learning practices and processes of individuals and groups (Billett, 2002). However, the concepts of OL and workplace learning partly overlap, as organizational-level learning always requires individual and group learning (Brandt & Elkjaer, 2011).

Crossan et al. (1999) theory presents organizations' two-way learning processes, which, at best, create a dynamic process. In their descriptions of the learning process, an individual's new ideas and actions flow to the group and organizational levels; on the other hand, things that are already learned flow from the organizational level to the group and individual levels, affecting individuals' thinking and actions (Crossan et al., 1999). The core of Crossan's et al. theory (4I framework) is the process between individual, group and organizational levels. The process occurs in individuals' intuiting (a process of pattern recognition), interpreting (the verbal expression to others), integrating (shared understanding and dialogue) and institutionalizing, which is the phase where routines take place and actions are organized. According to the theory, organizations' two-way learning processes can be described as employee-oriented or organization-oriented. Employee-oriented learning is a continuum of learning that starts from the individual (employee) and continues to the group and organizational levels. The processes are described to flow as exploration (feed-forward) and exploitation (feed-back). To summarize, in organization-oriented learning processes, learning that is embedded in the organization is knowledge and understanding that affects or has implications for an individual's understanding and action, whereas the employee-oriented process refers to how individual learning leads to group learning and then an organization's learning (Crossan et al., 1999; Vera & Crossan, 2004).

Based on the descriptions above, we argue that OL can be examined based on two different processes: individual learning that converts to group learning and then to the development of the organization; and organizational starting points (e.g. knowledge, necessities and practices) that comprise group and individual learning. Therefore, the starting point for this study is the view of learning as a process that originates from either the individual or organizational levels. Analytically, our focus of interest is on locating the starting points of the learning processes and describing the potential progression to the next levels. In addition, we take into consideration the aspects presented in the theory of the frames of the learning process by focusing on the presuppositions of the learning processes (Crossan et al., 1999).

Prior research on organizational learning in the hospital context

OL is a broad phenomenon characterized by many aspects that can be added to the premise of learning (employee- or organization-oriented). The literature has pointed out how an organization can support and enhance internal learning processes. Previous research has also described aspects that frame learning processes, such as leadership, opportunities to cooperate and participate, organizational structures, systems and individual features, including supporting motivation and self-efficacy. Organizational studies have referred to change as a frame, and it seems to be an essential starting point for learning. Leadership is

also a significant frame for OL (Do & Mai, 2020), both directly and indirectly, because, through leadership, the group atmosphere, for example, can be influenced. This, in turn, influences mutual knowledge sharing and reflection (Anselmann & Mulder, 2020; Kim & Park, 2020). As expertise vary in the health-care context, management activities are collaborative as well (Mintzberg, 2012). Organizational structures can affect not only how knowledge moves from different levels of the organization to another but also the kind of situations in which knowledge is shared and personnel can participate in learning processes (see Crossan et al., 1999; Thomas & Allen, 2006). Taking into account the multilevel perspective can guide research in the complex health-care organizations (Harrison & Shortell, 2021).

In the hospital context, OL can be defined as positive changes in an organization's collective knowledge and action that enhance its capability to achieve desired outcomes (Lyman et al., 2021). Therefore, in OL, it is essential that change and the learning process are in line with the organization's mission, vision, values and goals. OL has been described as a promising strategy for improving the safety and quality of health care (e.g. Lyman et al., 2018). It is a precondition for developing practices and the organization, as development has been described as continuous in the complex hospital environment (e.g. Lyman et al., 2021; Lyman et al., 2018). In development projects in health-care and other fields, OL is ultimately about individual and group learning, which should be both understood and supported at the organizational level. Development activities that do not increase value, such as perceptions of failed attempts to improve practices, can lead to resistance to development (Hovlid, Bukve, Haug, Aslaksen, & von Plessen, 2012). However, successful or failed attempts to improve practices are difficult to assess, as the assessment is dependent on the person's role. Modern, complex and interprofessional health care, in which complicated practices and interprofessional activities occur to enable novel problems to be solved, requires new media for development instead of traditional organizational development approaches (Rydenfalt et al., 2017). In particular, bottom-up processes have been emphasized instead of traditional top-down development activities to allow what works in the organization and what should be developed to be truly known (Peet, Theobald, & Douglas, 2022). Understanding the phenomenon of learning at work as practice-based puts the focus on learning's human nature (see e.g. Elkjaer & Nickelsen, 2016).

Research on nurses has found that, at the individual level, learning occurs through nurses doing their work, adding new elements to social interaction with colleagues, reflecting on work experiences and through theory or supervision and life outside work (Berings, Poell, & Gelissen, 2008). Often, in the hospital context, learning occurs by doing and reflective discussions related to cases are meaningful for enhancing personnel's understanding and further implementing learning in the whole organization (Bontemps-Hommen, Baart, & Vosman, 2020). In health care, personnel's learning is significantly affected by the work environment and its elements, including a favorable climate for learning in which the individual experience of autonomy and a social sense of belonging can be supported (Clarke, 2005). Existing procedures and communication can either hinder or promote workplace learning, which is why it might be useful to question these (Newton, Henderson, Jolly, & Greaves, 2015). Opportunities to participate are seen as crucial, especially for everyday workplace learning. Without support and equal opportunities to participate, learning does not happen equally (Riera Claret, Sahagún, & Selva, 2020). In addition, frames for the hospital context can include duties linked to professional practices, such as personal responsibilities for developing competence, autonomy and responsibilities related to autonomy.

Study aim and research questions

A hospital is a complex interprofessional organization in which personnel's learning is a precondition for the organization's development. Previous studies have described OL in the hospital context and its meaning, especially for patient safety and the quality of nursing work. Researchers have called for empirical studies that focus directly on the organization's learning processes and that produce an understanding of the contextual framing aspects of learning (see [Crossan et al., 1999](#)). Therefore, in this study, we examine hospital personnel's descriptions of the OL, applying the previous OL theories ([Crossan et al., 1999](#); [Vera & Crossan, 2004](#)) by focusing especially on the starting points of OL processes and examining the presuppositions occurring in descriptions related to OL. Hence, the aim of this study is to increase the understanding of the starting points and presuppositions of OL processes and, with it, elaborate the OL theory by detecting what is behind the intuiting and institutionalizing stages in a hospital surgical department. Additionally, we aim to make visible the practical possibilities of the OL theory in this context. Thus, we formulated two questions for the study:

- Q1. What kinds of starting points of OL processes are described in a surgical department?
- Q2. What kinds of presuppositions for OL processes are described in the surgical department?

Research context, data and analysis

The organization that participated in this study is a hospital with several thousand employees. The participating employees (doctors and nurses) work in the hospital's surgical department. The surgical department's tasks include surgical operations and ward treatment, day surgery and outpatient activities. The hospital's surgical department, as a work environment, is a diverse research object. Workplace learning and professional development are vast parts of everyday life for personnel working in health care. In contrast to other working organizations, continuing education and training for employees working on patients is set by the national health-care law. Employees must take care of maintaining and updating their own professional competence. As an employer, the hospital must ensure sufficient continuous professional education. The hospital takes care of continuous in-service training either carried out in-house or outside the hospital. The competence development carried out by the organization varies from an employee's interest to long-term training programs of which developmental needs often emerge from functional or administrative changes in the organization. The hospital provides for example training at work, annual continuing education, different kinds of online learning environments and simulation training for its employees. Motivated and ambitious employees are also sometimes supported in completing specific professional degrees while working. Individual professionals are expected to be responsible for their competence and report when major changes occur. Work is often conducted in teams where knowledge is shared and colleagues help each other. In particular, specialist training for doctors has been described as learning by doing together with a supervisor. In addition, new operating models and personnel skills are being developed in work groups and development projects. However, learning that is not directly linked to formal education but is present in day-to-day work an important but less studied phenomenon in hospitals. Therefore, this study focuses, in particular, on everyday noneducational learning processes at work.

This study is a qualitative case study in which the aim is to understand the target case (a hospital surgical department) from the OL point of view (cf. [Stake, 2005](#)). A case study appears to be an applicable starting point for this research because the aim is to describe and explain the phenomenon of OL in this specific organization and develop a detailed practical understanding of the phenomenon's framing aspects instead of forming broad generalizations (see [Yin, Ma, Yu, Jia, & Liao, 2019](#)).

In this study, we collected thematic interview data from the surgical department ($N=26$). The individual interviews lasted 30–60 min each and were conducted remotely through Microsoft Teams software. A total of 14 participants were physicians and 12 were nurses, 9 were males and 17 females. The participants were first asked to talk about their own educational and work history, after which the interviews followed themes such as competence development, learning at work, organizational development and development ideas. Interviewees were allowed to talk freely. Participants' answers covered, for example, organizational points of view on how their organization supports learning and what their own role is in different kinds of learning processes. The interviews were recorded and transcribed. The interview data were then structured into themes relevant to the research (e.g. competence and development, learning on the job and development) using ATLAS.ti Web (Version 3.15.0–2022-03–09) ([ATLAS.ti, 2022](#)).

The data were analyzed using qualitative theory-based content analysis (see [Hsieh & Shannon, 2005](#)). We applied the OL theory ([Crossan et al., 1999](#); [Vera & Crossan, 2004](#)), according to which OL processes start from either an employee or an organizational level thus proceeding from individual to group and organization or from organization to group and individual. We therefore focused our empirical investigation on the specific (employee- or organizational-oriented) starting points that participants describe as the basis of potential OL processes. In addition, we adapted the idea of the direction of the flow of learning between different levels. The data analysis started with a preliminary reading of the structured data. The interview data were read through, and two researchers took notes to form an overview. During the reading, the data were initially mapped out for descriptions directly related to the learning of and in the organization. Then, quotes describing OL processes were extracted from the data and put into a table. Reduced expressions were formed from each quote, which were categorized into subcategories based on the point from which the learning processes were described as having started (see [Table 1](#)). This allowed for locating both employee-oriented and organization-oriented starting points for learning processes and structuring the key factors behind their emergence. It was also considered that each identified process starting point was described by the interviewee as having the potential to progress from one level to another through (i.e. it is not, for example, just a single process detached from the organization or group). This means that the interviewee either also described the continuity of the process from individual to group or vice versa or highlighted the factors which anticipate the progression of the process to different levels. Finally, the process descriptions were searched to find interviewees' mentions of factors supporting or challenging the process. These factors, named presuppositions, were listed and their overlap was examined. In this way, four categories describing different factors that presuppose learning processes were formed. The analysis was checked by coauthors: a health-care employee with experience as a physician in competence development and management and a hospital training expert with research experience and work experience in training in a hospital.

TLO	Reduced expression formed from the quote	Sub-category (data-based)	Main category (theory-based)	Presuppositions
	A challenge at work initiates an idea and a process, which includes involving the group, planning and implementing it together Activity that burdens and hinders work is replaced by a system that is clear and efficient for everyone to use	Problem-based		
	One learns from colleagues in various unplanned situations and one person teaches the subject again to another Development of special expertise through rare patient cases in a small group	Situation-specific	Employee-oriented	Leadership and roles
	The employee's desire and interest in learning results in the establishment of a small group One's own project that is finally modified with colleagues	Interest-based		OL Practices and resources
	Learning about the work and ways of the organization through formal practices	Achieving the organization's expected skill level		Collaboration and climate
	An existing procedure that is developed in the organization annually (continuously within the framework of a certain meeting) Developers bring new things that employees should start implementing	Pursuit of continuous development	Organization-oriented	Motivation and activity
	Learning how to use new equipment through training or guidance Implementation of the new system through training and support as a routine	Organization's specific development need		
	Source: Authors' own, based on the findings of the current study			
	Table 1. The starting points and presuppositions of OL processes			

Findings

In our research, we found descriptions that reflect both employee-oriented and organizational-oriented learning. We classified the learning descriptions according to their starting points. Starting points of employee-oriented learning were described by the interviewees as problem-based, situation-specific or originating from the employee's own interests. Based on the data, three perspectives behind organization-oriented learning can be seen: achieving or maintaining the organization's expected skill levels, pursuing continuous development or pursuing the organization's specific development needs. The categories formed from the data are presented in [Table 1](#).

In this study, we examined not only the starting points for learning processes but also the presuppositions that the personnel described as framing or challenging the processes. These presuppositions can be divided into four categories:

- (1) leadership and roles;
- (2) practices and resources;
- (3) collaboration and climate; and
- (4) motivation and activity.

Next, we examine the findings arising from the analysis in more detail. We first describe the kinds of employee- and organization-oriented learning processes we observed, and then we highlight the presuppositions that frame and challenge these processes.

Employee-oriented organizational learning processes

In the surgery department of the hospital, it was described that there was a lot of learning that originates from the observations and activity of the employees. These learning processes start at the employee level, progress from the individual to the group and, potentially, turn into the practices of the entire organization. Next, we will present what kind of starting points the personnel described for employee-oriented OL.

Problem-based. According to the interviewees, learning processes started by the employees were often problem-based. In these cases, development and learning started from a perceived challenge, problem or deficiency. The problems behind the learning processes could be major difficulties independent of the employees, such as the need to do and organize work in a new way due to an increased number of patients. In addition, everyday challenges requiring smaller changes were also described as equally problem-oriented. Thus, the problems act as triggers, but the active action of the employees (individual or group) and tackling the problem appeared to be paramount in starting the learning process:

We noticed that we get more and more patients, that we can't manage with this two per day, that we should do more [...]. I took it [up] with my [...] group and [...] a few stakeholders. A few meetings were held. Our process was reviewed—all aspects of the process were reviewed. And [...] [as a result, after implementation/experiment], the third surgery of the day was past 10 to 3 (Doctor 5).

The problem could also be an unwanted activity that gradually develops over time. However, consideration of an alternative course of action seems essential in starting the problem-solving process. The interviewees often described how the problem-solving process first started independently, for example, by thinking about the problematic entity and frequently already forming a proposed solution. After this, the matter was taken to the group for discussion or introduced directly into the group's activities, for example, through a joint experiment:

It's so burdensome, this [describes in detail a burdensome factor in the work of a certain professional group], because in addition to their work, they often have to come in between. They come to ask if you can take this [the matter described]. There might be four patients, then it's for them quite a stressful and challenging factor, so then [with the group] this [describes a new way of working] was developed and tried out. I have been very satisfied with this. This has started to work and looks good and they [the professional group representatives] are satisfied, although at first I wondered how this would be successful. After this kind of developing, you get a feeling of success, that something is developing and that we can get this going with a bigger volume, that all the ward departments are involved in this (Nurse 9).

As the quote above shows, group-level experiments and development efforts sometimes lead to broader changes in practices that impact not only at an individual or team level but also at an entire unit level. Thus, learning processes initiated by the employee, described as

problem-oriented, can be seen as very potential processes permeating different levels of the organization in accordance with the theory of OL.

Situation-specific. Employee-oriented learning processes in the organization were also seen as situations in which the worker perceives an opportunity for learning and using what has been learned in the background of wider development. Such processes require that something unusual and new take place at work. However, in this context, it is not a question of an actual problem, as described above, but rather of a new situation. Even then, the individual does not independently develop a reason for starting the process but the initiation depends on the situations produced by the work. Nevertheless, the interviewees described how the employee plays a significant role in being aware of, interpreting and articulating the opportunities for learning brought about by the situation and thus also using it as widely as possible. Therefore, it is not just a matter of surviving a single situation but of producing wider value and benefit for the future of the unit:

Manual skills are very much required of our nurses, so yes, they learn it from their colleagues in those situations that we are always told, when a new situation comes up, you take that work partner and go through it, see how it goes, and then, the next time, you probably already know how to do it yourself and teach again for the next one. That this is probably the most typical way to learn by doing work (Nurse 6).

The detection of a situation that enables learning was often described as happening by an individual, but for the widest possible utilization, it is essential to share the resulting understanding of the learning opportunity with other participants who are in the same situation. Sometimes, the future situation could already be looked at in terms of learning in advance, and participants in the situation were chosen based on who would benefit the most in terms of learning and development. This also represents built-in professional health-care ethics, in which everyone has a duty to ensure that team members know the required things in their work. A single situation does not necessarily mean changing the practices of a group, unit or organization, yet the experiences generated by situations for groups can affect the unit's or organization's operating methods in the long term. Thus, work situations that are versatily used as learning situations by individuals and groups can be seen as part of the organization's learning process:

If something a little more special comes up, we think about it together [as a team], exchange ideas, and familiarize ourselves with the literature. [. . .] Then, there are rarities. If you feel like it, we can also do very special things together that no one comes across very often during their career. At the same time, everyone's skills increase (Doctor 8).

Interest-based. Some descriptions revealed that the organization's learning process starts purely from the individual's own interest and motivation. In these descriptions, the background of learning is not necessarily pressure or an external need but rather one's own desire to find out about something that interests them, develop what they think is an important entity thought, produce benefits on a wider scale or try something new based purely on curiosity:

Curiosity is the key word in education and learning today, and it describes surgeons very strongly. [. . .] But when you know the previous level, curiosity grows, and the needs of patients grow (Doctor 2).

Learning processes based on the employee's own interest were often seen as fundamentally individual-oriented. Some were described as strongly independent projects, until their own understanding was strong enough and the actor formed a comprehensive overall picture of

the subject or action proposal. Often, only after this was the whole idea presented or taught to the group and its implementation in the group's activities discussed:

I personally build it [the protocol] and, of course, at the end, when it's kind of ready, I show it to my colleagues, and the matter can be discussed, and everyone who participates in the treatment goes through it and thinks about how to edit it and then publish it. It is such a one-man project in a certain way that there are no working groups (Doctor 6).

Sometimes, ideas based on individual interests had already been brought to the group for evaluation and discussion during the ideation phase. It was also typical for an individual to gather those interested in the same topic, and the group developed the topic together from the beginning. In this case, instead of an individual, the group as a whole can be seen as an active actor in starting the process:

It [development] was probably out of personal interest [...]. I thought that the medical treatment is something where I can definitely start. [...] I also included the other bed wards [...], and we became such a small group (Nurse 9).

The data revealed that some of the described processes based on the actors' own interests progressed from an individual or group to a change in operations affecting a wider group. However, this did not always happen. Whether the learning process progressed to the unit or organizational level often depended on how extensive the change or development was. Some ideas concerned only a single team or group; some essential ones were more extensive, affecting the entire unit or even the organization. Implementing big changes was generally seen as more challenging, especially if the grounds were based on an individual's point of view.

Organization-oriented organizational learning processes

In addition to employee-oriented learning, the personnel of the hospital's surgery department described several learning situations that originated from the perceived need at the organizational level – often under the leadership of the organization or organizational development of an existing practice. Ideally, these organization-oriented learning processes progress from the organizational level to the group and finally to the individual. Next, we present what kinds of starting points the personnel described for organization-oriented OL.

The organization's expected skill level. The so-called typical processes aimed at achieving and maintaining the competence required of personnel appeared as organization-oriented learning processes in the data. Such processes, often described in the literature as human resource (HR) practices (Viitala, 2021), include induction periods, training, development discussions, work rotation and routinized meeting practices. These can involve various practices; for example, in orientation, a new employee is assigned an orientation person who guides and supports the new person and conveys internal information about the organization. Regular training and courses for a specific group in which personnel are directed to participate can also be seen as belonging to this organization-oriented category. In these processes, the starting point is the organization-oriented need to ensure and maintain the transfer to the employee of jointly shared knowledge and skills formed in the organization. Competence in this context refers to the personnel's understanding of the organization's operating methods, which are prerequisites based on the organization's basic mission, goals, vision and strategy:

When you come to the house [hospital] as a new person, of course the general orientation [...] it helped with that knowledge and familiarization and learning. Then, we have a system of working in pairs in use in the department. Then you can easily ask your coworker [...] (Nurse 5).

Achieving and maintaining the skill level expected by the organization was seen as an organization-oriented learning process because the processes attached to it are prevailing, often routine actions and practices in the organization. They are often communicated and agreed upon, for example, by HR or management, and they are also basically the same for everyone, regardless of operator group, unit or team. Although organization-oriented learning processes can be seen as starting from the organization's need to achieve and maintain a certain level of individual competence, in these processes, it is also essential that the process moves at different levels, and at the organizational level, instructions, routines and jointly agreed-upon operating methods are formed, which the units apply and implement in their own areas. Through this, the employees and employee groups operating in the units are ultimately learners who receive information and adopt operating methods. This is how the process moves from the organization to the group and, finally, to the individual.

The pursuit of continuous development. In the interviews, it became clear that the hospital is an organization that is developing and consciously seeking and nurturing continuous development activities. The pursuit of continuous development from the organization's will is concretized in such a way that opportunities and practices for continuous development have been created in the organization. These can focus on, for example, the organization's processes in relation to a certain entity. Continuous development is, as the name suggests, continuous and is something that develops in the long term through different stages that are regularly reached:

In bigger matters—let's talk about, for example, major accidents [...]. There are protocols for that, and it's the same as what is developed every year. It has meetings and is being built. It's a larger team project that basically goes on forever. In other words, it is updated all the time, built as the environment and everything develops (Doctor 6).

Yes, these treatment paths have been developed and thought about over the years (Nurse 16).

Annual meetings are an example of practices within the framework that aim to develop the desired entity on a regular basis. In connection with continuous development, the hospital has appointed persons whose task is specifically to develop operations or processes. These "developers" operate at the interface of the organization, units, teams and individuals, with the aim of introducing various development activities into the organization's operations and everyday life. These activities are not targeted or limited to the development of a specific individual issue:

From the developers we get new things that we should start implementing (Nurse 9).

Regarding the developer roles, it is essential that responsibility for the development of the work has been given to certain persons. At the same time, the interviewees also emphasized each employee's own responsibility for work development and participation in various work groups and events organized by the organization in which continuous development is also implemented.

The organization's specific development need. In addition to the fact that starting points for continuous development have been created in the hospital, the organization also faces various specific development needs. New systems, facilities, tools and operating models that the organization (e.g. management) wanted and deemed necessary were described. From the

point of view of the learning process, the interviews showed that the introduction of these new tools, operating models or systems for use by the entire organization's personnel is made possible through, for example, training or formal guidance. The organization is an active actor, as it offers personnel, for example, a guide, presenter or lecturer, to facilitate learning something, in which case the desired understanding is transferred from the organizational level to the individual:

The first thing that comes to mind [about learning] [. . .] is the equipment related to the procedure, what we get – some new instruments or something similar. We are trying to gather as many people from our own team as possible so that as many people as possible can see if there is a representative there who advises us on how to use a new device (Nurse 1).

There was a new type of cannula that you put in your hand, so there was now such nonstop training that everyone came to see and try out how it works (Nurse 4).

Organization-oriented learning processes targeting a specific issue typically progressed in such a way that, after organization-oriented guidance, notification or training, personnel were expected to practice and learn the system, tool or operating model themselves. However, training and learning could still be offered at the organizational level if needed. In terms of systems, for example, information technology services act as a support structure in the personnel's learning process:

But for this [mentions the new IT system], so for this, whether it was a one-day training with one person in front [mentions the person], that's what it was like. We had our own workstations, and it was there on the stage, and then we tapped and covered how this works and how [detailed description of the system's features]. That was the one day. So, after that I've been tapping on that myself. Sometimes it's been terribly difficult. Then I called IT support. But yes, it is now, I find it quite easy [to use for the purpose for which it is intended], and in terms of finding information [. . .]. I've already learnt some sort of routine from that (Doctor 9).

Presuppositions of organizational learning

The interviewees also described many prerequisites for learning situations which affect how and why learning in the organization progresses or ends. Next, we describe these presuppositions.

Leadership and roles. The importance of leadership in the progress of learning processes and development work from the individual to the organization, or vice versa, was emphasized in many interview responses. Management is a key factor in change processes when the manager is seen to have the power to make major decisions and opportunities to direct the personnel. When the personnel described employee-oriented processes, the goal of which was to develop the activities for a team or a more limited group (a certain community or unit), the role of the supervisor as an enabler of the process was particularly emphasized. The trust, encouragement and reward received from the supervisor for active learning and developing work was said to motivate individuals to promote things and thus also enable the development at the group level:

The fact that the manager trusts, that he or she doesn't check what I'm doing, it also gives you such courage that you don't have to constantly ask, "Can I do this now and am I able to make this decision?" [. . .]. It gives a lot of motivation and strength to one's own work to have the credit of the supervisor behind it (Nurse 9).

In the same way, frontline management can stifle or challenge learning processes. Superiors refusing experiments or ignoring successes appeared to employees as signaling a lack of appreciation for development and learning:

I agreed with my supervisor about a small-scale pilot where we would try [describes the content and progress of the pilot]. The procedures went perfectly; we were ready at 1:00 pm, that is, two hours before the end of office hours. On my behalf, I thanked the helpful staff. I offered them refreshments as a thank you. I myself have not received any kind of feedback about the success of the pilot from my supervisors [...]. In such “contractual” projects, the employer or its representative should have a bit of an eye for the game. [...] it would encourage others to do things quickly. The current system does not in any way encourage you to work briskly, but you will do best if you do an “avoidable minus” performance (Doctor 5).

Different responsibilities and roles presuppose many OL processes. In addition to managers and supervisors, for example, the role of personnel experts was considered in relation to organizational development. However, regarding the roles, the responsibilities and operating methods of the developer coordinators were strongly emphasized, especially in the interviews with the nursing staff. Developer roles were seen as positive because their underlying goal (to develop and teach personnel) is fundamentally good, but the roles and development activities were also seen as problematic. For example, the fact that developers do not necessarily understand everyday work, do not “speak the same language” as the staff or are otherwise difficult to approach from the staff’s perspective was described as a special challenge in the developers’ activities. The developer role was seen as successful when the developer’s work also included fieldwork:

We have a lot of developers, development coordinators and clinical nursing experts in our organization, but [...] they are very far from practice, and they speak a completely different language than our practical employees. We are on a completely different level. They will present something that we should implement, but even we ourselves may not necessarily understand how we would put this into practice. [...] then those things won’t work and they will never come true. It means that the same thing may be developed and tried to be driven in for a really long time, and in the end it becomes completely boring. It is certainly a good goal to want to develop and teach new things, but [...] they are far from this practice. The best we ourselves have gotten [...] is when we have a developer who does fieldwork half the working time and then half the development work. That’s how his/her teachings get across the best. And he/she finds the right ways to convey that lesson when he/she speaks the same language (Nurse 6).

Resources and practices. Among the presuppositions that frame learning processes, resources were described as the most typical, especially personnel and time resources. In those situations for which time and personnel resources were described as sufficient, the progression of learning processes, their anticipation and wider utilization from the individual to group levels were also described as possible. Time also proved to be a factor in implementing the organization’s development activities at the group and individual levels. The data contained some descriptions of situations in which the schedule for implementing development sites was postponed because the original period had proven to be too busy for the actual implementation. Not only was the resource perspective seen only as a frame created by the organization, but the interviews brought up an understanding that this frame begins to form at the societal level and goes all the way down to political decision-making:

This is the same thing all over Finland, that yes, we need more staff here, which would make it possible for us to be able to do this work smoothly in general and to be able to give that information to others. There are helplessly too few of us here from time to time (Nurse 1).

Some interviewees explained that, in addition to resources, the organization has both functional and nonpurposeful practices to support development and learning, which, in

part, are also attached to resources. Some existing operating methods for supporting development, such as different team practices, clear documentation and workflow, were seen as good. In contrast, the utility value of the development discussion practice (regular formal discussion between supervisor and employee), for example, was questioned. From a follow-up perspective, they were not perceived as producing information about the individual's development if the previous year's discussions were not returned to or if discussions were not held every year. In addition, for example, development work groups could sometimes be experienced as very heavy and time-consuming practices. At worst, they were described as an obstacle to eliciting individual-oriented development ideas:

If I mention a development idea, I notice that I end up in a working group somewhere. So here I have learnt that it's better to just keep quiet. Then just take things forward in your own unit with your own team, and you can move forward (Nurse 6).

Collaboration and climate. In an organization's learning processes, whether organization- or employee-oriented, it is essential that the processes extend to the individual, group and wider organizational levels. Thus, the sharing of understanding, expertise and experiences between different units and groups appears to be an important presupposition for the progress of processes. According to the interviewees, this sharing is made difficult by the lack of not only interaction situations but also common spaces:

It's a shame [that the cooperation with the other unit has decreased], because that's where the information is shared, when you see people all the time and otherwise talk [...]. There are no [common spaces]. Or yes, those [points to space], but they are a bit noisy (Doctor 1).

The importance of interaction between colleagues in the progress of learning processes is substantial, especially between the closest colleagues and one's own team, which was mostly described as functional. Getting help from a coworker in various situations was seen as natural, as employees have the encouragement and know-how to ask for help and opinions. An atmosphere of trust within a team enables individuals to feel safe, which, in turn, supports learning at work on the individual and group levels; this supports coping and learning at work and enables the presentation of different perspectives and further development, not only at the individual level but also at the level of group activities:

We have a good work atmosphere, and you can easily go and ask the more experienced ones, who have been there for longer, many tens of years, and they might come to ask me, and vice versa, and yes, work atmosphere is what seems to be the thing why you dare to ask for advice and you learn something new (Nurse 17).

Motivation and activity. The data showed individual factors that are susceptible to external influences and could also be identified as factors framing the learning process. These included attitude, one's own enthusiasm, activity, desire, competence and motivation. In addition to the fact that, in OL, many conditions surrounding employees have an impact on the progress of processes, the role and importance of the individual are not underestimated. Organization and work can offer opportunities and frameworks, but it also depends on the employee's own activity, whether they seize these opportunities and in what way:

Those [learning] opportunities are not terribly predictable, where it will go, but you may have to come to work in the morning and decide what I want to learn today (Doctor, 15).

[...] stick to old good practices, but also be ready to learn new things all the time. You can't stop, because after that, your activity starts to shrink and you start to distance yourself from the best possible care of your own profession (Doctor 2).

Learning and development were described as helping to maintain motivation, especially when the end results were visible and the process was also supported by the organization. At best, OL was seen as a self-feeding process in which experiences of success and the ability to produce motivation, in turn, produce the will and enthusiasm for the further development of operations.

Discussion

According to the findings, both employee- and organization-oriented learning occur equally in the studied hospital organization. Theory of OL (Vera & Crossan, 2004) helped us to locate the personnel descriptions of learning processes, even though all the descriptions did not include all the levels of OL, but they did highlight the potential of the process for continuity at all levels. Finally, the starting points of different learning processes could be located from the interviews, which allowed us to detect what is behind the intuiting and institutionalizing stages of the OL-processes (Crossan et al., 1999).

According to the findings, the starting point of employee-oriented learning processes, which occurred behind the intuiting phase, was often a problem, in the actor's own interest or a situation-specific opportunity. We found it is essential for the process to start so that the actor perceives and becomes aware of the starting point (the possibility of the need for change) and the possibility of the process progressing. As a result, learning was seen as highly incidental (Watkins & Marsick, 2021) and based on individual activity and was often reflected upon afterward, but not necessarily as a conscious learning process in the situation. The complex nature of learning challenges the capability to capture and theorize OL. This research shows how situational and unpredictable the starting point for learning is and how the theory of OL (Crossan et al., 1999) might thus be too structured to capture different situations that might be dependent on the activity of the individual. According to the findings, organizational-oriented learning processes were triggered by the organization's need and expectation for maintaining and achieving the personnel's skill level, a specific need for development at the organizational level or the pursuit of continuous development. In the light of OL theory, these were seen as the starting points behind the organization-oriented institutionalizing phase (see Crossan et al., 1999), through which the institutionalization process of the new practice started from the need observed at the organizational level. In this case, the learning process was more structured and conscious.

The data contained both complete learning processes that passed through different organizational levels and partial processes that had started and moved on to more than one level before stopping. Thus, not all described processes progressed to all levels, even if they were originally potential. In addition, the lessons learned do not necessarily relate to substance, but a process or practice or something that benefits the whole organization. From the OL theory point of view (Crossan et al., 1999), the process appeared to be successful when the new practice became routine, which was seen as adding value to one's own work. To summarize, the descriptions of employee-oriented learning were linked to day-to-day, work-related, informal and incidental learning situations, which are possible for any employee despite their position. In turn, the descriptions of organization-oriented learning were connected more with the formal and internal education and formal practices of the organization. This draws our attention to the extent to which learning can be guided or

structured and how understanding the presuppositions and challenges can help when supporting learning at work.

Various presuppositions for the processes were found that could challenge or even limit their movement from one level to another. The typical factors presupposing and framing the learning process can be divided into four categories: leadership and roles, practices and resources, collaboration and climate and motivation and activity. All of these are partly attached to the organization's culture, but conversely, there are also structural factors within them, such as physical spaces and work tools. In the big picture, the findings are consistent with what is already known about the factors that frame learning at work (Bapuji & Crossan, 2004; Do & Mai, 2020). Examining presuppositions brings an interesting and important dimension to the study of OL. A one-sided examination of individual or organizational orientation still does not explain why all processes, despite their potential, do not progress. In fact, our research found that the obstacle to the process is not necessarily the individual's lack of resourcefulness or the organization's inappropriate goals but is rather the complex conflict between the individual's thoughts, the organization's rather unclear learning goals and the organization's official strategic aims. This elaborates the tension Crossan et al. (1999) describe between exploitation and exploration.

Although the starting points of different processes vary, they are always based on the pursuit of change (Lyman et al., 2018) and the attendant benefits. The benefit perspective (Lyman et al., 2018) is interesting but problematic. In terms of OL, the purpose of the processes should, according to previous theory, be a benefit in line with the organizational-level strategy, values or goals (see, e.g. Vera & Crossan, 2004). However, the essential question from a practical point of view is how clearly the goals are described. In employee-oriented processes, the organization's strategic point of view may also be secondary because, for example, a problem-oriented learning process can start from the need to reduce the workload or development based on one's own interests can be done primarily with the goal of personal gain. Conversely, an organization-oriented process may not progress to the employee level if its value is not seen in terms of one's own work or if the idea does not work in practice. Conflicts of interest can be a significant explanation for why some OL processes are frustrating. From the perspective of the progress of learning processes, an important question is therefore how to get personnel to commit to development so that they see the organization's goals as important on an individual level as well. Equally essential is how the benefit and value of employee-oriented processes are seen at the organizational level. The meanings of interaction, common understanding, resources and management become essential. This point of view is also supported by previous studies conducted in the hospital context, according to which resources should be directed to supporting teams to promote change processes (Glover, Nissinboim, & Naveh, 2020) by considering the views of personnel regarding what works in the organization and what should be developed (Peet et al., 2022). This is justified because involving personnel in changing situations has been described as promoting learning (Valleala, Herranen, Collin, & Paloniemi, 2015). In the hospital context, such a bottom-up approach is not simple, as the operation is guided by a level that transcends the organization, which, in turn, defines resources and operational possibilities. The size of the organization, several structural levels and the mutual cooperation of the department can also affect how management's vision is perceived from employees' points of view.

This study has several limitations that should be acknowledged. The researchers used typical case study methods that proved useful in developing understanding of OL within a hospital surgical department. However, the study focused solely on one surgical department,

and the analysis was conducted using theory-based content analysis guided by Crossan et al.'s (1999) OL theory. These factors may have influenced the identification of relevant aspects and limited the generalizability of the findings. It is important to recognize that learning processes in organizations extend beyond the boundaries of a single unit and involve interorganizational dynamics. As Crossan et al. (1999) points out, it is difficult to define specifically, where does the individual learning and group learning start. Therefore, it is a challenge to make an accurate analysis of the starting points, especially if leaning toward the sociocultural aspect of learning. However, this study specifically concentrated on daily learning through interactions among colleagues, groups and their immediate organization without considering the broader complexity of the entire hospital as a training organization. Additionally, the study did not include interviews with personnel other than physicians and nurses, thereby excluding valuable perspectives from individuals in different roles within the organization. As the research data was based on the views of individual staff members, they were not always necessarily able to cover the movement of OL at different levels: the employee does not necessarily understand in what way the learning process that has become a group practice has or has not moved to the organizational level or vice versa. Thus, the research focused especially on examining the starting points of the processes and the possibilities and assumptions of their progression, but in further research, with the help of more extensive data, more understanding could also be gained about the later stages of the process and the flow between the stages.

Although two experts and researchers with experience in the hospital context were involved in carrying out the study, writing the paper and reviewing the results, the primary analysis phase was conducted by two researchers from the fields of education and organizational research who lacked personal experience and understanding of the hospital organization as a work environment. Although the contribution to the study of two researchers familiar with the hospital context is crucial and adds valuable perspectives, involving these experts throughout the entire research process would have further strengthened the study. To address these limitations, an interprofessional research group comprising organizational and learning researchers, along with experts in the hospital sector, could provide richer findings that enhance reliability and versatility in future research.

Conclusion

In this study, OL emerges as everyday working-life learning processes, which has also been evidenced in previous studies in hospital contexts (Berings et al., 2008; Bontemps-Hommen et al., 2020). However, this study highlights the incidental nature of learning in employee-oriented processes, which might not have been recognized in previous, more systematically described OL theory. The study concretizes and makes the starting points of processes of OL visible, which are particularly relevant behind the intuiting and institutionalizing phases of the OL process. From the point of view of this study, Crossan et al. (1999) theory of OL appears to be an appropriate theory for examining OL processes. However, especially from a *practical perspective*, the importance of successful learning processes is worth attention: Does the organization have the ability and incentives to support this process extensively? By paying attention to leadership practices, the adequacy and appropriateness of resources and opportunities for individuals to be motivated and active at work, hospital organizations can promote the progression of employee- and organization-oriented learning processes. From a societal perspective, this study highlights the means for how, in addition to organizations, individuals can create conditions for learning and developing OL. These can be beneficial for society to develop health care for the common good.

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Further reading

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Corresponding author

Marianne Jaakkola can be contacted at: marianne.e.jaakkola@jyu.fi