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Agency: Taking stock of workplace learning research

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Agency: Taking stock of workplace learning research

Abstract: This chapter presents a discussion of the concept of agency. Agency is understood as a multifaceted construct describing the idea that human beings make choices, act on these choices, and thereby exercise influence on their own lives as well as their environment. We argue that the concept is discussed from three different perspectives in the literature—transformational, dispositional, and relational—that are each related to learning and development in work contexts. These perspectives do not reflect incompatible positions but rather different aspects of the same phenomena. The chapter also offers an avenue of insight into empirical studies that employ agency as a central concept as well as discussions about concepts that closely overlap with ideas of human beings as agents of power and influence.

Keywords: agency, workplace learning, professional development, proactivity, self-direction

1 Introduction

In a rather broad and general sense, the concept of agency refers to something or someone having the capacity and the willingness to cause something else (Schlosser, 2015; Shanahan & Hood, 2000). The causing entity is referred to as an *agent*, and, within the social and educational sciences, this agent is usually a human being. In other words, within these scholarly fields, the concept of agency subsumes the notion that “human beings are agents of influence and power who are able to cause things and to bring about change” (Goller, 2017, p. 1). Based on this working definition, agency is related to the making of decisions and choices of human beings as well as their attempts to exercise control over their own lives, along with their physical and social contexts (Emirbayer & Mische, 1998; Eteläpelto, Vähäsantanen, Hökkä, & Paloniemi, 2013).

Within discourses about workplace learning and professional development, notions of agency have been quite prevalent in the last few years (Goller & Paloniemi, 2017; Tynjälä, 2013). The concept has been assumed to have explanatory power to further our understanding of how and why individuals learn within or for purposes related to professional contexts. On the one hand, agency is used to explain how individuals affect their own learning and developmental processes by, for instance, purposefully directing their attention or by actively creating opportunities for professional advancement. On the other hand, the concept describes more a relational factor that mediates between the individual and the environment. From this perspective, human agency shapes how individuals interact and engage with the affordances provided by the environment. Taken together, it might not be surprising that the concept appeals to many scholars. In a certain sense, the notion of agency seems to explain and shed light on the individual’s role within learning and developmental processes in relation to more structural factors

of the environment, including workplace characteristics or the nature of the work as such.

Most of the agency-related discussions are theoretical and frequently quite abstract. In addition, many authors use the concept in different ways; therefore, the idea of agency has not stood uncontested. Some scholars have questioned its explanatory power because of vague descriptions. Moreover, whether the concept of agency can be meaningfully and usefully employed in empirical research has been challenged (Goller, 2017; Mulder, 2014). Nevertheless, ideas related to agency have inspired a range of scholars to conduct empirical studies. So far, the majority of these efforts have been qualitative in nature (e.g., Bryson, Pajo, Ward, & Mallon, 2006; Smith, 2006; Wall, Tran, & Soejatminah, 2017). However, in recent years, a range of authors have also attempted to operationalise the concept and subsequently conducted further studies that employ hypothesis-testing methods (e.g., Goller, 2017; Vähäsantanen, Räikkönen, Paloniemi, Hökkä, & Eteläpelto, 2019). These relatively recent developments offer new insights into the place of empirical research within discussions about agency and workplace learning.

In this chapter, we aim to present a short overview and reflection on the recent discussions about agency¹ in relation to workplace learning and professional development. In the next section, the different meanings of agency within this body of literature are explored. There follows a section illustrating relevant examples of empirical studies that explicitly use agency as a central concept in researching workplace learning and development. Next, other concepts and constructs that are used in researching notions of agentic individuals and behaviours in working-life contexts are discussed in relation to agency. The chapter closes with a summary pointing out open questions and research gaps that are still to be tackled.

2 Agency as an abstract and multifaceted concept

As foreshadowed above, the concept of agency has been used in a multitude of different ways. While some authors use agency to describe actors' choices and actions as well as the consequences of these activities, others use the concept to express the underlying dispositions and features that allow individuals to make such choices and to engage in

1 In this chapter, we use the term *agency* to subsume all ideas that have been discussed elsewhere under the labels of *professional agency*, *work agency*, *personal agency*, *human agency*, *individual agency*, or *epistemological agency* (see Billett, 2006; Edwards, 2005; Eteläpelto et al., 2013; Goller, 2017; Harteis & Goller, 2014; Smith, 2017). In this way, we can discuss the whole range of literature pertaining to agency in the context of learning and development at and for work without being too narrow or exclusive. At the same time, however, we decided to focus our discussion only on agency as an individual-level phenomenon, meaning that studies describing agency primarily from a collective perspective have been excluded (see also Edwards, 2005, 2009, 2010; Edwards & Mackenzie, 2005).

actions based on these choices (see, e.g., Goller & Harteis, 2017). Thus, within the educational field, agency has mainly been understood as an individual feature (i.e., something people have) or as behavioural action (i.e., something people do) (Paloniemi & Goller, 2017). Consequently, some authors conceptualise agency as a mainly individual-level phenomenon, while others use it to describe collective and collaborative actions. This diversity of meanings attached to the concept of agency can mainly be traced back to the diverse theoretical frameworks different authors have adopted (e.g., sociocultural vs. cognitive; see Eteläpelto, 2017).

The aim of this section is to structure the agency discussion around three main perspectives that include and expand on the aforementioned distinction between agency as an individual feature and a behavioural action: (a) agency as a transformational phenomenon, (b) agency as a disposition, and (c) agency as a relational phenomenon. We herein draw heavily both on our own ideas published elsewhere as well as on prior writings of other authors (Damşa, Froehlich, & Gegenfurtner, 2017; Eteläpelto et al., 2013; Paloniemi & Goller, 2017).

The three perspectives on agency are illustrated in Figure 1. The perspectives are to be understood as analytical accounts that must be interpreted as neither mutually exclusive nor incompatible. Instead, we perceive them as variations of the same main idea which are conceptualised from different perspectives and which can be well integrated (see also Damşa et al., 2017; Goller, 2017; Goller & Harteis, 2017). Both the relational as well as the dispositional perspectives answer the questions of why and how intensively individuals engage in agentic efforts that are discussed within the transformational perspective. The relational perspective emphasises more strongly that agency is deeply embedded and rooted in sociocultural practices. The dispositional perspective, while acknowledging the high relevance of contextual factors, places a more intense focus on individual factors that explain both the intentionality and the intensity of human agency. After a more detailed conceptual description of these three perspectives in Secs. 2.1 through 2.3, there follows a combined discussion on how agency is related to professional learning and development in Sec. 2.4.

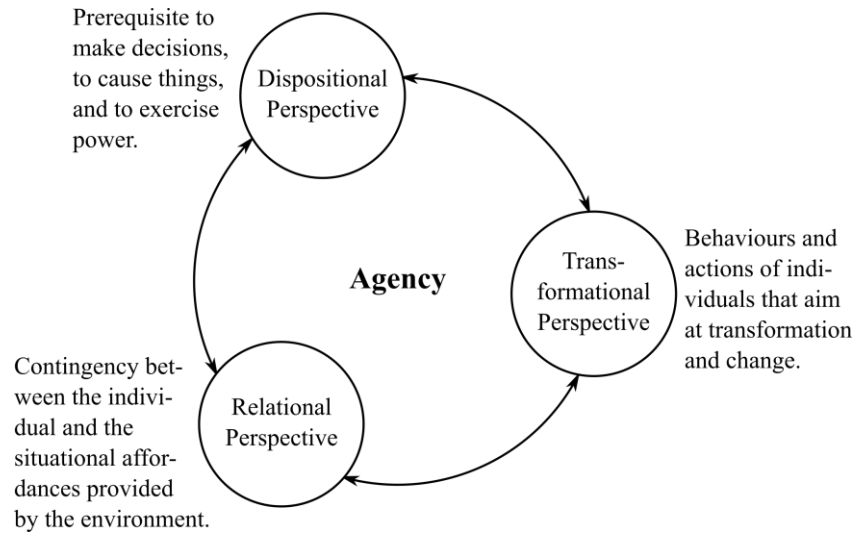


Figure 1. Three perspectives of agency

2.1 Transformational perspective

From this perspective, agency is directly related to change initiated by an actor. Individuals that exercise agency try to make a difference by actively shaping their life circumstances, by making a difference in the status quo, or by taking stances against undesirable conditions. As noted by Damşa et al. (2017), such efforts are strongly future-oriented since they aim to change a current state to bring about some anticipated future situation. Emirbayer and Mische (1998) describe this transformational perspective in their projective dimension of agency, as do Hitlin and Elder (2007b) in their life-course agency construction.

Transformational efforts initiated by an actor can either be directed towards the individual her/himself or the individual's environment, including other external actors (Harteis & Goller, 2014). Agency that is directed towards the individual subsumes all activities in which the actor attempts to purposefully shape her/his own career, deliberately pursue her/his own learning activities, or actively negotiate her/his own identity. Typical examples are workers who actively seek feedback on their job performance to further their development (e.g., Harwood & Froehlich, 2017) or incumbents who negotiate with their supervisors about potential training opportunities (e.g., Evans & Kersh, 2006). Another example is a worker's active reflection about her/his work attitudes or beliefs that might result in a change of work behaviour in the future. However, workers might also engage in active reflection that strengthens their identity in the future. Instead, agency that is directed towards the environment includes all efforts in which individuals actively aim to change the situational or social circumstances of their work. For instance, incumbents might develop or transform current work practices or address social tensions at work. At the same time, this facet of

agency might manifest itself when individuals deliberately assume responsibility for others.

Discussions relating to the transformational perspective always conceptualise agency as something that an individual does, either overtly, as visible behaviour, or latently, in the sense of mental actions (Goller & Harteis, 2017). In any case, transformational agency requires individuals to invest effort and to make choices in favour of the activity in question. In addition, individuals need to exhibit perseverance in the face of problems and difficulties. Such obstacles may be a direct consequence of situational and contextual constraints. This emphasises that workplaces are not uncontested settings; it would be too simplistic to assume that individuals are effortlessly able to change existing circumstances or to create as yet non-existent learning opportunities. In other words, transformational agency stands independent of neither sociocultural nor material context factors. While some of these factors act as constraints that hinder individuals from taking charge of their lives, others actively support individuals' transformational efforts. For instance, work environments that are characterised by an organisational culture that is open to suggestions for change are much more likely to support any type of transformational agency compared to work environments that are less flexible and more conservative. Such organisational cultures are the product of not only leadership that signals to employees that agentic behaviour is accepted or even desired but also collegial support and trust that ensure the safety to engage in agentic actions that might somehow be risk related.

2.2 Dispositional perspective

Scholars that adopt a dispositional perspective conceptualise agency as a disposition (e.g., Bryson et al., 2006; Eraut, 2007; Harteis & Goller, 2014). Dispositions, in this context, are understood as personal features that determine the likelihood that an individual will adopt particular goals and engage in certain behavioural patterns (Dweck & Leggett, 1988). In other words, agency as dispositional concept subsumes all varieties of individual-level characteristics that explain why some individuals exercise more agency than others. Agency is not characterised as something individuals do but rather something they are able to employ. Inherent in this perspective is that some individuals are able to utilise their agency to a greater extent than others (Hitlin & Elder, 2007a).

Harteis and Goller (2014) illustrate this notion of agency with an analytical continuum between two theoretical extrema: agentic and non-agentic individuals (see, for a similar conceptualisation, Little, Hawley, Henrich, & Marsland, 2004; see also the early writings of DeCharms, 1968). While agentic individuals frequently take charge of their lives and attempt to control their environments, non-agentic individuals would rather comply with given situations. Non-agentic individuals perceive themselves first

as a product of external forces to which they tend to react instead of taking the initiative as agentic individuals would do. Along this continuum, agentic individuals more often engage in transformational efforts that are related to learning and development at work than do their non-agentic counterparts.

Dispositional agency is firmly rooted in psychological theories as well as research on life-course development (e.g., Bandura, 2001, 2006; Fay & Frese, 2001; Parker, Bindl, & Strauss, 2010; Shanahan & Elder, 2002). For instance, influenced by these discourses, Goller (2017) introduced three facets of agency that explain why some individuals tend to utilise their agency more than others: (a) agency competence, (b) agency beliefs, and (c) agency personality. *Agency competence* describes the ability to come up with goals, make decisions in favour of or against these goals, translate these decisions into action plans, implement these action plans in actual behaviour, constantly evaluate one's own progress regarding goal achievement, and persist in the face of challenges and obstacles. *Agency beliefs* are subjective perceptions of the extent to which one has the abilities just described or not. Finally, *agency personality* is a trait-like component that can be defined as a stable and relatively situation-unspecific inclination to take control over one's life and environment. Within this model, Goller assumes that individuals who are agentially competent, believe in their agency competences, and feature a strong agency personality tend to exercise more transformational agency than individuals without these characteristics (see also Goller & Harteis, 2017). Another example is the work of Raemdonck (2006), who introduced the notion of self-directedness and self-directed learning orientation (see also Raemdonck, Gijbels, & van Groen, 2014; Raemdonck, Thijssen, & de Greef, 2017). Raemdonck assumes that some individuals differ in their inclination "to take an active and self-starting approach to learning activities and situations and to persist in overcoming barriers and setbacks to learning" (Raemdonck et al., 2014, p. 192) in the context of work. In her model, it is individuals with a strong self-directed learning orientation that tend to engage more often in agentic behaviours related to learning and development than less self-directed actors. Both Goller and Raemdonck present empirical findings in their studies that speak in favour of their theoretical presumptions.

At first glance, the dispositional perspective of agency might seem to deny the relevance of social, cultural, historical, and physical factors in explaining human behaviour. Dispositions alone seem to determine how individuals act. However, dispositions are not understood as having a deterministic influence on behaviour (Goller & Harteis, 2017). Instead, contextual factors are able to change the a priori probability of whether individuals exercise agency or not (Dweck & Legett, 1988). While some situational contextual factors encourage individuals to take charge and take control, others actually discourage and prevent them from doing so. In other words, the situation

can either afford or constrain human agency to a certain extent (see Sec. 2.1 as well as Elder & Shanahan, 2007; Shanahan & Hood, 2000). For instance, work environments that provide sufficient discretion make it much easier for agentic individuals to act out their agency dispositions, while situations that do not afford much autonomy may hinder even the most agentic individuals from exercising their agency traits. In a similar vein, social support and an atmosphere of trust can be perceived as moderators that help individuals to actualise their agentic dispositions. For a more detailed discussion of possible context factors that influence individuals to act agentially, see Goller (2017) as well as Goller and Harteis (2017).

2.3 Relational perspective

From this perspective, agency is conceptualised as an analytical tool that helps in further understanding the interaction between individuals and their contexts. To be more concrete, agency is understood as a mediator that bridges the realm of the person and the domain of the context it is embedded in (Damşa et al., 2017). The concept thereby facilitates further understanding of how individuals interact with their environment and how the environment is perceived by individuals.

An important assumption of the relational perspective is that individuals differ in the unique experiences they undergo during their lives. As a result of different life-courses and their cognitive legacies, each individual develops idiosyncratic values, goals, interests, beliefs, ideologies, and attitudes that manifest themselves in their personal identity as well as their sense of self (Billett, 2001, 2006; Billett & Smith, 2006; see also Vähäsantanen in this volume). It is exactly this personal identity or sense of self that determines how individuals construe external stimuli (i.e., how they make sense out of them) and how they engage with (i.e., how they react to) social suggestions they encounter (Billett & Smith, 2006). However, this mediation is by no means a passive process. Individuals are active agents that have the power to determine the degree to which they interact with their environment and with what level of intensity. At the same time, Billett and colleagues still acknowledge the role of social experiences in explaining individuals' behaviour. While conceding that the social sphere does, indeed, affect individuals, they emphasise that "social suggestions are never complete or comprehensive enough" (Billett & Smith, 2006, p. 145) to fully determine how individuals engage with their environment and that agency always plays a role. It follows that in writings that adopt a relational agency perspective, individual and social accounts are considered to be intricately intertwined and never fully separable.

This kind of thinking has been thoroughly incorporated into Eteläpelto and colleagues' (2013) *subject-centred sociocultural approach* to professional agency. This approach conceptualises professional agency as "practised when individuals exert

influence, make choices and take stances that affect their work and their professional identity” (p. 61). Agency is strongly intertwined with professional identity, and individuals’ experience, knowledge, and competencies are understood as resources for exercising agency in the context of sociocultural resources and circumstances at work. This implies the relational nature of agency in that individuals are interacting with and within specific contexts (see also Imants & Van der Wal, 2019). Although the authors conceptualise agency and social contexts as analytically separate entities, they understand them as mutually constitutive in the sense employed by Billett (2006). Overall, the relational approach to agency acknowledges the intertwined relation between the (agentic) individual and the social (structures), which shapes its discussion of this core relationship in learning and professional development.

2.4 Agency and its relationship to workplace learning and professional development

It remains to explain how agency is related to workplace learning and professional development. For this purpose, Billett’s (2001, 2006) co-participation model is appropriate and useful. The model explores the interdependence of work practices as well as individuals’ participation in these practices. Billett assumes that opportunities for learning and development at work arise when employees engage in goal-directed work activities such as problem-solving and social interactions that are constituent of a certain workplace (see also Hager, 2013). Such activities are powerful means of learning and development because they have the potential to lead to cognitive adaptations (see, e.g., Anderson, 1982, 1993; Boshuizen & Schmidt, 1992, 2008; Gruber, 1999; Kolb, 1984; Kolodner, 1983). Other opportunities to construct knowledge and skills relevant for work can arise through employees’ engagement in more formal learning activities such as training (see also Goller, 2017). However, it is not only opportunities afforded by the work environment that explain learning and development. In Billett’s model, employees are not understood as passive entities that are subjugated by their social context and, therefore, just reactively engage with what is afforded to them at work. Instead, Billett suggests that employees, through exercising agency, actively decide how to interact with their environment. They are, at least in a certain sense, able to select the opportunities they want to use as well as how to mentally and overtly engage with the demands of their work.

On a quite fundamental level, employees decide—based on their values, goals, interests, beliefs, ideologies, and attitudes—how much attention they will direct towards certain work phenomena and how they will respond to them (Billett, 2004, 2006, 2011). Responses might vary from completely ignoring or even rejecting what is suggested by the workplace to fully engaging in the activities that are afforded to them. For instance, Gustavsson (2007) found that paper mill operators actively decided whether they wanted

to participate in certain problem situations at work or not. In Gustavsson's interviews, some of the operators argued that they could indeed solve certain problems but instead chose not to do so since they saw them as part of neither their job definition nor their work identity. In other words, through the exercise of agency, these workers determined how they engaged with their work and what experiences they could create and learn by. Similarly, Billett (2000) found evidence that a young recruit refused to take part in a mentoring scheme offered by his organisation because he did not appreciate the mentor's guidance. Again, it was the recruit's values and beliefs that led to the active denial of the help and advice afforded by his more senior colleague. Consequently, it can be argued that the exercise of agency determined the degree of proximal guidance the novice had access to and, therefore, the learning opportunities connected to it. In yet another study, Goller (2017) interviewed geriatric care nurses and found evidence that while some nurses tried actively to avoid taking part in training opportunities offered by their employer, others were keen participants in seminars or workshops since they perceived them as opportunities to develop expertise or to progress within the nursing home hierarchy. The latter were especially identified as employees that actively wanted to take charge of their professional advancement. All three examples can be explained using either the relational perspective of agency (i.e., choices regarding how to react to social suggestions based on their sense of self or work identity) or the dispositional perspective (i.e., some individuals have a stronger disposition to take charge of their professional lives).

Individuals, however, are capable of not only actively dealing with social suggestions from their workplace but also agentically creating opportunities for learning and development that otherwise would not have been afforded to them (Goller & Billett, 2014). On the one hand, such efforts can explicitly focus on learning and development. For instance, employees that seek feedback and information to improve themselves actively create stimuli for reflection about their own performance levels, deficits, or even their work identity, including current beliefs or attitudes that would not have existed without their effort. It is these reflections that act as triggers for informal learning in work contexts, including the acquisition of new knowledge or the differentiation of existing knowledge structures (Kolb, 1984; Schley & van Woerkom, 2014). Similarly, individuals who succeed in negotiating additional training courses actively secure themselves new formal learning opportunities. On the other hand, transformational agency might lead to workplace learning and professional development only as a by-product. For instance, workers that manage to craft their job actively by seeking out more interesting tasks may not actively pursue learning. However, they create new experiences that might result in important insights and new knowledge. Also, individuals who attempt to change structures and processes at work create opportunities for learning

and development, although this may not be an explicit goal of their agentic behaviour (see also Sec. 4.3). Such efforts require the individual to reflect actively on work practices and to come up with potential solutions that address the issues perceived. It is often the changes that take place in work structures, tasks, and/or practices that evoke the (re)construction and possible transformation of professional identity (e.g., Eteläpelto et al., 2014). Taken together, all these examples are illustrations of agency that are discussed from the transformational perspective.

To sum up, the concept of agency can indeed be used to explain how and why employees learn and develop in work contexts. Moreover, it conceptualises how and why employees engage with the social suggestions as well as the contextual constraints of their workplace. The transformational perspective describes how employees take charge of their lives and how this exercise of agency leads to cognitive changes that are the basis of learning and development. Both the dispositional and the relational perspectives explain why employees do or do not engage in such transformational efforts. Despite the differences in theoretical understandings and approaches to agency, the scholars who employ these different perspectives all seem to acknowledge the relevance of agency for explaining workplace learning and professional development processes.

3 Illustrations of empirical research on agency and workplace learning

This section illustrates examples of current empirical studies that have used agency as a central concept in workplace learning research. The studies presented represent different conceptual as well as methodological choices with regard to investigating agency. One should note, however, that the studies included here are not meant to offer a comprehensive review of empirical research on work-related agency. Instead, they are selected to illustrate the current state of the research explicitly on agency within the workplace learning literature that has not been covered in earlier reviews on agency (e.g., Eteläpelto et al., 2013; Goller, 2017). These studies highlight the different methodological approaches adopted in research on agency as well as the different content arenas covered. Sec. 3.1 will concentrate on qualitative studies, while Sec. 3.2 will focus on quantitative studies. This separation is relevant since each research approach is concerned with different conceptual aims.

3.1 Qualitative studies on agency intertwined with professional identity and workplace participation

The research on agency to date has mostly been qualitative in nature. This is understandable because of the multiple and even contesting conceptualisations of the

phenomenon. Within these studies, agency has been investigated in different work domains and different settings, which has led to further compartmentalisation of the concept into various sub-categories that have been respectively developed and discussed. Examples of these sub-categories include identity agency, creative agency, and dialogical agency (Paloniemi & Goller, 2017). In many of the related studies, the focus is on exploring the resources for and/or the obstacles to agency—either individual or social—in certain work environments and conditions.

Qualitative research on agency at work has mostly approached agency from relational and transformational perspectives, focusing on individual actions within or in relation to work communities. As illustrated in the compilation *Agency at Work* (Goller & Paloniemi, 2017), these studies have contributed to an understanding of agentic work and/or learning practices in specific circumstances in the professional lives of individuals. Emphasis is further placed on the interplay between individual factors (e.g., professional competence, identity) and sociocultural affordances in the workplace (e.g., leadership practices, the nature of work). In investigating agentic actions embedded in social circumstances at work, recent research has highlighted and utilised active participation in work practices and the relational nature of agency to explain learning and development (Paloniemi & Goller, 2017). Consequently, many of the studies have concentrated on examining the process of learning via professional identity construction or participation in work community practices in specific circumstances. Thus, agency is enacted within organisational work practices and in social relationships, which have a close connection to professional identity construction.

So far, the majority of the research on agency and professional learning has been conducted among white-collar employees, such as teachers and health care professionals. An exception is a study by Fuller and Unwin (2017), which focused on low-grade workers in health care. They examined the agentic dimension of workplace participation by exploring the various ways that hospital porters developed and used their expertise at work to create positive occupational identities and crafted their jobs. The interview data revealed that the porters had become knowledgeable practitioners not only in their formal role of moving patients and materials but also when engaging in patient care work. The hospital porters conceived of caring and identification with the healthcare workforce as primary functions and sources of satisfaction in their job. Overall, the study by Fuller and Unwin (2017) illustrates the meaning of agency for (re)constructing identity through active job crafting, thus representing both relational and transformational perspectives on agency (see Sec. 4.1 for a short discussion of the concept of job crafting in the context of the proactivity literature).

Similar to Fuller and Unwin, Pappa et al. (2017a, 2017b) highlighted the connection between professional identity and agency. In their studies on content and language

integrated learning (CLIL) teachers' agency, the researchers adopted a holistic and dynamic theoretical conceptualisation of agency, placing particular emphasis on the professional relationships and socio-cultural environment of classrooms and schools. Their findings showed that teachers exercised identity agency in terms of both pedagogical agency (e.g., pedagogical choices) and relational agency (e.g., shared collegiality). Thus, identity agency was enacted as not only implementing autonomous and reflective actions in the classroom but also attending to one's own opportunities for participation and membership in a teacher community. Without acknowledging the individual nature of identity (e.g., prior experience, pedagogical values), the researchers underlined the meaning of shared collegial practices in a work community, through which teacher agency was exercised. Further, autonomy, openness to change, teacher versatility, and collegial community were found to support teacher agency (Pappa et al., 2017a).

Adopting a relational perspective on agency, Wall et al.'s (2017) study showed how international students exercised agency to resist and overcome discrimination and deskilling during their work-integrated vocational learning. In doing so, building social networks, utilising relationships, and accessing their social capital were means the students used in practicing agency at their workplaces. This study emphasises the role of localised knowledge in helping individuals to navigate particular workplace settings and structures and, thereby, to secure workplace learning opportunities.

Both relational and transformational perspectives can be identified in a recent study by Hökkä et al. (2019b). The research focused in investigating leaders' agency in terms of identity agency, relationship agency, and organisation agency. The identity agency aspect focused on the ways the leaders actualised and reshaped their core commitments, values, ethical standards, and competencies at work. The relationship agency of the leaders was manifested in the ways they led and supported the work, interaction, and learning of their staff. In response to administrative issues and strategic instructions from the upper management, the leaders were faced with the need to exercise organisation agency, for example, in terms of raising productivity levels. Overall, the enactment of leaders' agency turned out to be a multifaceted and emotional endeavour that was by no means solely a matter of rational considerations.

So far, the research on agency in working-life contexts has focused mainly on rational and goal-orientated actions, whereas less attention has been paid to the role of emotions in individuals' agentic actions at work and in learning. The studies by Hökkä et al. (2017; 2019b) have contested the purely rational nature of work-related agency and emphasised a need to include emotional aspects in the discussion of agency at work and in learning.

The above-described qualitative studies on agency and learning in work contexts share an understanding of agency as a relational (and partly as a transformational)

phenomenon. Individual characteristics (i.e., experiences, values, and competences) have their say in the manifestations of agency at work. This is most clearly visible in the descriptions and discussions of identity agency. Further, the interplay between the individual and the social is elaborated, especially in participation in work communities and the resources offered by the structural and cultural affordances of the workplace. In addition, the studies seem to approach workplace learning more from a process-orientated rather than a learning-outcome approach.

3.2 Quantitative studies exploring the structure and resources of agency

As most studies to date have been qualitative in nature, some scholars have called for more quantitative research that examines how agency relates to learning and development using larger samples and hypothesis-testing methods (e.g., Goller, 2017; Paloniemi & Goller, 2017). Currently, only a few studies have taken on this challenge in the context of workplace learning and professional development. On the one hand, some of them have started to develop and test measurement instruments that allow the operationalisation of agency in various contexts. On the other, some have already tested various hypotheses partially derived from prior qualitative work on the relationship between agency and workplace learning.

Vähäsantanen and colleagues (2019b) developed and validated the Professional Agency Measurement (PAM), which comprises 17 items. Professional agency was found to consist of three separate dimensions: (a) influencing at work (e.g., participation in the preparation of matters in one's work unit), (b) developing work practices (e.g., active collaboration with others in one's work unit), and (c) negotiating professional identity (e.g., realising professional goals in one's work). Empirically, it was possible to show that agency indeed comprises individual actions targeting either the actors' self—that is, her/his identity—or the work as such (see Sec. 2.1). The study also showed that the three dimensions of agency were closely linked to learning at work. Another study, utilising the PAM, examined how agency is related to employees' hierarchical and occupational position in an organisation (Vähäsantanen et al., 2019a). A multi-method study (utilising questionnaire data and semi-structured interviews) investigated the professional agency of academics in a Finnish university context. The findings showed that academics working in a leadership position reported stronger professional agency, especially in terms of influencing at work, than did the participating teachers and researchers. This was especially the case concerning decision-making and preparation for decisions in the work community (i.e., a university department). On the contrary, the teachers and researchers assessed their possibilities of influence at work as being as good as the leaders' only where limited to their own work.

Similarly, via adopting a multi-dimensional perspective on professional agency, Pyhältö, Pietarinen, and Soini (2015) studied teachers' professional agency and learning in school communities. The findings of their survey study showed that teachers' professional agency as an integrative concept included five interrelated elements: (a) transforming the teaching practices, (b) collective efficacy, (c) positive interdependency, (d) mutual agreement, and (e) active help-seeking. Teacher agency was found to be a central determinant in the successful transformation of a school into an active community (see also Imants & Van der Wal, 2019). However, this kind of successful transformation requires the construction of a collaborative learning environment and offering learning opportunities to individual teachers, specifically in co-regulating stress. The meaning of agency-supportive leadership practices has also been underlined in qualitative studies focusing on the meaning of leadership in enhancing agency and learning at work (e.g., Collin et al., 2017; Hökkä et al., 2017; Hökkä et al., 2019a). It seems that leadership is an especially important resource in enabling transformational agency in work contexts.

Goller (2017) included both the dispositional and transformational perspectives in his study on the relationship between agency, workplace learning, and expertise development in the domain of geriatric care nursing. On the dispositional level, work agency was conceptualised via the three individual facets of agency competence, agency beliefs, and agency personality already described in Section 2.2. Further, agentic actions and choices (e.g., job enrichment, participation in institutionalised learning activities) were seen as a result of this agency disposition and reflecting the transformational perspective of the concept. The study aimed to empirically examine a model of impact relationships between work agency, agentic actions, and, ultimately, professional development (i.e., expertise) using hypothesis-testing methods. The findings of his study confirmed that agency as a dispositional phenomenon is indeed a positive predictor of transformational agentic actions at work. In other words, individuals that could be characterised as agentic engaged more often in agentic actions at work than did less agentic ones. In addition, those nurses who deliberately aimed at job enrichment and participation in institutionalised learning activities exhibited higher expertise compared to the nurses who engaged less often in deliberate agentic actions. Based on his study, Goller (2017) concludes that work agency as an individual feature is a predictor of engagement in agentic actions at work and, thus, impacts on workplace learning and professional development (see also Goller & Harteis, 2017).

Overall, the research examples described above indicate that agency can be studied as a multidimensional phenomenon via quantitative measurement instruments across professional domains and industries. In addition, the instruments provide promising potential to explore in greater detail the relationship between agency and learning at

work as well as the differences in agency between individuals, professional groups, work industries, and countries. In addition, the empirical studies to come will provide important knowledge with practical implications aimed at fostering professional learning in work contexts by supporting the agency of employees in various work environments.

4 Widening the field: Constructs investigating similar notions

Thus far, only literature that uses agency as an explicit and distinct concept has been discussed in this chapter. At the same time, however, ideas about agents that take control of their lives and environments are also summarised under labels other than agency. Indeed, within the literature, a range of concepts can be identified that conceptualise similar notions. In the paragraph below, we will focus on three that are explicitly related to professional learning and development: (a) proactivity, (b) self-regulation and self-regulated learning, and (c) entrepreneurship and intrapreneurship. Each of the concepts will be briefly introduced in relation to the ideas of agency described earlier in the chapter.

4.1 Proactivity

Within the organisational behaviour literature, notions of agency are discussed mainly under the label of proactivity at work (e.g., Crant, 2000; Grant & Ashford, 2008; Parker & Collins, 2010; Tornau & Frese, 2013). Proactivity describes all kinds of behaviours of employees that are self-initiated, future-oriented, and aim to change either the individual her/himself or her/his situational context (Bindl & Parker, 2011). A part of the proactivity literature is concerned with the identification and conceptualisation of different phenomena in which employees (attempt to) initiate some kind of change. For instance, *voice* describes the idea of employees actively making constructive suggestions for change at work (Van Dyne & LePine, 1998), and *job crafting* subsumes all activities in which employees attempt to deliberately change the tasks and relational boundaries of their jobs (Wrzesniewski & Dutton, 2001). Other discussed phenomena are employees *taking charge* to initiate constructive change at work (Morrison & Phelps, 1999), making others aware of certain problems through *issue-selling* (Dutton & Ashford, 1993), actively *seeking feedback* about work performance or information about how to tackle work problems (Ashford & Cummings, 1983; Morrison, 1993), and deliberately engaging in active career planning (Parker & Collins, 2010). It follows that these ideas of proactive behaviour largely overlap with the transformational perspective of agency described above (see Sec. 2.1). At the same time, however, proactivity has also been discussed as a personality trait (*proactive personality*: Bateman & Crant, 1993; *personal initiative personality*: Fay & Frese, 2001), which explains why some

individuals engage more often in proactive behaviours than others. In this sense, proactivity is also closely connected to the dispositional perspective of agency (see Sec. 2.2).

Besides this phenomenon-driven research, scholars interested in proactivity have also invested substantial effort in explaining the psychological mechanism behind proactive behaviours at work. Grant and Ashford (2008) proposed that all kinds of proactive behaviours follow a course of three phases that are related to certain cognitive processes. In the first phase, individuals have to anticipate and mentally represent possible future states that are (a) different from the status quo and (b) desirable to bring about. These possible futures can be related to oneself (i.e., a possible future self; see also Cross & Markus, 1991) or one's circumstances (i.e., the work environment). In the second phase, these mental representations of desired futures need to be translated into concrete goals as well as action plans that link those goals with actions and outcomes (Parker et al., 2010). In other words, planning is needed to come up with feasible ways to realise the desired future states. The last phase includes all actions that help to meet the goals envisioned in the planning phase and bring about the envisioned change. During these phases, individuals need to monitor their own progress continually to understand the potential requirements of regulating one's own action strategies (Parker et al., 2010). In this context, reflection is a necessary requisite.

Ideas about proactivity have stimulated a range of empirical studies. These studies have focused mainly on the identification of individual and situational antecedents of proactive behaviour as well as the consequences that result from employees' exercise of proactivity (see, e.g., Goller, 2017; for an overview of this empirical work, see Fuller & Marler, 2009; Tornau & Frese, 2013). Most studies about the consequences of proactivity have investigated some measure of individual-level or organisational performance. Such studies suggest that the relationship between proactivity and performance can be theoretically explained by employees developing knowledge and competences due to their proactive behaviour (e.g., through feedback-seeking or intensive engagement with work problems; see Frese & Fay, 2001; Thomas et al., 2010). However, learning has not often been the focus of analysis in empirical studies investigating proactivity (see, however, Hornung, Rousseau, & Glaser, 2008).

4.2 Self-regulation and self-regulated learning

Theories of self-regulation are concerned with questions of how individuals set, follow, and reach their own goals (Zeidner, Boekaerts, & Pintrich, 2005). In addition, attention is given to how "people resist temptations, effortfully persist, and carefully weigh options to choose the optimal course of action to reach their goals" (Baumeister & Vohs, 2012, p. 180) in a range of different domains (e.g., health, education, sexual behaviour).

Agency within such theories is understood as the executive function of the self—that is, the facet of the self that originates and controls all actions that are intentional and deliberate. However, self-regulation also subsumes processes in which individuals agentially resist urges, delay certain gratifications, or interrupt habitual responses that could prevent them from meeting pre-set goals (Baumeister & Vohs, 2012). This is an important aspect since human beings constantly face conflicting goals that have to be dealt with (e.g., having a relaxing weekend vs. writing a chapter for a book that is due soon). Self-regulation is also required when individuals are confronted with obstacles and barriers that prevent them from reaching their goals. In such instances, individuals need to either persist in the face of upcoming challenges or find new strategies that are adequate to deal with new problems encountered (Pintrich, 2005). In this sense, ideas of self-regulation strongly reflect the discussions regarding relational agency summarised in Sec. 2.3. Self-regulation explains how individuals deal with external stimuli in their environment and how they engage with it.

Research on self-regulation has brought forward a multitude of theories, models, and empirical studies (see, for an overview, e.g., Vohs & Baumeister, 2016). For instance, some scholars (e.g., Carver & Scheier, 1998, 2016) are interested in how individuals constantly adjust their actions to meet certain goals on different hierarchical levels. This process can be modelled using feedback loops in which an agent evaluates the current state of affairs in light of a desired one and adjusts her/his behaviour for as long as the standard of the end state is not reached (test-operate-test-exit model, see also Miller, Galanter, & Pribram, 1960). In some models, such regulation processes are assumed to consume physiological as well as psychological resources and can only be maintained as long as those resources are available (e.g., Baumeister & Heatherton, 1996). Exercising self-regulation (i.e., making choices, monitoring progress to reach a goal, and finding new strategies to bypass obstacles) can lead to depletion effects that impair subsequent self-regulatory efforts until the required resources are re-established (Maranges & Baumeister, 2016). In other words, self-regulation is exhausting and cannot be continued indefinitely. This might explain why employees intensively exercise agency in one domain but not another. Apart from this resource view, differences in individuals' self-regulation have also been explained by trait characteristics. Evidence exists that some people are more inclined to engage in self-regulation than others and that this tendency can be traced back to certain personality aspects (e.g., Hoyle, 2006). This facet of self-regulation overlaps with the dispositional perspective of agency described in Sec. 2.2.

Besides these general theories, self-regulation has also been explicitly discussed in reference to learning and development. In fact, quite a few different models have been developed to explain how learners regulate their learning to reach certain learning goals

(e.g., Boekaerts, 1999, 2011; Winne & Hadwin, 1998; Zimmerman, 2005). A unifying element of these models is that they all explicitly incorporate not only cognitive processes but also motivational, emotional, as well as meta-cognitive ones. A detailed discussion of these models, including corresponding empirical evidence, is beyond the scope of the current work and can be found elsewhere (Panadero, 2017; Puustinen & Pulkkinen, 2001; Schunk & Greene, 2018).

4.3 Entrepreneurship and intrapreneurship

Entrepreneurship and intrapreneurship are also two concepts closely related to the notion of agency (see, for discussions of the link between these concepts, e.g., Kreuzer, Weber, Bley, & Wiethe-Körprich, 2017; Obschonka, Hahn, & ul Habib Bajwa, 2018). According to a rather broad definition, entrepreneurship describes the phenomenon of an individual investing time and effort to establish a new organisation that serves a certain purpose, such as offering products or services (Frese, 2009). The new organisation is thus not perforce profit-oriented and could also be non-profit. Much more relevant is that entrepreneurship is necessarily connected to the idea that an entrepreneur creates something new and therefore changes existing market conditions by detecting and seizing opportunities (Shane & Venkataraman, 2000). In other words, entrepreneurship is about value creation (Bruyat & Julien, 2001). The concept of intrapreneurship is used to describe any type of entrepreneurial effort conducted by employees within an existing organisation (Antoncic & Hisrich, 2001; Kreuzer et al., 2017). Constituent of intrapreneurship is that employees generate, promote, and realise ideas that lead to changes and innovations of organisational practices, routines, or structures (for a discussion of issues of intrapreneurship under the label of *innovative work behaviour*, see also Messmann & Mulder, 2017). Both entrepreneurship and intrapreneurship require actors to engage in agentic performance that includes active goal setting, exploration, execution and monitoring of action plans, as well as being persistent in the face of obstacles and challenges (Frese, 2009). Since entrepreneurship and intrapreneurship always aim at the creation of something new and, therefore, often the transformation of existing circumstances, both concepts are strongly related to the transformational perspective of agency discussed in Sec. 2.1.

Entrepreneurial and intrapreneurial actions bridge the gap between organisational and individual development. Although the focus of these actions is to bring about change in the actors' environments, they are also connected to individual learning. On the one hand, it is the new experiences that entrepreneurs and intrapreneurs are exposed to during their actions, along with reflection on those experiences, that open up opportunities for learning and development (Goller & Billett, 2014; Messmann & Mulder, 2017). On the other hand, learning might be much more intentional. To

establish new work practices within an organisation or even to create a novel organisation, individuals are required to understand, a priori, how a specific organisation or market, including all relevant stakeholders, works. In other words, entrepreneurs and intrapreneurs need to acquire knowledge actively that informs them how to initiate the intended change to be successful. Whether such subjective theories are helpful and correct can then be determined through experience and reflection (Frese, 2009; Messmann & Mulder, 2017).

4.4 Identifying the common theme and explaining the differences

All three concepts introduced above share a similar idea: human beings are active agents that take control over their selves and their environments by coming up with goals, weighing available options, making choices, transforming plans into action strategies, acting deliberately, being persistent in the face of challenges, and reflecting on their own performance in the world. In other words, the three concepts exhibit a strong conceptual overlap with the three perspectives of agency discussed in Sec. 2. Besides proactivity, self-regulation, and entrepreneurship or intrapreneurship, this is also true for other concepts, such as creativity (e.g., Karwowski & Beghetto, 2019) or self-determination (e.g., Little et al., 2004). Differences exist mainly based on which phenomena these concepts are intended to explain, the contexts in which the phenomena are usually embedded, and the vocabulary used to describe the processes behind the phenomena of interest.

Unfortunately, these concepts are only very seldom discussed under the same umbrella (see, however, Goller, 2017; Goller & Paloniemi, 2017). It instead seems that the different research branches remain largely disconnected and infrequently refer to one another. Of course, this is not specific to the idea of agency; rather, it often happens when scholars with different backgrounds are interested in similar phenomena (e.g., Billett, Harteis, & Gruber, 2018; Bruner, 1990). Various researchers use their own theories and descriptors to discuss and explain the phenomena of interest to them (see also Eteläpelto, 2017). Such theoretical as well as terminological differences, however, then make it difficult for other scholars to find existing research and to relate their own ideas to it. In the worst case, this can lead to redundant research and a loss of potential synergy effects. It is therefore desirable that scholars engaged in discussions about agency-related phenomena take note of one another and try to integrate their different approaches into their respective work.

5 Summary

To sum up, one can argue that agency is a meaningful and helpful construct in understanding professional learning and development in workplace contexts. Despite the

various conceptualisations and theoretical standpoints (i.e., transformational, dispositional, and relational perspectives), the growing body of empirical research within workplace learning studies emphasises the meaning of human agency in furthering one's professional development in workplace contexts. Instead of seeing the different conceptualisations as opposing each other, they offer a rich ground to understand agency at work comprehensively (Eteläpelto, 2017). At the same time, we urge scholars interested in researching agency to render transparent the conceptualisation(s) they adopt. Otherwise, the discussion of agency will remain abstract and vague, especially for scholars who are unfamiliar with the discourse in its entire breadth. In general, we believe that greater clarity in regard to discussions of agency is helpful to understand how agency relates to workplace learning and professional development.

Seeing employees as responsible actors in relation to their work communities and organisations affords possibilities for human resource development practices in the changing world of work. The explicit goal of enabling individuals to learn and work with organisations to develop simultaneously towards shared targets can be elaborated via agency-promoting practices. Empirical studies elaborating our understanding of what work-related agency is about and how to examine this multifaceted phenomenon in the future are well underway to fulfil the growing learning demands of individuals and work organisations. At the same time, we would recommend studies focus on how to support employees in exercising agency in work contexts. Such studies could either focus on the further identification of sociocultural factors that foster or hinder engagement in agentic actions as well as the individual factors that explain why individuals differ in how and the extent to which they exercise agency. In addition, scholars within the field of workplace learning and professional development could find it helpful to integrate research conducted in other scientific domains that tackle similar issues but do not use the term *agency*. Especially, research on proactivity and self-direction seems to be promising in this context (see also Goller, 2017). Further, in order to elaborate on how to support the agency and learning of employees at work, an integrated perspective taking into account both the individuals and the social circumstances is called for. The research referred to and described in this chapter offers promising examples of both theoretical as well as methodological developments in this field.

Workplace learning has been understood and studied from various perspectives. At its best, an agency perspective offers a comprehensive understanding of work practices, social relationships, and identity negotiations in studying professional learning and development in individuals' lives. What is worthy of notice here is that most of the studies have been conducted within the professional domains of education (especially

the teaching profession), health care, or other knowledge-intensive work domains (such as information technology). One could argue that due to the nature of the work of these professions, autonomy, proactivity, and self-initiated actions are expected from the practitioners. So far, only a few studies have focused on low-level professions or blue-collar work (e.g., Fuller & Unwin, 2017). Thus, there is a need to broaden the scope of work domains and the types of work communities studied in order to elaborate work-related agency more deeply. Studies of domains that have not been investigated yet in agency research can help us to understand further the mechanisms of how agency interrelates with structure and how the exercise of agency affects professional development.

In this chapter, we have focused on agency as an individual phenomenon. This has also been the focus and the level of analysis in most of the research conducted in the area. One should, however, keep in mind that the notion of agency at work is also a collective-level phenomenon. Of the three approaches described in this chapter (Sec. 2), the relational and transformational perspectives offer premises for studying collective work-related agency. To date, a few empirical studies have approached work-related agency in terms of collective manifestations in the workplace (e.g., Hökkä et al., 2019a). However, new elaborations of group-level (collective) agency and professional learning at work have recently been suggested and called for by Hager and Beckett (2019). In the changing context of work, the learning demands, processes, and practices are becoming more and more complex. This complexity presents new challenges for the conceptual and methodological understanding of both agency and learning at work. Further, it underlines the importance of researching the many meanings of agency in relation to the learning processes in work contexts, instead of merely concentrating on learning outcomes.

Until recently, most of the empirical studies utilising agency as a central concept in studying workplace learning have been qualitative in nature. Taking into account the suggested contextual nature of the phenomenon (e.g., Eteläpelto, 2017; Paloniemi & Goller, 2017), such an approach is understandable and reasonable. However, as Damşa et al. (2017) argue, this can lead towards multiple variations of the concept, raising questions regarding the separateness of these sub-concepts of agency as such. In avoiding this, the quantitative examinations focusing on the structure and maintenance of work-related agency have given us new insights for operationalising the concept. While more such examinations are needed, there is also room for methodological approaches utilising multi-method designs (see Damşa et al., 2017) as well as longitudinal designs for the elaboration of the phenomenon. Further, theoretical and methodological elaborations have the potential to obtain further understanding of

agency, for example, in the dynamics of change in working life (Imants & Van der Wal, 2019).

In conclusion, the concept of agency is highly relevant to explaining learning and development in and for work, in our opinion. Therefore, although both the conceptualisation of agency and its empirical investigation have made much progress in recent years, we want to urge both up-and-coming as well as established scholars to continue their efforts to research work-related learning and development processes using, among others, an agency perspective in their academic endeavours.

References

- Anderson, J. R. (1982). Acquisition of cognitive skill. *Psychological Review*, 89(4), 369–406. <https://doi.org/10.1037/0033-295X.89.4.369>
- Anderson, J. R. (1993). Problem solving and learning. *American Psychologist*, 48(1), 35–44. <https://doi.org/10.1037/0003-066X.48.1.35>
- Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16(5), 495–527. [https://doi.org/10.1016/S0883-9026\(99\)00054-3](https://doi.org/10.1016/S0883-9026(99)00054-3)
- Ashford, S. J., & Cummings, L. L. (1983). Feedback as an individual resource: Personal strategies of creating information. *Organizational Behavior and Human Performance*, 32(3), 370–398. [https://doi.org/10.1016/0030-5073\(83\)90156-3](https://doi.org/10.1016/0030-5073(83)90156-3)
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1–26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164–180. <https://doi.org/10.1111/j.1745-6916.2006.00011.x>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103–118. <https://doi.org/10.1002/job.4030140202>
- Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7(1), 1–15. https://doi.org/10.1207/s15327965pli0701_1
- Baumeister, R. F., & Vohs, K. D. (2012). Self-regulation and the executive function of the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 180–197). New York: Guilford.
- Billett, S. (2000). Guided learning at work. *Journal of Workplace Learning*, 12(7), 272–285. <https://doi.org/10.1108/13665620010353351>
- Billett, S. (2001). Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning*, 13(5), 209–214. <https://doi.org/10.1108/EUM0000000005548>
- Billett, S. (2004). Workplace participatory practices: Conceptualising workplaces as learning environments. *Journal of Workplace Learning*, 16(6), 312–324. <https://doi.org/10.1108/13665620410550295>
- Billett, S. (2006). Relational interdependence between social and individual agency in work and working life. *Mind, Culture, and Activity*, 13(1), 53–69. https://doi.org/10.1207/s15327884mca1301_5
- Billett, S. (2011). Subjectivity, self and personal agency in learning through and for work. In M. Malloch, L. Cairns, K. Evans, & B. O’Conner (Eds.), *The international handbook of workplace learning* (pp. 60–72). London: Sage.
- Billett, S., Harteis, C. & Gruber, H. (2018). Developing occupational expertise through work activities and interactions. In K.A. Ericsson et al. (Eds.), *The Cambridge handbook on expertise* (pp. 105–126). Cambridge: Cambridge University Press.

- Billett, S., & Smith, R. (2006). Personal agency and epistemology at work. In S. Billett, T. Fenwick, & M. Somerville (Eds.), *Work, subjectivity and learning* (pp. 141–156). Dordrecht: Springer.
- Bindl, U. K., & Parker, S. K. (2011). Proactive work behavior: Forward-thinking and change-oriented action in organizations. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology, Vol. 2: Selecting and developing members for the organization* (pp. 567–598). Washington: American Psychological Association.
- Boekaerts, M. (1999). Self-regulated learning: Where we are today. *International Journal of Educational Research, 31*(6), 445–457. [https://doi.org/10.1016/S0883-0355\(99\)00014-2](https://doi.org/10.1016/S0883-0355(99)00014-2)
- Boekaerts, M. (2011). Emotions, emotion regulation, and self-regulation of learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 408–425), New York: Routledge.
- Boshuizen, H. P. A., & Schmidt, H. G. (1992). On the role of biomedical knowledge in clinical reasoning by experts, intermediates and novices. *Cognitive Science, 16*(2), 153–184. https://doi.org/10.1207/s15516709cog1602_1
- Boshuizen, H. P. A., & Schmidt, H. G. (2008). The development of clinical reasoning expertise. In J. Higgs (Ed.), *Clinical reasoning in the health professions* (pp. 113–121). Amsterdam: Elsevier.
- Bruner, J. (1990). *Acts of meaning*. Cambridge: Harvard University Press.
- Bruyat, C., & Julien, P.-A. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing, 16*(2), 165–180. [https://doi.org/10.1016/S0883-9026\(99\)00043-9](https://doi.org/10.1016/S0883-9026(99)00043-9)
- Bryson, J., Pajo, K., Ward, R., & Mallon, M. (2006). Learning at work: Organisational affordances and individual engagement. *Journal of Workplace Learning, 18*(5), 279–297. <https://doi.org/10.1108/13665620610674962>
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. Cambridge: Cambridge UP.
- Carver, C.S., & Scheier, M.F. (2016). Self-regulation of action and affect. In K. D. Vohs & R.F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (3rd ed., pp. 3–23). New York: The Guilford Press.
- Collin, K., Lemmetty, S., Herranen, S., Paloniemi, S., Auvinen, T., & Riivari, E. (2017). Professional agency and creativity in information technology work. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 249–270). Cham: Springer.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*(3), 435–462. <https://doi.org/10.1177/014920630002600304>
- Cross, S., & Markus, H. (1991). Possible selves across the life span. *Human Development, 34*(4), 230–255. <https://doi.org/10.1159/000277058>
- Damşa, C. I., Froehlich, D. E., & Gegenfurtner, A. (2017). Reflections on empirical and methodological accounts of agency at work. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 445–461). Cham: Springer.
- DeCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic.
- Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. *Academy of Management Review, 18*(3), 397–428. <https://doi.org/10.5465/AMR.1993.9309035145>
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*(2), 256–273. <https://doi.org/10.1037/0033-295X.95.2.256>
- Edwards, A. (2005). Relational agency: Learning to be a resourceful practitioner. *International Journal of Educational Research, 43*(3), 168–182. <https://doi.org/10.1016/j.ijer.2006.06.010>
- Edwards, A. (2009). Relational agency in collaborations for the well-being of children and young people. *Journal of Children's Services, 4*(1), 33–43. <https://doi.org/10.1108/17466660200900004>
- Edwards, A. (2010). *Being an expert professional practitioner: The relational turn in expertise*. Dordrecht: Springer.
- Edwards, A., & Mackenzie, L. (2005). Steps towards participation: The social support of learning trajectories. *International Journal of Lifelong Education, 24*(4), 287–302. <https://doi.org/10.1080/02601370500169178>

- Elder, G. H., & Shanahan, M. J. (2007). The life course and human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology*, (pp. 665-715). Hoboken: John Wiley.
- Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology*, *103*(4), 962–1023. <https://doi.org/10.1086/231294>
- Eraut, M. (2007). Learning from other people in the workplace. *Oxford Review of Education*, *33*(4), 403–422. <https://doi.org/10.1080/03054980701425706>
- Eteläpelto, A. (2017). Emerging conceptualisations on professional agency and learning. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 183–201). Cham: Springer.
- Eteläpelto, A., Vähäsantanen, K., Hökkä, P., & Paloniemi, S. (2013). What is agency? Conceptualizing professional agency at work. *Educational Research Review*, *10*, 45–65. <http://doi.org/10.1016/j.edurev.2013.05.001>
- Eteläpelto, A., Vähäsantanen, K., Hökkä, P., & Paloniemi, S. (2014). Identity and agency in professional learning. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning* (pp. 645–672). Dordrecht: Springer.
- Evans, K., & Kersh, N. (2006). Learner biographies, workplace practices, and learning. In H. Rainbird, P. Hodkinson, A. Munro, & K. Evans, *Improving workplace learning* (pp. 68–94). London: Routledge.
- Fay, D., & Frese, M. (2001). The concept of personal initiative: An overview of validity studies. *Human Performance*, *14*(1), 97–124. https://doi.org/10.1207/S15327043HUP1401_06
- Fuller, B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, *75*(3), 329–345. <https://doi.org/10.1016/j.jvb.2009.05.008>
- Fuller, A., & Unwin, L. (2017). Job crafting and identity in low-grade work: How hospital porters redefine the value of their work and expertise. *Vocations and Learning*, *10*, 307–324. DOI: 10.1007/s12186-017-9173-z
- Frese, M. (2009). Towards a psychology of entrepreneurship: An action theory perspective. *Foundations and Trends in Entrepreneurship*, *5*(6), 437–496. <https://doi.org/10.1561/03000000028>
- Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, *23*, 133–187. [https://doi.org/10.1016/S0191-3085\(01\)23005-6](https://doi.org/10.1016/S0191-3085(01)23005-6)
- Goller, M. (2017). *Human agency at work: An active approach towards expertise development*. Wiesbaden: Springer VS.
- Goller, M., & Billett, S. (2014). Agentic behaviour at work: Crafting learning experiences. In C. Harteis, A. Rausch, & J. Seifried (Eds.), *Discourses on professional learning: On the boundary between learning and working* (pp. 25–44). Dordrecht: Springer.
- Goller, M., & Harteis, C. (2017). Human agency at work: Towards a clarification and operationalisation of the concept. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 85–103). Cham: Springer.
- Goller, M., & Paloniemi, S. (2017). *Agency at work: An agentic perspective on professional learning and development*. Cham: Springer.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, *28*, 3–34. <https://doi.org/10.1016/j.riob.2008.04.002>
- Gruber, H. (1999). *Erfahrung als Grundlage kompetenten Handelns [Experience as foundation of competent action]*. Bern: Huber.
- Gustavsson, M. (2007). The potential for learning in industrial work. *Journal of Workplace Learning*, *19*(7), 453–463. <https://doi.org/10.1108/13665620710819393>
- Hager, P. (2013). Theories of workplace learning. In M. Malloch, L. Cairns, K. Evans, & B. O’Conner (Eds.), *The SAGE handbook of workplace learning* (pp. 17–31). London: Sage.
- Hager, P., & Beckett, D. (2019). Fresh approaches to agency and learning. In P. Hager & D. Beckett (Eds.), *The emergency of complexity. Perspectives on rethinking and reforming education* (pp. 221–247). Cham: Springer.

- Harteis, C., & Goller, M. (2014). New skills for new jobs: Work agency as a necessary condition for successful lifelong learning. In S. Billett, T. Halttunen, & M. Koivisto (Eds.), *Promoting, assessing, recognizing and certifying lifelong learning: International perspectives and practices* (pp. 37–56). Dordrecht: Springer.
- Harwood, J., & Froehlich, D. E. (2017). Proactive feedback-seeking, teaching performance, and flourishing amongst teachers in an international primary school. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 425–444). Cham: Springer.
- Hitlin, S., & Elder, G. H. (2007a). Agency: An empirical model of an abstract concept. *Advances in Life Course Research, 11*, 33–67. [https://doi.org/10.1016/S1040-2608\(06\)11002-3](https://doi.org/10.1016/S1040-2608(06)11002-3)
- Hitlin, S., & Elder, G. H. (2007b). Time, self, and the curiously abstract concept of agency. *Sociological Theory, 25*(2), 170–191. <https://doi.org/10.1111/j.1467-9558.2007.00303.x>
- Hökkä, P., Rautiainen, M., Silander, T., & Eteläpelto, A. (2019a). Collective agency-promoting leadership in Finnish teacher education. In J. Murray, A. Swennen, & C. Kosnik (Eds.), *International research, policy and practice in teacher education: Insider perspectives* (pp. 15–29). Cham: Springer.
- Hökkä, P., Vähäsantanen, K., Paloniemi, S., & Eteläpelto, A. (2017). The reciprocal relationship between emotions and agency in the workplace. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 161–182). Cham: Springer.
- Hökkä, P., Vähäsantanen, K., Paloniemi, S., Herranen, S., & Eteläpelto, A. (2019b). Emotions in leaders' enactment of professional agency. *Journal of Workplace Learning, 31*(2), 143–165. <https://doi.org/10.1108/JWL-07-2018-0086>
- Hornung, S., Rousseau, D. M., & Glaser, J. (2008). Creating flexible work arrangements through idiosyncratic deals. *Journal of Applied Psychology, 93*(3), 655–664. <https://doi.org/10.1037/0021-9010.93.3.655>
- Hoyle, R. H. (2006). Personality and self-regulation: Trait and information-processing perspectives. *Journal of Personality, 74*(6), 1507–1526. <https://doi.org/10.1111/j.1467-6494.2006.00418.x>
- Imants, J., & Van der Wal, M. (2019). A model of teacher agency in professional development and school reform. *Journal of Curriculum Studies, Online First*. <https://doi.org/10.1080/00220272.2019.1604809>
- Karwowski, M., & Beghetto, R. A. (2019). Creative behavior as agentic action. *Psychology of Aesthetics, Creativity, and the Arts, Online First*. <https://doi.org/10.1037/aca0000190>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs: Prentice-Hall.
- Kolodner, J. L. (1983). Towards an understanding of the role of experience in the evaluation from novice to expert. *International Journal of Man-Machine Studies, 19*(5), 497–518. [http://doi.org/10.1016/S0020-7373\(83\)80068-6](http://doi.org/10.1016/S0020-7373(83)80068-6)
- Kreuzer, C., Weber, S., Bley, S., & Wiethe-Körprich, M. (2017). Measuring intrapreneurship competence as a manifestation of work agency in different educational settings. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 373–399). Cham: Springer.
- Little, T. D., Hawley, P. H., Henrich, C. C., & Marsland, K. W. (2004). Three views of the agentic self: A developmental synthesis. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 389–404). Rochester: The University of Rochester Press.
- Maranges, H. M., & Baumeister, R. F. (2016). Self-control and ego depletion. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (3rd ed., pp. 42–61). New York: The Guilford Press.
- Messmann, G., & Mulder, R. H. (2017). Proactive employees: The relationship between work-related reflection and innovative work behaviour. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 141–159). Cham: Springer.
- Miller, G. A., Galanter, E., & Pribram, K. H. (1960). *Plans and the structure of behavior*. New York: Henry Holt and Co.

- Morrison, E. W. (1993). Newcomer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal*, 36(3), 557–589. <https://doi.org/10.2307/256592>
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42(4), 403–419. <https://doi.org/10.2307/257011>
- Mulder, R. (2014). *Discussion of the symposium "Theorising and modelling professional agency"*. Presentation presented at EARI SIG 14 conference, Oslo.
- Obschonka, M., Hahn, E., ul Habib Bajwa, N. (2018). Personal agency in newly arrived refugees: The role of personality, entrepreneurial cognitions and intentions, and career adaptability. *Journal of Vocational Behavior*, 105, 173–184. <https://doi.org/10.1016/j.jvb.2018.01.003>
- Paloniemi, S., & Goller, M. (2017). The multifaceted nature of agency and professional learning. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 465–478). Cham: Springer.
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, 8, 422. <https://doi.org/10.3389/fpsyg.2017.00422>
- Pappa, S., Moate, J., Ruohotie-Lyhty, M., & Eteläpelto, A. (2017a). Teacher agency within the Finnish CLIL context: tensions and resources. *International Journal of Bilingual Education and Bilingualism*, 1–21. <https://doi.org/10.1080/13670050.2017.1286292>
- Pappa, S., Moate, J., Ruohotie-Lyhty, M., & Eteläpelto, A. (2017b). Teachers' pedagogical and relational identity negotiation in the Finnish CLIL context. *Teaching and Teacher Education*, 65, 61–70. <https://doi.org/10.1016/j.tate.2017.03.008>
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856. <https://doi.org/10.1177/0149206310363732>
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 36(3), 633–662. <https://doi.org/10.1177/0149206308321554>
- Pintrich, P. R. (2005). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 452–502). San Diego: Academic Press.
- Puustinen, M., & Pulkkinen, L. (2001). Models of self-regulated learning: A review. *Scandinavian Journal of Educational Research*, 45, 269 – 282. <https://doi.org/10.1080/00313830120074206>
- Pyhälä, K., Pietarinen, J., & Soini, T. (2015). Teachers' professional agency and learning – from adaption to active modification in the teacher community. *Teachers and Teaching*, 21(7), 811–830. <https://doi.org/10.1080/13540602.2014.995483>
- Raemdonck, I. (2006). *Self-directedness in learning and career processes. A study in lower-qualified employees in Flanders* (Doctoral dissertation). Universiteit Gent: Gent.
- Raemdonck, I., Gijbels, D., & van Groen, W. (2014). The influence of job characteristics and self-directed learning orientation on workplace learning: Job characteristics and self-directed learning orientation. *International Journal of Training and Development*, 18(3), 188–203. <https://doi.org/10.1111/ijtd.12028>
- Raemdonck, I., Thijssen, J., & de Greef, M. (2017). Self-directedness in work-related learning processes: Theoretical perspectives and development of a measurement instrument. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 401–423). Cham: Springer.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92. <https://doi.org/10.1023/A:1015630930326>
- Schley, T., & van Woerkom, M. (2014). Reflection and reflective behaviour in work teams. In C. Harteis, A. Rausch, & J. Seifried (Eds.), *Discourses on professional learning* (pp. 113–139). Dordrecht: Springer.
- Schlosser, M. (2015). Agency. In E. N. Zalta (Ed.), *The stanford encyclopedia of philosophy* (Vol. Fall 2015). Stanford: Stanford University.
- Schunk, D. H., & Greene, J. A. (Eds.). (2018). *Handbook of self-regulation of learning and performance* (Second edition). New York: Routledge.

- Shanahan, M. J., & Elder, G. H. (2002). History, agency, and the life course. In L. J. Crockett (Ed.), *Agency, motivation, and the life course: Volume 48 of the Nebraska symposium on motivation* (pp. 145–186). Lincoln: University of Nebraska Press.
- Shanahan, M. J., & Hood, K. E. (2000). Adolescents in changing social structures: Bounded agency in life course perspective. In L. J. Crockett & R. K. Silbereisen (Eds.), *Negotiating adolescence in times of social change* (pp. 123–134). Cambridge: Cambridge University Press.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226. <https://doi.org/10.5465/amr.2000.2791611>
- Smith, R. (2006). Epistemological agency in the workplace. *Journal of Workplace Learning*, 18(3), 157–170. <https://doi.org/10.1108/13665620610654586>
- Smith, R. (2017). Three aspects of epistemological agency: The socio-personal construction of work-learning. In M. Goller & S. Paloniemi (Eds.), *Agency at work: An agentic perspective on professional learning and development* (Vol. 20, pp. 67–84). Cham: Springer.
- Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology*, 83(2), 275–300. <https://doi.org/10.1348/096317910X502359>
- Tornau, K., & Frese, M. (2013). Construct clean-up in proactivity research: A meta-analysis on the nomological net of work-related proactivity concepts and their incremental validities. *Applied Psychology*, 62(1), 44–96. <https://doi.org/10.1111/j.1464-0597.2012.00514.x>
- Tynjälä, P. (2013). Toward a 3-P model of workplace learning: A literature review. *Vocations and Learning*, 6(1), 11–36. <https://doi.org/10.1007/s12186-012-9091-z>
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41(1), 108–119. <https://doi.org/10.2307/256902>
- Vähäsantanen, K., Paloniemi, S., Räikkönen, E., & Hökkä, P. (2019a). Professional agency in a university context: Academic freedom and fetters. *Teaching and Teacher Education*, 89, 12 pages. <https://doi.org/10.1016/j.tate.2019.103000>
- Vähäsantanen, K., Räikkönen, E., Paloniemi, S., Hökkä, P., & Eteläpelto, A. (2019b). A novel instrument to measure the multidimensional structure of professional agency. *Vocations and Learning*, 12, 267–295. <https://doi.org/10.1007/s12186-018-9210-6>
- Vohs, K. D., & Baumeister, R. F. (Eds.). (2016). *Handbook of self-regulation: Research, theory, and applications* (3rd edition). New York: The Guilford Press.
- Wall, T., Tran, L. T., & Soejatminah, S. (2017). Inequalities and agencies in workplace learning experiences: International student perspectives. *Vocations and Learning*, 10(2), 141–156. <https://doi.org/10.1007/s12186-016-9167-2>
- Winne, P. H., & Hadwin, A. F. (1998). Studying as self-regulated engagement in learning. In D. Hacker, J. Dunlosky, & A. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 277–304). Hillsdale: Erlbaum.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179–201. <https://doi.org/10.5465/AMR.2001.4378011>
- Zeidner, M., Boekaerts, M., & Pintrich, P. R. (2005). Self-regulation. Directions and challenges for future research. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 749–768). San Diego: Academic Press.
- Zimmerman, B. J. (2005). Attaining self-regulation. A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). San Diego: Academic Press.