Co-Occurrence of Sociocultural Elements and Self-Direction in Learning Situations: A Police Organization Case Study

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Abstract: Adult's self-direction and self-directed learning (SDL) have become topics in the discussion of work-related adult learning and an autonomous approach, emphasizing responsibility and independence, has received increasing attention in studies of learning. In the context of SDL, in contrast, the importance of the learning environment and community has received less empirical attention. The aim of this article is to increase the understanding of the co-occurrence of sociocultural elements and self-direction in learning situations at work. From a practical viewpoint, it is important to understand both, the sociocultural and self-directed nature of different learning situations at daily work, so that organizations and workplaces can develop the practices that support learning and self-directedness in the work environment and create appropriate expectations for individual self-direction. In this study, we examined the elements of sociocultural learning and self-direction in police organization. The content analysis focused on interviews with 26 police officers, examining their descriptions of learning situations. The findings show that in learning situations at work, individual responsibility alternates with collectivity, peers, supportive supervisory work, and tools. The theoretical and practical implications of the findings are highlighted.

Keywords: self-direction, self-directed learning, workplace learning, sociocultural theory of learning, zone of proximal development

> " ...THE OPPORTUNITIES TO SHARE EXPERIENCES AND REFLECT TOGETHER WOULD HELP LEARNING IN ADDITION TO INTRODUCING NEW TOOLS ONLY THROUGH EXPERIMENTATION... "

Introduction

In recent years, adult's self-direction and self-directed learning (SDL) have become topics in the discussion of work-related adult learning (Lemmetty, 2020; Curran et al., 2019; Gu, 2016). There are several reasons for this interest, which are linked to broader changes in work life: the increase in individualistic culture (Beck, 2016),

appreciation of workers' freedom and autonomy (Noe & Ellingson, 2017), and changes brought about by digitalization and the requirements of flexibility at work (Curran et al., 2019). In all these changes, the emphasis has been on the responsibility of the individual (i.e., the employee or the actor) for the work performed. Recently, researchers have found that the learning needs in work life have increased and become a prerequisite for coping with work tasks and problem solving (Yeo, 2008). Simultaneously, the responsibility for learning has steadily shifted from organizations to employees (Ellinger, 2005; Noe & Ellingson, 2017).

Employees are often expected to engage in self-directed activities and self-learning, which have been considered as adult skills and abilities (Blaschke, 2012; Guglielmino, 1977). Previous studies found that different people have different abilities in terms of education, experience, and personality, which affect their ability to self-direct (Guglielmino, 1977). Self-directed learning (SDL) has been described as a learning in which the learner is responsible for the progress of the learning process (goal setting, controlling, and evaluating) (Knowles, 1975; Tough, 1971). However, this autonomous perspective has been criticized for failing to consider the environment and context in which the learner operates (Baskett, 1993; Merriam, 2001; Usher & Johnston, 2006).

Sociocultural learning theories have received much attention in the field of education and learning research, but they have not been thoroughly considered in studies of adult's SDL. The theory of sociocultural learning (Vygotsky, 1978) emphasizes the formation of learning in interactions between the individual, community, and environment. Many previous studies (Author, 2020; Baskett, 1993; Bouchard, 2012; Boucouvalas, 2009; Hiemstra & Brockett, 2012) suggested that self-direction in work life and adult learning should be approached simultaneously with sociocultural examinations. In particular, empirical research on the co-occurrence of self-direction and sociocultural elements in different adult learning situations is limited. In this study, we combine the perspectives of self-direction (based on the theory of self-directed learning) and sociocultural learning by examining *how do the sociocultural elements and self-direction co-occur in police officers' descriptions of learning at work.*

Toward a Co-Occurrence of Self-Direction and Sociocultural Learning

Self-Direction in Adult Learning

In andragogy—the theory of adult learning—self-direction, which means the learner's responsibility and activity in learning situations, has been described as one of the basic orientations of adult learning (Knowles, 1975). Based on this, the concept of SDL was first developed by American researcher Malcom Knowles (1975). The best-known descriptions of SDL are based on Knowles' view of SDL as a process of various stages, from setting learning goals to assessing what is learned, in which the learner plays a significant and responsible role (Knowles, 1975). In the first descriptions of SDL, adults were considered responsible and internally motivated actors who utilized their previous life experiences as resources in their own learning (Lindeman, 1926). In previous studies of SDL, adult personality traits, skills, and abilities were examined. Measurements have been developed to assess individuals' ability to manage their own learning (Guglielmino, 1977; Stockdale, 2003; Taylor & Kroth, 2009).

Self-direction in learning has often been considered synonymous with autonomous and independent learning, as well as activities under the individual's control. For example, Noe and Ellingson (2017) equated SDL with autonomous learning, where individuals are the main actors and decision-makers in their own learning (see also Holec, 1981; Merriam & Caffarella, 1999. Merriam & Caffarella, 1999). In the context of work life, Noe and Ellingson (2017) stated that autonomous learning should be voluntary; thus, it should not be required or dictated by an organization's formal human resource management rules or practices. Moreover, according to Noe and Ellingson (2017), employees do not learn because of predetermined learning goals, but because they decide to participate actively and strive to learn (see also Garaus et al., 2016). The role of the organization in supporting autonomous learning administratively or operationally was considered negligible (Noe & Ellingson, 2017).

In the context of work, self-direction is often seen as important part of informal, on-the-job learning (Billett, 2001; Lave & Wenger, 1991; Wilson & Hartung, 2015). Informal learning often refers to a process derived directly from the characteristics of the work process

(Poell, 2014). It is seen as learning that takes place between work tasks and in problem-solving situations that is not guided by systematic or organized support (Hoekstra et al., 2009). The learner thus has a self-directed, responsible, and active role in informal learning at work (Lemmetty & Collin, 2019).

Many scholars (Lemmetty, 2020; Baskett, 1993; Boucouvalas, 2009; Hiemstra & Brockett, 2012; Merriam, 2001) have criticized autonomy and individualism-based definitions of adult learning, because they do not account for the considerable weight of contextual forces that inevitably affect the learning process (Bouchard, 2012; Merriam, 2001). Boucouvalas (2009) pointed out that Knowles (1975) did not view self-direction as an individualistic phenomenon; rather, his descriptions of SDL were misunderstood because his book did not critique individualism.

Sociocultural Learning Theory

The sociocultural approach to learning has received much attention over the years. Therefore, this approach is not based on one unified theory but on different interpretations and applications of socioculturalism (John-Steiner & Mahn, 1996). Although there are several schools of sociocultural learning, all are connected by similar backgrounds and assumptions about learning, which are based on the theory of Lev Vygotsky (1978). According to Wertsch (1985):

> The three themes that form the core of Vygotsky's theoretical framework are: 1. a reliance on a genetic or developmental method, 2. the claim that higher mental processes in the individual have their origin in social processes, 3. the claim that mental processes can be understood only if we understand the tools and signs that mediate them (p. 14).

A starting point in the development of Vygotsky's theory is his critique of an individualistic perspective that denies social reality (Wertsch, 1985). His theory considers the individual as a social being and a member of a group in a particular context (Vygotsky, 1994). The starting point is that the learner is an actor who is integrated into a culture, context, and community and whose learning occurs in interactions with the community and the environment (Vygotsky,

1978). In this case, learning develops in the internal processes of the individual's mind in social interaction, which is influenced by other people, the environment, and culture. According to Vygotsky's theory, learning occurs in all interpersonal activities (John-Steiner & Mahn, 1996; Wenger, 1998).

To explain how social learning occurs, Vygotsky (1978) developed the concept of *the zone of proximal development* (ZPD), which is "the distance between actual developmental level as determined through independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Thus, the ZPD can be considered an area of learning that occurs in the space between independent competence and supported competence. In the ZPD, a task that is too difficult to solve based on an individual's current knowledge, skills, or intellectual resources can be solved in collaboration with others or with the help of others. Therefore, a person is more capable of performing intellectually demanding functions with the help of external support structures than without them. In the ZPD, individuals actively use tools and language to create a connection between the environment and their own activities. Through social interactions, learning through the use of cultural tools becomes an internal process within the individual. According to Vygotsky (1978), the individual learns first on a social level and only then on a psychological level.

Guidance and peers are considered essential in the ZPD. The learner can develop by working either with the help of a more competent person or by collaborating with peers. John-Steiner and Mahn (1996) presented a study by Brow et al. (1992), which found that people, adults, and children with different levels of expertise are active actors in the ZPD. According to them, the ZPD may also contain artifacts, such as books or videos. An essential interaction in sociocultural learning is supported interaction, which requires symbolic means (e.g., language) and physical means (i.e., the so-called material artifacts; Vygotsky, 1978). Through participation, an individual learns patterns and gains an understanding of the issue, and by sharing knowledge with others using various aids, they can increase learning opportunities (Wenger, 1998). In addition, both types of acts—collaborative and

individual—are part of a sociocultural framework (Billett, 2001). Group interaction and dialogue can produce new knowledge that does not depend on the merit of the individual but is something that the individual would not have acquired alone (Isaacs, 1999).

Sociocultural Elements in Self-Directed Learning

Unlike individualistic approaches, Vygotsky's theoretical framework emphasizes the importance of socioculturalism in learning. This framework and the concept of the ZPD have been widely used not only in the study of children's learning but also in adult learning, such as in the study of developmental work research (Engeström, 2005). Gallimore and Tharp (1999) observed that adult learning processes were similar to those of assisted and independent action in the ZPD in children. In studies of SDL, even in adults, Vygotsky's perspectives have rarely been applied. However, this focus is important for two reasons: (a) the critique of theories of SDL about the lack of a sociocultural perspective points to the need to examine self-direction and socioculturalism of learning simultaneously; (b) the emphasis on the individual-centered and individualistic approach to SDL can lead to practical problems, such as adults' workloads (see Lemmetty, 2020).

Although previous studies have not combined the theory of sociocultural learning with SDL, it is possible to find some sociocultural features emerged in descriptions of SDL. Some SDL studies (Author, 2020; Baskett, 1993; Bell, 2017; Foucher, 1995; Hiemstra & Brockett, 2012) have focused on the contextual factors that promote or limit SDL (e.g., learning context and teacher–student interaction factors). The importance of context in SDL was illustrated, for example, in the article by Spear and Mocker (1984). They presented SDL as a phenomenon defined by the environment. They pointed out, in contrast to Tough (1971) and Guglielmino (1977), that self-directed learners often did not have the ability to implement personal learning projects, but learning is determined by the circumstances surrounding learners more than by their "determination" or "inner inclination" (Spear & Mocker, 1984). Self-directed learners usually do not plan their learning projects but

choose a course from limited options that occur accidentally in their environment (Spear & Mocker, 1984, p. 4).

Similar observations have been made in the context of work: self-direction as autonomous practice at work is limited, as learning goals and resources are often not entirely at the discretion of individuals but are driven by organizational-level goals and the work environment (see, e.g., Artis & Harris, 2007; Lemmetty, 2020). Studies have found that structural and cultural factors in organizations, such as roles, collaboration, and leadership, play a role in the way self-directed learning takes place (Lemmetty, 2020). Overall, applying a holistic perspective in defining SDL, which Bouchard (2012) described as follows, would be worthwhile:

Self-directed learning has been defined as a process, a personality construct, and an environmentally determined phenomenon. In the end, any tangible occurrence of self-directed learning undoubtedly involves the interaction of all three aspects, in that it will entail (1) the application of some actions or procedures, (2) by a person who is not psychologically averse to the experience, (3) in an environment, which at the very least does not preclude the emergence of self-directed learning. (p. 3000).

Sociocultural features can also be traced from the latest SDL descriptions by Knowles and others (2012). According to these descriptions, in an SDL process, the teacher or facilitator can act as a supporter of the learner, but their tasks differ from those of a traditional teacher. Knowles et al. (2012) described the job of such facilitators as preparing the learner for a situation by providing information about the phenomenon or learning need and creating a learning-friendly communal atmosphere and collaborative framework. Similarly, Foucher (1995) described leaders in the context of work life as supporters of SDL. Kops (1997) also examined SDL as an organization-supported phenomenon influenced by open communication, clear goals, and opportunities for learners to make contacts and build networks with colleagues.

Case Study of a Police Organization

The aim of this article is to increase the understanding of the simultaneous manifestation of sociocultural elements and self-direction in learning

situations at work. In accordance with the sociocultural framework, the investigation of learning situations begins with the idea that the individual is integrated into the environment and the community, and these three factors interact (Vygotsky, 1978). We define self-direction according to SDL theory as the *responsible and active action of the individual* (Knowles, 1975). We examine the sociocultural elements using ZPD theory, paying attention to, for example, peers, guidance, and material artifacts of learning situations. In this article, we use a police organization as a case organization. Thus, the research question is: *how do the sociocultural elements and self-direction co-occur in police officers' descriptions of learning at work?*

The target organization of the study is the Preventive Policing Unit of the Helsinki Police Department in Finland. The aim of preventive police work is to prevent crimes before they occur and increase security and people's trust in the police. Preventive police work differs from many other areas of police work, such as emergency work. From the point of view of self-direction, it is significant that the role of the traditional "chain of command"–based guiding is not as strong. Preventive work should be seen more strongly as expert work, where the police's self-direction, multiprofessional cooperation, and situational problem solving alone or in a group are strong.

During the fall of 2020 and 2021, we interviewed a total of 26 police officers working in the preventive unit. The majority of the interviewees had been doing police work for over 5 years. Fewer than 10 of them had worked in the police for a few years or less. The interviews lasted about an hour and were conducted as semi-structured thematic interviews. In the interviews, each police officer was first asked to give a general overview of their own work, after which we discussed the themes of competence, learning, responsibilities, well-being, and leadership. In particular, the sections related to the themes of learning and responsibilities were used in this study, which provide answers to the research question. Interviewers asked more specific questions if respondents did not spontaneously talk about their learning experiences in sufficient depth and detail. The interview questions included, for example, "How would you describe learning at your work?" and "How do you feel responsible for your own learning in your work?"

The interviews were analyzed using qualitative, directed-based content analysis (see Hsieh & Shannon, 2005), whereby analysis starts with a theory or relevant research findings as guidance for the initial codes. The analyses focused on the experiences of learning at work and the descriptions of responsibility and active role (*self-direction*) of the individual presented within them. In addition, features of learning environments and collective activities were examined by locating and structuring the sociocultural elements (based on *sociocultural learning theory*) that emerged in the described learning situations.

Findings

In this section, we describe the findings of our case study. In the data citations, the sections that describe the sociocultural elements are bolded, and the sections that describe self-direction are in *italics*. In preventive police work, self-direction seemed to be a basic feature emerging in everyday work. Police officers typically described their work tasks as problem-based, and usually, complicated and not easily anticipated. Due to this, they needed to make decisions and take responsibility for the process of solving the problems: "Most of this work requires really self-directed, independent and responsible working style from the employee" (Police Officer 1, senior). "It is necessary to independently plan and think about how and what issues should be done and what things should be resolved" (Police Officer 12, senior).

The processes were not only individual or autonomous actions. In practice, many kinds of sociocultural elements could be found in the situations. Next, we present the most typical sociocultural elements and emergences of self-direction of the police officers' learning descriptions.

Peers, Experienced Colleagues, and Stakeholders as Supporters of Independency in Learning

In police work, in addition to formal roles (as constable, chief constable, etc.), team members have changing informal roles. These roles emerge from everyday learning situations and are situational learner–counselor roles. Counselor roles are sometimes permanent for certain experienced experts, but more often, the roles vary, depending on the nature of the problem and the topic. An employee can be a learner in one situation and a mentor in

another situation. The following description by a senior police officer shows that learning is independent but requires following others: "*A lot has had to be learned independently, thinking about how this should be done* [. . .] But still, **it develops by following other people and by going to places**. However, *you have to learn your own style* by doing things" (Police Officer 20, senior).

Even when the police officers described learning situations as self-directed, the processes included individual and collective actions. Thus, the individual's actions and interactions with colleagues alternated. As shown in the next example, police officers asked for help and for viewpoints from experienced colleagues: "One younger person was in the field today and *did a really good and independent job*, but **she still had a more experienced colleague there supporting her**" (Police Officer 1, senior). "*Even I have figured out a lot of things myself, I have mostly learned things through doing the work* and, of course, **from other colleagues, older colleagues**" (Police Officer 9, junior).

This consideration reflects the co-occurrence of sociocultural nature and self-direction in learning situation highlighting the importance of peers and guidance in learning. There is no demand for individuals to know and learn everything alone, but they have to actively ask and share ideas or problems with others:

The demands on *what I should know and master are terribly* broad here, but everyone does not need to know everything—one of us knows one thing and another person knows another thing and then **we ask and help each other depending on the specific situation**. (Police Officer 5, senior)

It also seems typical in preventive police work that competence is not always within a team but in broader contexts, such as multidisciplinary groups. Thus, cooperation across organizational boundaries is important to advance independent learning processes and the various problem-solving situations that come with them. Therefore, guidance or peers can be found in a wide variety of networks. An officer stated:

It is important to have a large network, know a wide range of people [xxx]. Then as soon *as you notice a problem, then the right name comes to your mind and you twig* that this person knows a lot about this. (Police Officer 6, senior)

Learning Environments, Work Tools, and Web Channels as Helpful Artifacts for Taking Responsibility of Learning

From the perspective of learning, a wide range of technological tools have become part of employees' daily lives (see also Curran et al., 2019; Song & Hill, 2007). These tools provide opportunities for learning in everyday work by quickly providing information and perspectives on various issues. According to Vygotsky's theory, material artifacts include books and other tools that support learning (Vygotsky, 1978, 1994; Wenger, 1998). The interviewees provided many descriptions of the use of tools, such as Google and blogs, which supported their active role in learning situations. Police Officer 4 (senior) said, "We read **through relevant blogs almost daily** to get to know what's going on in this realm from the point of view of our genre, and if there's anything new and important there then *you have to take it further and find out more*." Social media and other virtual channels are also tools for achieving an objective or obtaining an artifact (e.g., image, video, or text), which promotes the individual's own learning process, but could also be a way to support others' understanding. Police Officer 22 (Junior) described:

"I also do social media, but I told others I wasn't going to do it the same way others do. **I noticed that there were already a lot of similar channels**, *I wanted to start doing it in my own way, to think in a completely different way* [. . .] I want to show others with my own example that you can do this also in such a different, new way."

Other material factors that were present in learning situations were linked to police work tools. The artifact itself was usually the thing that had to be learned. In that case, experimentation and the use of the tool were, of course, means of learning. Police Officer 2 (senior) stated, "**A new function** was added to the field computer, *so we went to a police car and found out that there is a new function and tried out how it works*."

Knowledge sharing also occurred through various office facilities. A flipchart with brochures, pictures, and messages provided opportunities for learning something new. In addition, the open office, for

example, appeared to be an arena for shared learning: "In this work, *things become personalized and therefore one must know how to take the reins*; however, as a learner, I feel that **this open office** is the only thing that I can stay on the map and can learn from others" (Police Officer 17, senior).

The Supervisor's Role as a Facilitator of Self-Direction in Learning

In addition to peers playing a significant role in employee learning processes, interviewees emphasized the importance of supervisors. Managerial work in the form of facilitating, coaching, and guiding an employee promoted the advancement for self-direction. The encouragement to experiment also seemed important in the work of supervisors, as the following quote shows: "A **young guy once asked his supervisor 'how to do this**', that he had a desire to do this. The supervisor said that 'I don't know—*you know much better, so just try*'" (Police Officer 4, senior).

Asking questions and providing encouragement were typical supervisor behaviors, which promoted discussion, and thus, problem solving. Police Officer 13 (senior) said:

I feel that *in this kind of [self-directed] work* it is good that the **supervisor is coaching, sparring, that is, not commanding, but more conversational relationship** [xxx]. We have **daily discussion with my supervisor** about how things can be done well every day.

Supervisors are role models, and their actions can set an example for others. However, direct copying of activities is not appropriate, rather the focus in on the application: "By **following more experienced colleagues or a supervisor, you will be able to get a model**, not copy it yourself, but *apply and then format the model which suits to you*" (Police Officer 19, senior). Self-direction extended to everyday work and all kinds of decision-making, but at the same time, police officers emphasized the importance of supervisors as supporters of decision-making. Police Officer 7 (junior) stated:

You have to use your own brain here, even when you think what you start to do today or tomorrow. Very self-directed work, but **team leaders are then in a different position, they are supporting it**, but they are largely like any other coworkers.

Discussion and Conclusions

In this study, we found that in polices' descriptions of learning in everyday work, sociocultural elements and self-direction coexist. In particular, it appears that sociocultural elements are a prerequisite for the realization of self-direction in learning. Thus, this study strengthens the understanding of learning at daily work not only as an individual, autonomous, or self-directed entity but also as a sociocultural one.

Based on our data, also in those descriptions where the police say that learning is independent, autonomous, or self-directed, there were also several actors and factors outside of individual that were important for learning situations. These notions also appear to be consistent compared to previous studies. First, colleagues or stakeholders shared their own experiences and views with the learner when the importance of interaction and collaboration was demonstrated (see also Author, 2020; Kops, 1997). Second, several artifacts served as tools for enabling individual learning. Web-based channels, blogs, and social media were typical learning resources (see also Curran, 2019). Third, the research also revealed more formal instructor roles, which may have been held by a supervisor (see also Foucher, 1995). The point of the supervisory work was to be a supporter and guide.

As learning situations were strongly influenced by other people and the available equipment and tools, the study confirms the claim of previous studies (see, e.g., Lemmetty, 2020) that from the individual's point of view, self-direction is a momentary activity in the wider context of social activity. From a sociocultural point of view, it could be said that learning at daily work is an entity in which individual responsibility alternates with collectivity, tools, and organizational frameworks (see also Lemmetty, 2020; Bouchard, 2012; Boucouvalas, 2009). Thus, an individual's learning situations, such as those in which they take responsibility in everyday work, can be considered ZPDs. The individual would not reach a new level of competence or solve a problem through learning without collaborating and interacting with peers or other counselors.

However, the role of the individual in learning is not exclusive or trivial. The findings of the present study demonstrate and reinforce previous understandings of

the interaction between self-direction and sociocultural frameworks (Lemmetty, 2020; Bouchard, 2012; Wertsch, 1985) in work–life learning situations. For example, based on the data individual responsibility and autonomy are important parts of the learning processes, as individuals should make decisions and manage different situations (see also Noe & Ellingson, 2017). However, the realization of self-direction in practice depends also on factors outside the individual (see Bouchard, 2012). Workplaces should ensure that individuals have adequate tools and opportunities, for example, to search for information, share knowledge, and participate in various events. In this case, workplaces should not automatically expect self-direction in any situation; they should also consider the operating environment in which self-direction is expected to emerge.

Interview quotes showed that both older and younger employees need support. More experienced employees play a key role in supporting younger colleagues, but on the other hand, younger ones can also act as guides for seniors. Self-direction is supported not only by the availability of enough shared information but also by the incentive to try to participate in new situations. In the workplace, employees' skills to guide each other's learning should also be strengthened: direct instructions and regulations can be detrimental to self-directedness, but adequate frameworks and models are needed for individuals to dare to make decisions and try new things. Self-direction and continuous learning are increasingly present now and in the future in different workplaces, which is why training supervisors in the themes of self-direction and sociocultural elements of learning at work would be beneficial. As learning processes are linked to everyday work situations, it would also be important to understand them at the level of the entire work community. In the development of work communities into learning communities, it would be important to concretize and make visible the self-directed and sociocultural elements of learning. Thus, each member of the work community could become more aware of their own role in community learning. Based on the study, it can also be recommended that human resource developers pay more and more attention, for example, to the introduction of new tools or work processes: the opportunities to share

experiences and reflect together would help learning in addition to introducing new tools only through experimentation.

The limitation of this study is that it involved only one organization and one context. Thus, the information obtained from this research may not be transferable to other contexts. For this reason, it is necessary to also investigate self-direction and sociocultural elements in various private and public sector organizations in the future. The consideration of self-direction is also important because more and more employees are working remotely. Online environments and various virtual discussion channels are thus an important state of interaction, which also creates a new kind of framework for the responsibility and learning of individuals. The results of this study can help to form an analytical framework and tools for exploring self-direction and sociocultural elements in different learning environments and organizations in the future.

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