

# Human resource development practices supporting creativity in Finnish growth organizations

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*Creativity can be enhanced through appropriate Human Resource Development (HRD) practices that support employees' learning and competence development. The aim of this study is to increase our understanding of HRD practices that enhance creativity in Finnish growth companies. To achieve this aim, we searched for creativity requirements based on employees' experiences expressed in interviews, and we studied HRD practices used in organizations that respond to the requirements of creativity. We gathered 98 interviews from personnel in technology, industrial and artistic design organizations and utilized them for a theory-driven content analysis to identify the variety of requirements for creativity. We found that various HRD practices aligned with the requirements of creativity, including job design, teamwork, career development and everyday supervision and leadership. Thus, our findings indicate that HRD plays an important role in increasing creativity in the workplace and that it can best support creativity by taking the form of shared responsibilities in teams, clear career paths and everyday fair leadership.*

## Introduction

In recent years, organizational studies have become more interested in the relationships between leadership, creativity and innovation (e.g. Collin *et al.*, 2017; Riivari, 2016). In the context of human resource development (HRD), researchers have found that companies' survival in competition, growth and development are increasingly dependent on employees' creativity, skills and motivation (e.g. Jimenez-Jimenez & Sanz-Valle, 2012) as well as competence development and workplace learning (e.g. Joo *et al.*, 2013; Poell & van der Krogt, 2017). All of these can be seen as mutually

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reinforcing phenomena (Anderson *et al.*, 2014; Ford, 1996), as learning and skills are an essential part of problem-solving, and thus a prerequisite for creativity in working life (Lemmetty & Collin, 2020). According to the prevailing understanding, all employees can be creative and act creatively at work (Loewenberger, 2013). In this study, creativity is approached not only as an individual feature but also as a socio-cultural phenomenon that takes place in the everyday practices of working life (Collin *et al.*, 2017; Glăveanu, 2015). HRD practices should be seen as important for not only developing and managing workers' competencies and learning (De Long & Fahey, 2000; Edvardsson, 2008; Stewart, 2007) but also enhancing creativity (Jiang *et al.*, 2012; Loewenberger, 2013).

The purpose of HRD as a sub-function of human resource management (HRM) accomplished by leaders (Kuchinke, 2017; Lee, 2016) is to enhance learning by, for instance, motivating employees. Additionally, HRD is intended to create an organizational culture that supports knowledge sharing and transfer (De Long & Fahey, 2000; Edvardsson, 2008; Joo *et al.*, 2013), and to strengthen workers' orientation toward change and development of their expertise (Stewart, 2007). Several studies have indicated that creativity is linked to employees' previous competencies and expertise (e.g. Amabile, 1996; Ford, 1996; Ness & Soreide, 2014; Runco, 2015; Simonton, 2012) and continuous learning occurring at work (Lemmetty & Collin, 2019, 2020). Since HRD is considered to be responsible for enhancing the learning of all personnel (Lilova & Poell, 2019; Loewenberger, 2013), the support of individual and team creativity and organizational innovativeness have been identified as important functions of HRD (Gibb & Waight, 2005; Joo *et al.*, 2013; Li *et al.*, 2006). However, to date, studies of HRD have paid insufficient attention to the practices that are relevant in the enhancement of creativity (Minbaeva *et al.*, 2009).

Rapid changes in flexible environments require continuous learning and professional development in growth organizations (see, e.g. Collin *et al.*, 2012; Lemmetty & Collin, 2019). In addition to enhancing learning, creativity has been described as one of the most important ways to maintain growth and development in organizations (e.g. Amabile & Khaire, 2008; Florida & Goodnight, 2005). Therefore, organizations are increasingly dependent on employees' creativity and their ability to develop competitiveness (Grant & Ashford, 2008; Shalley *et al.*, 2004). For this purpose, it is important for growth organizations to understand the meaning of HRD practices for not only supporting employee creativity but also support growth (see Thoman & Lloyd, 2018).

The starting point of this study is that the views of employees need to be taken into account when defining the requirements for their creativity in the context of HRD. We started this study by examining employees' perceptions of organizations-driven activities that support creativity. Next, we looked at the interview material to see how different HRD practices respond to the requirements of creativity defined by the employees.

## **Creativity and human resource development practices at work**

### **Creativity at work – practice-based framework**

In recent years, creativity has been approached as an individual capability and characteristic, a highly context-based phenomenon and a combination of both (see, e.g. Amabile, 1996; Anderson *et al.*, 2014; Glăveanu, 2015). The literature seems to agree that creativity is related to the emergence of something novel, or at least that it offers a different way to approach something that already exists or a known problem (Anderson *et al.*, 2014; John-Steiner, 2000; Kaufman & Sternberg, 2007; Sawyer, 2004; Sternberg, 2003). It is also associated with the idea of usefulness (Dewett & Gruys, 2007; Gruys *et al.*, 2011; Runco & Jaeger, 2012; Simonton, 2012; Weisberg, 2015). Creativity has been described as high-quality products and outcomes (Amabile, 1996) as well as procedures, ideas and products that differ from those that have been developed before (Csikszentmihályi, 1996). In other words, creativity produces novel, valuable and useful products, services, processes and ideas in appropriate contexts (Ford, 1996) that

are desired by individuals and communities (Woodman *et al.*, 1993). Thus, creativity is a significant factor in maintaining organizations' ability to innovate, develop and survive in competition. It is suggested that creativity is an important requirement for the accomplishment of good outcomes and empowerment at work for both employees and an organization.

As a process, creativity includes everyday problem-solving, innovation and new work methods (Collin *et al.*, 2017; Lemmetty & Collin, 2019) as well as idea generation (e.g. Mumford *et al.*, 2012). In the field of organizational and business studies, creativity is often connected to innovation and innovation processes. In these processes, the role of creativity is seen as important only at the beginning, although the concept of innovation emphasizes the execution and implementation of creative ideas (e.g. Amabile, 1996; Anderson *et al.*, 2014; Hunter *et al.*, 2007). In this study, we approach creativity as activity that is manifested individually or collectively in employees' practices, including problem-solving, development of work methods and creation of novel solutions (see Collin *et al.*, 2017). It does not necessarily produce innovations.

Our study is based on the sociocultural framework of creativity, which claims that creativity is influenced by a number of external organizational factors (Glăveanu, 2015). According to the sociocultural view, all employees have the potential to be creative (Loewenberger, 2013), but enabling creativity depends on the environment and context of an organization. It can be defined as a highly context-based and situational phenomenon that emerges from the interaction of an individual with others and the environment (Vygotsky, 1978) and requires relevant opportunities and affordances to be realised (Glăveanu, 2015; Lemmetty & Collin, 2020).

### Importance of HRD for creativity

HRD can be seen as a sub-function of HRM and leadership in organizations (Lee, 2016) that includes development of individuals' learning, competence and careers as well as the perspectives of organization-level development, taking into account that the capability of an organization is completely dependent on the competence of the individuals working in it (Weinberger, 1998). HRD refers to all practices that support training and learning in for work as well as from and through work (Kuchinke, 2017). In practice, however, HRD is still mostly viewed as the process of designing training courses, and it is predominantly understood as a management tool (Poell & van der Krogt, 2017).

Recently, the relatedness of HRD and creativity has drawn researchers' attention (e.g. Collin *et al.*, 2017; Joo *et al.*, 2013; Riivari, 2016). Previous studies on creativity have noted that creativity relates to employees' previous competence and expertise (e.g. Amabile, 1996; Ford, 1996; Ness & Soreide, 2014; Runco, 2015; Simonton, 2012) as well as workplace learning (Lemmetty & Collin, 2019). Joo *et al.* (2013) believe that all kinds of HRD, including learning and development, job design, leadership and development of organizational culture, are important for creativity. Consequently, creativity within organizations should be at the core of HRD practices, and these practices should be seen as essential not only for competence development but also for enhancing creativity in organizations (Gibb & Waight, 2005; Jiang *et al.*, 2012; Li *et al.*, 2006; Loewenberger, 2013). These notions are in alignment with critical HRD, which suggests that HRD ignores issues such as power relations, identities and emotions (Bierema & Callahan, 2014; Sambrook, 2008; Stewart *et al.*, 2014), and thus represents masculinity and the commodification of workers. If, however, these more critical aspects are taken into account in HRD, creativity and continuous learning may have a better opportunity to flourish (Bierema & Callahan, 2014). In this study, we consider learning, creativity and HRD to be strongly related as, nowadays, most learning takes place during, not separate from, work. Presumably, creativity is better supported in circumstances in which HRD takes employees' learning experiences and needs into account and employees can participate in their competence and career development (see Poell & van der Krogt, 2017).

According to previous studies, HRD enhances learning in organizations by motivating personnel; developing an organizational culture that promotes the acquisition

Table 1: Participating organizations

Organization	Technology	IT1	IT2	Industrial	Design
Number of employees	280	25	30	350	12
Job titles of interviewees	Software developer, customer service employee, information and communication technology expert, marketing developer, project leader, manager, Automation developer, electrical developer, design engineer	Installer, customer service employee, seller, technical expert	Software developer, consultant, manager, supervisor	Civil engineer, information technology expert, foreman, assistant, manager	Logistic and operations manager, production worker
Number of interviews	46	8	16	21	7
Data collection period	Spring and autumn 2017	Spring and autumn 2018	Spring 2017	Spring 2018	Autumn 2018

and sharing of knowledge and expertise (De Long & Fahey, 2000; Edvardsson, 2008; Stewart, 2007); improving individual and organizational effectiveness and performance; developing knowledge, skills and competencies; and enhancing human potential and personal growth (Hamlin & Stewart, 2011). To reach these aims, different HRD functions and practices are presented. For instance, in their literature review, Jimenez-Jimenez and Sanz-Valle (2012) identify seven categories of HR practices that enhance competence development: teamwork, staffing, career development, training, performance appraisal and compensation.

In this study, we found it appropriate to utilize Jimenez-Jimenez and Sanz-Valle's categorization of HR practices as an analytical framework. We considered these categories to be applicable to the promotion of creativity because research (e.g. Lemmetty & Collin, 2020) has often described creativity and the development of skills (i.e. learning) as similar phenomena that can be managed with similar practices. Jimenez-Jimenez and Sanz-Valle's categorization also emphasises practices that influence workers' daily lives, which are expected to affect creativity when it is realized in the workplace. Equivalent categories have been presented in other studies (see, e.g. Joo *et al.*, 2013). In this study, however, we examine creativity and the practices that support it in a strongly data-driven way. We consider that many of the abovementioned learning-enabling activities may also foster creativity, remembering that this is a process of creating new products and everyday solutions and developmental work (Collin *et al.*, 2017), and suppose that it may require some special frameworks (see, e.g. Blomberg *et al.*, 2017). In previous studies, elements like autonomy and freedom have been emphasized as part of a special framework for creativity (Lemmetty & Collin, 2020), but it is unclear which practices can be used to form such frameworks in organizations. So far, research in the field of HRD has not been able to pay enough attention to the HRD practices that are relevant to creativity (Minbaeva *et al.*, 2009). Thus, there is a call for greater understanding of the organizational practices that promote creativity (Blomberg *et al.*, 2017; Collin & Herranen, 2017). This study aims to answer this call.

## Research aim and research questions

In this study, we aim to increase our understanding of the HRD practices that support employee creativity in Finnish growth organizations. We ask the following questions: (1) Which kinds of requirements for creativity (the organization's responsibility) do the personnel describe in their work? (2) Which HRD practices align with the requirements of creativity defined by personnel?

## Methodology

### Context and participating organizations

The research is part of the larger Ethical Human Resource Management Supporting Creative Activity in Finnish Growth Companies (HeRMo) research and development project, which was implemented from 2018–2020. The five participating organizations (see Table 1) are Finnish and of different sizes (15–350 employees). The target organizations were selected through three criteria: (1) they aim for both financial and personnel growth, (2) they aim to produce new types of innovative products in their operating fields and (3) there is a need to examine organizational structures and practices and support opportunities for personnel to engage in creative activities. The increasing number of employees and diversity in personnel requires companies to look at the functionality of HRD practices and ask whether they serve the needs of diverse organizations well enough. Although the five participating companies are from different industries (technology and information technology, industrial design and artistic design), the importance of technology is the content of their work or the work that indirectly affects the companies. Continuous technological change and growth drives companies to implement new kinds of problem-solving and develop new work

procedures, methods and tools. Therefore, everyday work-related creativity is a crucial requirement for coping with and managing continuous growth.

During 2017, key personnel in the organizations (e.g. CEO, HR Director) were approached by email to determine the organizations' interest in participating in the study. When key personnel were interested in the research project, preliminary meetings were held with them to refine and evaluate the suitability of the organizations for the research. The research work began by collecting data in the organizations during 2017 and 2018.

### Data

The data for the study comprised 98 thematic interviews. The interviewees were randomly selected from people working under different titles or in different groups/teams. At the beginning of the interviews, the interviewees were asked to talk about their own work, its content and related challenges and opportunities. In addition, they were free to present issues that were important to them or topical at work at the time of the interview. The themes of the interviews included leadership, supervisory practices, personnel, support, work community, inequality, creativity and competence development. Each theme was discussed based on a question posed by the interviewer, which the interviewee was allowed to answer freely. The interview questions included 'What does creativity mean in your work?', 'What kind of support should there be for creativity in the workplace?', 'What kind of leadership and supervisory practices do you have in your organisation?', 'How are personnel rewarded or recruited in your organisation?', 'What is your work community like?', 'How do you solve problems together?', 'How can you develop competencies in your organisation?' and 'What kind of support for competence development is provided?' Interviews were transcribed, and then they were read several times to gather a comprehensive picture of the data as a whole. All three researchers took part in data collection, organization and analysis to ensure the reliability and plausibility of interpretations and to enable triangulation (Patton, 2002).

### Analysis

The study was conducted using two-phase analysis to answer the research questions. In the first phase, using data-driven content analysis (Hsieh & Shannon, 2005), we searched for the requirements of creativity as described by the personnel. Specifically, we looked at those sections of the interviews in which the theme was creativity and ways to support it. We also located interviewees' descriptions of the requirements for creativity at their workplaces. Similar views were expressed by different interviewees, and we combined these to form six categories of requirements for creativity. In the second phase, theory-guided content analysis (Hsieh & Shannon, 2005) was utilized to examine HRD practices that support the requirements for creativity in an organization. We were interested in how creativity is supported in the target organizations, paying particular attention to the interviewees' descriptions of existing practices in their organizations. We compared these descriptions to the creativity requirements we identified in the previous phase and then mapped the number of practices in organizations that meet the requirements for creativity. The HRD practices were mapped and named according to Jimenez-Jimenez and Sanz-Valle's (2012) seven categories of HRD practices that enhance competence development in organizations. Practices that did not fit these categories but were described as supporting creativity were classified into new data-driven categories.

### Findings

We present our findings in two parts to align with our research questions. First, we describe the requirements of creativity that employees describe as important in their work. Next, we shed light on the HRD practices that respond to the requirements of creativity indicated by employees.

## Requirements of creativity described by employees

The requirements of creativity were categorized into six themes: time and freedom, resources and support, opportunities to develop competence, collectivity, peaceful work environment and versatile content of work. These requirements, which are summarised in Table 2, emerged from data-driven analysis of 98 interviews.

The personnel in the Finnish growth organizations described *sufficient time* as an essential requirement for the fruition of creativity. In the researched fields, work typically needs to be done effectively and promptly, which does not necessarily leave time for the creative part of the work. In addition to time, individuals' and teams' *freedom and autonomy* were mentioned as important requirements for creativity. The personnel in the growth companies described a variety of *light frames* that do not suffocate creativity and instead support creative work processes. Both of these requirements are well illustrated in the following extract from the data:

It (creativity) does not come by wrenching it from 8 to 4, but by raising the legs on the table sometimes and giving space and peace to weekdays ... you should more often shut the laptop and go away walking around the office, for instance. (Business manager, industrial organisation)

Creativity was also described as something that *needs support*. For example, *feedback* from supervisors seemed to play an essential role in directing personnel's development and clarifying personal aims. Technological development, organizational growth, tightened competition and expectations from clients continuously produce new needs for creativity and competence. Also, loose schedules and budget, functional tools (programmes and devices) and clear and shared business aims support the manifestation of creativity in everyday practices. Furthermore, encouraging positivity and enabling development and well-being in a cosy atmosphere were mentioned as important requirements for creativity:

In general the atmosphere ... if it is supportive in an appropriate way, there are appropriate aims, and so on, perhaps. (Software developer, IT organization 1)

Both personal and collective *competence* and their utilization and development were seen as necessary resources for creativity in growth organizations. In addition, it is important to enable the existing competencies of employees to be fully utilized in future projects:

We have a lot of different and strong competence among our people, I think that growth organisations are too cautious of developing new products from the bases of persons' special expertise, but that is the base we should build on. (Consultant, IT 2)

Creativity is often realized as a collective process that occurs through discussions and dialogue. Therefore, *teamwork and collectivity* at work seems to be an important requirement for actualizing creativity. Creative work includes different phases and methods, some of which are more fruitful when performed collectively and some of which are better to perform individually, as supported by the opinion of one employee:

... after the problem or situation is identified, you dare to put it under possible critique and discussion, and then you notice that people start creating the common and shared picture of the issue. (Civil engineer, industrial organisation)

Individual creative activities require a *peaceful work environment* in which employees can concentrate on their work and not need to be aware of changes in business activities or other business pressures:

I feel that many times those best ideas are coming when it is quiet ... during service hours, for instance. (IT expert, IT 1)

Work motivation, which is related to *versatile content of work*, was described in the interview data as an important requirement of creativity. New challenges should be offered from time to time to prevent work from becoming too routine, which does not enhance creativity:

Table 2: Creativity-related requirements described by employees

Time and freedom	Resources and support	Possibilities to develop competence	Collectivity	Peaceful work environment	Versatile content of work
<ul style="list-style-type: none"> <li>• Time to search for the best possible solution to the problem</li> <li>• Time to experiment with various alternatives</li> <li>• Time to explore the problem</li> <li>• Time to discuss the problem with colleagues</li> <li>• Time to learn new things</li> <li>• Ability (freedom) to make independent decisions</li> <li>• Individual and team autonomy to make decisions with alternative judgments</li> <li>• Freedom to think and plan things individually or with the team</li> <li>• Freedom to make decisions, which increases motivation to work, and thus supports creative solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Loose schedules and budget</li> <li>• Functional tools (programmes and devices)</li> <li>• Clear and shared business aims</li> <li>• Customer relationships</li> <li>• Support from supervisors, colleagues, and other stakeholders</li> <li>• Encouragement, positivity and promotion of development and well-being in the work atmosphere</li> <li>• Constructive feedback between agents to building creativity and a supportive atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>• Personal and collective competence</li> <li>• Potential for learning in situations where the project determinations, aims and desired outcomes are defined by the customer</li> <li>• Pre-existing competencies of employees, which could be fully utilized in future projects</li> <li>• Time allocated for the creative part of the work and deeper learning</li> </ul>	<ul style="list-style-type: none"> <li>• Teamwork</li> <li>• Shared practice</li> <li>• Formal and informal discussions at work</li> <li>• Dialogical skills</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to do work in a quiet and peaceful environment (when working individually)</li> <li>• Option for individuals to be unreachable by colleagues and stakeholders</li> <li>• Working without constant interruptions related to business pressures or the organization in general</li> </ul>	<ul style="list-style-type: none"> <li>• Work motivation</li> <li>• Versatile work content</li> <li>• Meaningfulness of one's work</li> <li>• Work issues that enable one to more deeply involve oneself in the task</li> <li>• Variety of tasks and new projects</li> </ul>



There won't be new problem-solving situations if you are just working with the same code day after day. (Software developer, IT 1)

In particular, administrative tasks were described as time-consuming and frustrating when describing creativity at work.

### **HRD practices aligning with the requirements of creativity in Finnish growth organizations**

In the sections above, we described employees' perceptions of important requirements for creativity in their work. Next, we shed light on the HRD practices that respond to these requirements. For our analytical framework, we utilized Jimenez-Jimenez and Sanz-Valle's (2012) seven categories of HRD practices that enhance competence development: job design, teamwork, staffing, career development, training, performance appraisal and compensation.

We aimed to determine whether they align with the requirements for creativity defined by the employees.

#### *Job design*

Three different practices related to job design were found in the data: *multifaceted tasks*, *individual and team autonomy* and *communication*. Multifaceted tasks were mentioned as important for both employees' and supervisors' work. Though the general job descriptions of supervisors vary, they usually include other tasks, such as project development. Two workdays are rarely the same due to customers' changing needs and desires, which change the actual content of the work. Project-based work guarantees occasional shifts in tasks, at least between projects:

I can get to know and do very different kinds of tasks here ... this is a big bonus here. (Customer service employee, technology organization)

As multifaceted tasks have been shown to increase motivation, the HRD practice of job design is equivalent to the requirements for creativity that are related to work content. To some extent, tasks are selected to match the existing competencies of personnel. Therefore, the utilization of skills and competencies, as a requirement for creativity, can be actualized.

The team structures varied between the studied organizations, but all were intended to allow the teams to be self-directed:

These are so talented, self-directed people here that I don't need to shepherd them. (HR manager, technology organisation)

It is thought that self-directed teams can exhibit autonomy and decision making in their work. Individual autonomy in teams is possible when the employees' responsibilities and tasks are clearly defined and framed. Line or project managers in teams help employees to express autonomy, which may involve decision making related to work methods, tools, internal organization and prioritization of jobs or about when to ask for advice from colleagues:

We have carte blanche to do things in our way, decide suitable technologies for products and alike ... no one has given them to us. (Software developer, technology organization)

Flexible structures make it possible for an employee to learn any part of the organization's activities if needed. Thus, within certain contexts self-directed team structures and practices enable individual employees' self-directedness. Self-directed practices and structures are in alignment with the requirements of freedom and autonomy, a peaceful work environment (e.g. the possibility to communicate via digital devices when possible) and frames and support (frames given for employees and support given by other team members and supervisors).

Communicative HRD practices were especially important to the participants when they were connected to collectivity, competence, peacefulness, frames of work and support. Two kinds of communicative practices were found: internal communication

in shared events and communication via digital devices. There were shared events in every organization, but their content varied. Shared events for the whole organization included monthly, weekly or daily events in which organizational issues were announced; practices or strategies were developed together; projects were updated, launched or ended; and new technologies were presented. In yearly events, the organizational strategy was updated and discussed, and feedback from personnel was collected. All these events enabled increased collectivity and support from the organization. Furthermore, thanks to the discussions and information sharing, these events were perceived as places to develop competence. Increased awareness of "bigger" frames for individuals and teamwork was seen as especially beneficial.

Internal communication that takes place via digital devices allows employees to make decisions related to their own work when they utilize the organizationally sensitive devices and platforms such as electronic mailboxes, chats, Skype or Hangouts.

Yes, yes, absolutely a good channel (digital devices) ... if we just communicated (by) shouting over the screens, it would be chaos; now, you can just shut your eyes and participate later when (it is) appropriate for you. And another good thing is that you can also communicate in real time from home when working there. (IT expert, technology organization)

### *Teamwork*

We found three different practices belonging to the teamwork category: *self-directed (project) teams*, *'spar partners'* and *new-timer-old-timer pairs* and *competence-based developmental teams*. Some growth organizations utilize the project team structure. The team consists of people working on a specific project, although they may have other roles. Teams are led by the project lead, who manages the budget and communication with clients. Otherwise, teams work autonomously and have meetings to define the internal division of responsibilities. In other organizations, there may be no stable team structure, and teams may be constructed on a project-by-project basis. In such cases, any employee can find something to develop, and other employees can contribute and discuss how to proceed. However, there is also a possibility for individual developmental work, which does not require others' views.

One basis for constructing a team is experience. An inexperienced employee can start on a team composed of a variety of employees of different ages, backgrounds and levels of work experience:

Discussions with more experienced workers service everyone; it is a good practice that people of different age(s) and experience (levels) are selected in teams. (Automation developer, technology organization)

The term 'spar partners' is used to describe experienced colleagues with whom an employee has become close. 'Spar partner' is not a formal title, and depending on the situation, anyone could take on the role. These partners are critical for support, competence development and collegiality:

And sometimes I need to take a sparring role, and perhaps someone acts as a spar for you ... for instance, right now, my colleague guides me to get to know new technologies. That's the most painless way to learn for me. (Software developer, IT 2)

The purpose of competence-based developmental teams is to share knowledge and competence with those who might be interested in developing new ideas and solutions for a specific issue. These teams often work more informally across projects and tasks and are free from routine work. This provides employees the freedom to individually participate in teams according to their interests while simultaneously enhancing their competence, development and collegiality:

Oh yes, when I was working at headquarters, I was always invited to some of those developmental teams ... developing something new and discussing.... (Civil engineer, industrial organization)

### *Recruitment*

We found one recruitment practice that was described to enhance creativity: *competence-based recruitment*. Recruitment did not emerge as an HRD practice that strongly enhances creativity, but the concept is based on the applicant's competencies, which in turn supports creativity:

We have a couple of technical guys here who have interviewed (the applicants) ... because I can't know exactly ... those experts then tell me what are the competencies of the applicants and thus, what new they could give to the organisation'. (Owner, IT 1)

Identifying the special competencies and interests of applicants is seen as important, as it makes it possible to place them in tasks throughout the organization in which their competencies will be useful. Thus, although creativity is not the primary purpose of recruiting an applicant, an organization may need a special skill for an open task and share it throughout the organization.

### *Career*

*Employee-oriented career development* is a practice in the career category that enhances creativity at work. Some of the studied organizations enable equal career development, which is mainly based on employees' individual will and personal aims.

Many times, I have a few words (with subordinates), and you get to know quite well what is going on ... and at its best these kinds of talks with people can have results that satisfy both parties (employer and employee). That's the best thing, I think. (Supervisor, technology organization)

When starting new projects, individuals' views and willingness are taken into account. Employee-oriented career development supports creativity, especially from the point of view of freedom, work content, the possibility to influence others and competence utilization.

### *Education and training*

Three different education and training practices seemed to contribute to the creative activity of individuals and groups: *formal training*, *internal training events* and *spontaneous training*. In all the studied organizations, there are possibilities for participation in training and formal courses:

This organisation offers us possibilities to train ourselves ... it gives us resources to participate and asks if we have any training needs. (Civil engineer, industrial organization)

However, practices vary from organization to organization. Personnel either search for appropriate and useful training themselves or negotiate participation with their supervisor. In some cases, organizations offer appropriate courses for their personnel and employees choose the ones that are most useful for their purposes. Formal training is shown to enhance expertise, and thus respond to the requirement for competence development in order to achieve creativity.

Internal training events are also provided at some organizations. For instance, developmental seminars that are focused on a specific skill or competence but offered to all personnel are quite common. Although the reason for organizing such events is determined by leaders, employees at different levels can participate in planning of the content of these events. Internal training has been used to enhance collegiality and develop competence.

Spontaneous training is offered in various forms. Employees may notice training or learning needs themselves and ask permission to complete training during working hours. Alternatively, employers may define a certain number of hours for personal development and give the employee the power to choose how he or she will use this time. In other organizations, time is allocated for competence development, which personnel can utilize for meaningful developmental work, innovation and learning.

I think this (training) is one tool to strengthen all kinds of doings together ... that we have different kinds of days for coders ... like lab days, hack days and the like ... where they can think together about these things and carry them out ... that is a kind of creativity in our work. (Business manager, technology organization)

### *Performance appraisal*

*Developmental or checkpoint discussions* were mentioned as an important HRD practice in all but one of the organizations. These discussions were often structured as frequent (i.e. daily or weekly) organized conversations about the employee's current projects. Discussions may also take place between an employee and a supervisor who guides the daily work. In these discussions, customers' aims, organizational and individual aims, necessary competencies, problematic situations, well-being, success and failures were addressed.

Well ... in the discussions we usually go through different issues from the past year ... what kinds of jobs you would like to do, how you have developed and give feedback to leaders about the situation in our firm ... HR stuff alike. (Software developer, technology organization)

The discussions are used to increase employees' awareness of the organization's aims and expectations for workers as well as to provide supervisors information about their subordinates' competence and developmental needs. Discussions and practices related to the evaluation of behaviour-enhanced utilization of competencies clarify the frames of work practices and guarantee that employees are able to influence their job and its content. *Team meetings*, as an assessment practice, are similar to developmental and checkpoint discussions. However, the assessments are focused on a team, its competence and needs for development and team goals rather than an individual worker's aims. Team meetings also enable competence development and support issues that frame employees' work and collectivity:

These (meetings) have been very good ... though there have been a lot of us present, discussions have been open minded about almost everything possible ... so, in our field, these have been good ... you get to know people a bit better. (Supervisor, industrial organization)

### *Rewards and benefits*

Practices related to rewards and benefits were mentioned by only one of the interviewees. This interviewee's company uses a *competence-based rewarding practice*, or a bonus system, in which a yearly monetary bonus can be given to an individual worker based on his or her skills and competencies. This practice has been described as supporting creativity through competence development. Benefits that produce *increased well-being*, such as exercise events, occupational health care, convertible tables and equipment for exercise, were mentioned by the interviewees.

### *Everyday supervision and leadership*

When the data are read in a more data-driven way, an additional category of creativity-enhancing HRD practices emerged: everyday supervision and leadership. The interviewees emphasized that clear leadership structures and responsibilities ensure that personnel are aware of whom to ask for help when, for example, questions arise about human resource issues. However, actualization and practices should be flexible, meaning that employees have autonomy in their tasks and supervisors do not interfere with their subordinates' everyday work.

Hierarchy doesn't need to be high and rigid in everyday work. I mean that there is no need for ladders ... but still, we need organising things because it partly works as shelter (for)the worker ... that there is at least someone to look after and take care. (Consultant, IT 2)

From the point of view of supporting creativity, the best practice for leadership is supervision as a spar partner. This practice is best enabled when the supervisor understands the content of the work, and thus can help with daily problem-solving, sharing ideas and reciprocal support. Therefore, it is important to consider what kind of expert can act as a supervisor for a certain employee:

The fact that people are working in similar kinds of projects affects who is the foreman for you, and who could be better for somebody else ... if your tasks don't meet at all, the foreman cannot see the situation in which his subordinate is working. (HR manager, technology organization)

Table 3 summarizes the notions of creativity and supporting HRD practices.

*Table 3: Human resource development practices that align with the requirements of creativity*

Categories of practices (according to Jimenez-Jimenez and Sanz-Valle, 2012)	Practices supporting creativity
Work design	Multifaceted tasks, communication, individual and team autonomy
Team work	Self-directed (project) teams, sparring partners and new-timer/old-timer pairs, competence and developmental teams
Recruitment	Competence-based recruitment
Career	Employee-oriented career paths
Education and training	Formal and informal training, spontaneous, continuous training and learning
Performance appraisal	Developmental and checkpoint discussions, team meetings
Everyday supervision and leadership	Clear structures, flexible practices, supervisor as a spar partner

## Discussion

In this study, we found that employees describe the following as requirements for creativity: time and freedom, resources and support, possibilities for competence development, collectivity, peaceful work environment and versatile work content. We also described creativity-supporting HRD practices in Finnish growth organizations and identified many HRD practices (Jimenez-Jimenez & Sanz-Valle, 2012) that enhance creativity (Bierema & D'Abundo, 2004; Fenwick & Bierema, 2008; Shen & Zhu, 2011) and respond to the requirements employees described. In practice, this means that, for instance, employees are given opportunities to develop themselves, be rewarded and participate in decision making. However, the implementation of these opportunities may vary according to individual employees' needs, aims and conditions. This is the reason why employees need to be able to trust that in problematic situations, help and support (e.g. in the form of everyday leadership) will be available and no one will be left on their own (see Collin *et al.*, 2018).

Our findings suggest that, in addition to structural HRD practices, such as work design, teamwork and recruitment, supervisory work is particularly important. Sparring and coaching as supervisory work allow employees to act freely and autonomously but also provide feedback and guidance for the organization, which in turn may foster creativity. Thus, our study suggests that the roles of supervisory work and leadership could be more explicitly taken into account when defining the HRD practices that support creativity (cf. Jimenez-Jimenez & Sanz-Valle, 2012). For example, in performance appraisal, employees are offered the opportunity to have regular developmental or checkpoint discussions, but the content and duration of those discussions depend on the employee's needs. Therefore, creativity-enhancing HRD practices should include case- and context-sensitivity and enable equal possibility to act creatively (Minbaeva *et al.*, 2009).

A rapidly changing working life requires changes in appropriate HRD practices. One increasingly important creativity-supporting HRD practice that requires change is education and training, as also emphasized in the area of critical HRD (Bierema & Callahan, 2014). Continuous learning, creativity and the support of managers and colleagues cannot be promoted by only taking courses and enrolling in formal training to respond to changing learning and creativity needs. Instead, based on our findings, we believe that learning is an intrinsic part of work (see Lemmetty & Collin, 2019), and support for creativity comes from sparring and coaching alongside everyday work.

Thus, the HRD practices that best support creativity seem to emerge most strongly from transparent supervisory roles and structures.

Our findings have several practical implications. First, creativity-supporting HRD practices must offer equal opportunities for all workers based on rules, clear structures and transparency. Similar kinds of procedures do not fit every team, and similar types of supervisory roles, career paths or modes of development do not suit each employee. It is important that organizations are aware of the different needs of individuals, teams and organisational levels. However, this approach requires delicate analysis of situations, work processes and continuous changes. For example, supervisors should know the working conditions of their subordinates in order to understand what is creative in and for their work. There is also a need for more empirical studies about HRD structures and practices that encourage individual and team autonomy and self-directedness to produce creativity (see Lee & Edmondson, 2017).

Although our aim was not to compare the fields of work or organizations under study, we noticed differences between them. In all participating organizations, there were some creativity-supporting HRD practices, but some were practices that constrain creativity and undermine ethical behaviour. Hence, there is an obvious need for further research to provide more information on creativity-constraining HRD practices. Another interesting finding of our study was the lack of longer term temporal orientations in HRD practices. Thus, it is important to focus further research on HRD practices that may work better for longer term needs, rather than reacting to needs in rapidly changing environments. Finally, more research is needed to shed light on how digitalization produces new kinds of learning and supervisory roles within HRD practices, as these types of experiences were almost totally absent from our data.

From a practical point of view, our findings imply that fashionable ideas and theories, such as those on leadership, are not suitable for all organizations, even if they are customized for a specific organization to enhance creativity. Therefore, it is important to identify the competencies and strengths of people in organizations and to create new practices that are suitable for the organization. Creating new practices also requires courage to renew structures if needed, especially in situations of constant organizational growth, as was the case in our study. In the present study, we have shown that clear structures and supervisory roles do not hinder the autonomous action of individuals and teams. In contrast, organization that aim for autonomy, self-directedness and non-leadership should implement clearer HRD practices and guidance (Lee & Edmondson, 2017).

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