

ANNA WALLIN

# Empathy-Based Stories of Digitalization and Professional Development

An empirical illustration and methodological exploration  
of the method of empathy-based stories



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ACADEMIC DISSERTATION

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*Anna Wallin*

# ABSTRACT

Overall, this article-based dissertation has twofold aims – methodological and empirical. First, the methodological aim is to introduce and further develop a qualitative data collection method called the method of empathy-based stories (MEBS). In the MEBS, the participants write short texts or stories based on frame stories (i.e., introductory scripts) designed by the researcher. The core idea in the MEBS is that at least two versions of a frame story exist, which differ in one element. This variation enables the researcher to examine how the stories change when one element is varied. In this dissertation, a literature review (Publication I) shows how the MEBS has been used in Finland, and discusses its strengths, limitations, and future prospects. The literature review demonstrates that although the MEBS has been used in Finland for decades, it is still a nascent method in international contexts. Thus, a methodological article (Publication II) introduces the method internationally for the first time. This second article illustrates some possible ways to design and conduct MEBS research, discusses its relation to narrative methods as well as explores its methodological possibilities and limitations.

The second aim of this dissertation is to empirically illustrate the possible relation between digitalization of work and professional development. Drawing on 101 empathy-based stories from 81 Finnish government workers, this dissertation provides different scenarios and illustrations on how digitalization might either support or hinder workers' professional development. More specifically, the dissertation provides insights on how digitalization might alter the learning opportunities of the workplace (Publication III) and how digitalization can lead to different experiences of and responses to work–identity (mis)alignments (Publication IV).

Overall, this dissertation's empirical findings lay the foundation for a more comprehensive understanding of the ways in which digitalization may influence workers' professional development by illustrating possible scenarios and typifications. The findings show how digitalization, by changing work tasks, work practices, and knowledge development and management, potentially alters a variety of aspects related to workplace learning opportunities, such as job demands, the level of job control, task variety and complexity, and social support, and thus can either

support or hinder professional development. In addition to illustrating how digitalization may change workplaces as learning environments, the findings show that whether digitalization supports or hinders professional development also relates to workers' professional identities and how they practice their professional agency at work. Four types of workers (thriving developer, loyal transformer, stagnant self-doubter, and career crafter) are identified from the participants' stories. By introducing these four typifications, the findings describe how digitalization influences professional development by requiring the workers to assess how their work aligns with their professional identities, consequently resulting in experiences of work–identity (mis)alignments, and agentic actions in the form of identity work and job crafting. Altogether, the findings emphasize the need to broaden our view on what accounts for professional development. The results also suggests that a full understanding of how digitalization can either support or hinder workers' professional development requires a theoretically complex view that acknowledges the interrelations among digitalization, the workplace learning opportunities, professional identity, and professional agency.

This dissertation contributes to existing research on professional development and digitalization by applying a novel data collection method, that demonstrates the power of imagination and storytelling in exploring individuals' perceptions, understandings, and sense-making. Moreover, by introducing the MEBS and showcasing its use empirically, this dissertation aims to generate methodological discussions and inspire researchers to find new ways of using the MEBS in diverse contexts.

*Keywords:* professional development, digitalization, workplace learning, professional identity, professional agency, method of empathy-based stories



# TIIVISTELMÄ

Tämä väitöstutkimus sisältää kahdenlaisia tavoitteita – metodologisia ja empiirisiä. Ensimmäisenä, metodologisena tavoitteena on esitellä ja kehittää edelleen kvalitatiivista aineistonkeruumenetelmää, jota kutsutaan eläytymismenetelmäksi. Eläytymismenetelmässä tutkimuksen osallistujat kirjoittavat lyhyehköjä tarinoita tutkijan suunnitteleminen orientaatioiden, niin kutsuttujen kehyskertomusten, perusteella. Ydinajatuksena menetelmässä on, että kehyskertomuksista on olemassa aina vähintään kaksi versiota, jotka poikkeavat toisistaan yhden tekijän suhteen. Tämän variaation avulla tutkija pystyy tarkastelemaan sitä, kuinka osallistujien tarinat muuttuvat, kun yhtä seikkaa muutetaan. Tämän artikkeliväitöskirjan ensimmäinen osajulkaisu havainnollistaa kirjallisuuskatsauksen avulla, kuinka eläytymismenetelmää on käytetty Suomessa erityisesti kasvatustieteissä, ja tarkastelee menetelmän vahvuuksia, rajoja sekä tulevaisuuden näkymiä. Kirjallisuuskatsaus osoittaa, että vaikka eläytymismenetelmää on käytetty Suomessa jo vuosikymmenten ajan, kansainvälisesti menetelmää on käytetty verrattain vähän. Menetelmän lanseeraaminen kansainvälisesti onkin väitöskirjan toisen osajulkaisun tavoitteena. Tässä metodologisessa artikkelissa esitellään menetelmään historiaa ja teoreettisia lähtökohtia, havainnollistetaan menetelmän käyttötapoja sekä pohditaan menetelmän yhteyttä narratiivisiin tutkimuksiin sekä sen metodologisia mahdollisuuksia ja rajoja.

Väitöskirjan toisena, empiirisenä tavoitteena on tutkia digitalisaation ja ammatillisen kehittymisen välistä suhdetta 81 suomalaisen valtion työntekijän eläytymismenetelmätarinan ( $N = 101$ ) avulla. Näiden tarinoiden avulla tarkastellaan valtion työntekijöiden näkemyksiä siitä, kuinka digitalisaatio voi tukea tai haitata työntekijöiden ammatillista kehittymistä muuttamalla työpaikkojen oppimismahdollisuuksia (osajulkaisu III), ja vaikuttamalla työn ja ammatillisen identiteetin väliseen tasapainoon (osajulkaisu IV).

Väitöskirjan empiiriset tulokset auttavat laajentamaan ymmärrystä niistä mahdollisista tavoista, joilla digitalisaatio voi vaikuttaa työntekijöiden ammatilliseen kehittymiseen. Tulokset osoittavat, miten digitalisaatio voi sekä tukea että haitata ammatillista kehittymistä vaikuttamalla työpaikan oppimismahdollisuuksiin, kuten työn vaatimuksiin, työn hallintaan, työtehtävien monimuotoisuuteen sekä

sosiaaliseen tukeen muuttamalla työtehtäviä, työkäytäntöjä ja osaamisen kehittämistä sekä tiedon hallintaa. Sen lisäksi, että tulokset esittävät, kuinka digitalisaatio voi muuttaa työpaikkoja oppimisympäristöinä, tulokset osoittavat, että digitalisaation rooli ammatillisessa kehittämisessä liitetään myös työntekijöiden ammatilliseen identiteettiin ja siihen, miten työntekijät harjoittavat ammatillista toimijuuttaan. Tulokset havainnollistavat neljän tyypin kautta sitä, kuinka työn digitalisaation nähdään eri tavoin haastavan tai tukevan työn ja ammatillisen identiteetin välistä tasapainoa, johtaen työntekijää osallistumaan identiteettityöhön, sekä oman työn ja uran tuunaamiseen. Kaiken kaikkiaan tulokset osoittavat, kuinka ymmärrys digitalisaation roolista työntekijän ammatillisessa kehittämisessä edellyttää moniulotteista tarkastelua, jossa huomioidaan työpaikan oppimismahdollisuuksien sekä työntekijän ammatillisen identiteetin ja toimijuuden välinen vuorovaikutteinen suhde.

Väitöskirja edistää ammatillista kehitystä ja digitalisaatiota koskevaa tutkimusta soveltamalla uutta tiedonkeruumenetelmää, joka osoittaa mielikuvituksen ja tarinankerronnan voiman tutkittaessa, miten yksilöt ymmärtävät ja näkevät jonkin ilmiön. Esittelemällä eläytymismenetelmää ja sen käyttöä niin teoreettisesti kuin empiirisestikin, väitöskirja pyrkii herättämään metodologista keskustelua ja innostamaan tutkijoita löytämään uusia tapoja käyttää eläytymismenetelmää erilaisissa yhteyksissä.

*Avainsanat:* ammatillinen kehittyminen, työpaikalla oppiminen, ammatillinen identiteetti, ammatillinen toimijuus, eläytymismenetelmä

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# ACRONYMS

AI	Artificial intelligence
PD	Professional development
ICT	Information and communication technology
JDC	Job demand-control model
JDCS	Job demand-control-support model
MEBS	Method of empathy-based stories
RQ	Research question
SCSC	Subject-centered socio-cultural approach

## Definitions of main concepts

**Digitalization** Digitalization refers to how digital technologies (e.g., information and communication technology, artificial intelligence, and robotics) can lead to fundamental changes, for instance by altering existing business processes, such as communication (e.g., Verhoef et al., 2021). In this dissertation, digitalization is approached from the perspective of knowledge workers, for whom digitalization is particularly visible in how the growing use of digital technologies can result in major changes in their work practices and work tasks, requiring them to work in new, distributed, and continuously changing work environments that are technologically mediated.

**Identity work** Identity work refers to “people being engaged in forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence and distinctiveness” (Sveningsson & Alvesson, 2003, p. 1165; for additional definitions, see Caza et al., 2018; Lepisto et al., 2015).

<b>Job crafting</b>	Wrzesniewski and Dutton (2001) defined job crafting as any change made by an individual that is related to one’s task and/or the relational boundaries of one’s job. Job crafting can take three forms. Task crafting refers to job-related changes that result in a different number, scope, or type of job tasks. Relational crafting denotes changes in the quality and/or quantity of interactions at work. Cognitive crafting involves seeing one’s job in a different way (Wrzesniewski & Dutton, 2001).
<b>Professional agency</b>	According to the subject-centered socio-cultural approach, professional agency is “practiced (and manifested) when professional subjects and/or communities exert influence, make choices, and take stances in ways that affect their work and/or their professional identities” (Eteläpelto et al., 2013, p. 62).
<b>Professional development</b>	Professional development pertains to how workers continuously develop and maintain their competencies, identities, and work throughout their career by engaging in agentic actions and identity negotiations under the socio-cultural and material conditions of the workplace.
<b>Professional identity</b>	Professional identity denotes the way that an individual views oneself as a professional, based on one’s subjective beliefs, values, goals, experiences, and competencies, as well as social and material conditions (e.g., Eteläpelto et al., 2014; Fitzgerald, 2020; Vähäsantanen, 2015).
<b>Work–identity (mis)alignment</b>	Work–identity (mis)alignment refers to the experienced match or mismatch between a workers’ professional identity and their work context (Kira & Balkin, 2014).
<b>Workplace learning opportunities</b>	Workplace learning opportunities comprise the various ways that workplaces can afford potentials for learning and development, relating to factors such as job characteristics, availability of social support and a collaborative culture, opportunities for feedback, reflection and evaluation, and opportunities for knowledge

acquisition and access to information (e.g., Cerasoli et al., 2018; Ellström, 2011; Kyndt et al., 2009, 2016; Noe et al., 2014; Parker, 2017; van Ruysseveldt & van Dijke, 2011).





# ORIGINAL PUBLICATIONS

- Publication I Wallin, A., Helenius, J., Saaranen-Kauppinen, A., & Eskola, J. (2015). Eläytymismenetelmän ensimmäiset kolme vuosikymmentä: Menetelmällisestä erikoisuudesta vakiintuneeksi tutkimusmetodiksi. *Kasvatus*, 3, 247–259.

Wallin designed and conducted the literature review and wrote the first draft of the manuscript. The co-authors contributed by providing comments and modifications.

- Publication II Wallin, A., Koro-Ljungberg, M., & Eskola, J. (2019). The method of empathy-based stories. *International Journal of Research and Method in Education*, 42(5), 525–535. <https://doi.org/10.1080/1743727X.2018.1533937>

Wallin was in charge of designing and writing the manuscript. The co-authors contributed by providing comments and modifications.

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Wallin designed the research and collected and analyzed the data. She wrote the first draft of the manuscript and the co-authors contributed by providing comments and modifications.

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# 1 INTRODUCTION

In recent years, digitalization has gained much attention in public discussions, as well as in academic research. Digitalization<sup>1</sup> is identified as one of the major trends influencing society and business, leading to fundamental changes in how people live and work, even so far as characterizing the digital era we are living in as the fourth industrial revolution (e.g., Schwab, 2016) or the second machine age (Brynjolfsson & McAfee, 2014). Despite the timeliness of these discussions, debates about how technologies change work are not new. Indeed, for more than a century, discussions and analyses have emerged regarding how technological developments influence jobs and working. Historically, new tools and technologies have improved industrial production by inventing new machines and electronic systems (during the first, second, and third industrial revolutions), dramatically changing the nature of work (see, e.g., Fischer et al., 2018). Thus, scholars have asked what makes this time different (e.g., Balsmeier & Woerter, 2019; Parker & Grote, 2020). Many authors point to how this time, the fusion of several technologies (e.g., big data, artificial intelligence [AI]) automates not only production but also knowledge, making it possible to adopt digitalization across a wide range of industries and enabling machines to substitute humans in cognitive and higher-skill domains as well (Autor & Dorn, 2013; Brynjolfsson & McAfee, 2014; Frey & Osborne, 2013, 2017). Perhaps Frey and Osborne’s (2013, 2017) work has gained the most attention; they have estimated that 47% of current jobs in the USA are at risk of becoming redundant

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<sup>1</sup> Digitalization is a broad and ambiguous term, often used interchangeably with concepts such as digitization and digital transformation. Although all of these concepts are closely related, some differences can also be identified. *Digitization* refers to the action of converting analog information into digital form (i.e., into zeros and ones). *Digitalization* refers to how digital technologies (e.g., information and communication technology, artificial intelligence, and robotics) can lead to more fundamental changes, for instance, altering existing business processes, such as communication (e.g., Verhoef et al., 2021). In organizational contexts, *digital transformation* has been defined as going beyond digitalization, describing “a change in how a firm employs digital technologies, to develop a new digital business model that helps to create and appropriate more value for the firm” (Verhoef et al., 2021, p. 889). In this dissertation, digitalization is approached from the perspective of knowledge workers, for whom digitalization is particularly visible in how the growing use of digital technologies can result in major changes in their work practices and work tasks, requiring them to work in new, distributed and continuously changing work environments that are technologically mediated.

because of automation. Triggered by these results, several other reports on how digitalization influences job creation and destruction have been published (e.g., Arntz et al., 2016, 2017; Autor, 2015; Balsmeier & Woerter, 2019) but with mixed findings. For instance, Arntz and colleagues (2016) have estimated that on average 9% of employment in the USA (and also in the OECD countries) can be replaced by automation. Brynjolfsson and colleagues (2018) have argued that although most occupations in most industries have some tasks that could be replaced by AI, an occupation in which all tasks could be replaced does not exist.

Despite the different conclusions and controversies among these cited reports, all these predictions share the view that the concept of work will significantly change over the coming decades (see also Murawski & Bick, 2017). In addition to changes in occupational structures, work itself is transformed as new digital technologies shape work tasks and ways of working. Besides AI, automation, and robots, digitalization of work is often associated with flexible work designs, called “smart work” (e.g., Raguseo et al., 2016) or “new ways of working” (e.g., de Leede, 2017). The latter refers to “practices in which employees are able to work independent of time, place and organization, supported by a flexible work environment which is facilitated by information technologies” (de Leede, 2017, p. xiii). With the use of information and communication technologies (ICTs), accessing, gathering, sharing, and analyzing information are easier, and workers can find new ways to collaborate and work, regardless of time and place (e.g., Fischer et al., 2018). Thus, altogether, digital changes, such as smart technology, artificial intelligence, robotics, and algorithms (STARA; Brougham & Haar, 2018), “are reshaping the information workers have access to (e.g., real-time data), where people work (e.g., co-working spaces), collaboration patterns (e.g., increasing interaction with robots), and, most fundamentally, people’s work designs” (Parker & Grote, 2020, p. 4). Most recently, the coronavirus pandemic has accelerated many of these trends, with the dramatic increase in remote work perhaps being the most visible one (e.g., Brynjolfsson et al., 2020; Lund et al., 2021).

Obviously, all these changes have implications for how people learn and develop at work. Despite a wide range of studies and possible scenarios exist on how digitalization changes work and occupational structures, researchers are still at the early stages of understanding the role that digitalization might play in workers’ professional development and workplace learning (e.g., Eteläpelto, 2017; Fischer et al., 2018; Harteis, 2018; Ifenthaler, 2018). As noted by Harteis (2018, p. 5), “the discussion about digitalization of work is widely dominated by contributions from technological (e.g., software engineering, robotics) and business domains (e.g., work

studies, management)". Thus, "it is important that educational researchers contribute to the debate in order not to leave the field to the disciplines of business, engineering and ICT. It is the traditionally humanistic perspective of educational research which needs to be acknowledged besides all legitimate economic and technological concerns" (p. 8). This dissertation responds to this call by empirically illustrating the possible relationship between digitalization and professional development from the Finnish government workers' perspective. In particular, this dissertation aims to illuminate how workers perceive digitalization as either supporting or hindering professional development. Thereby, this dissertation intends to complement and extend previous research and discussions on digitalization and professional development.

From an educational point of view, digitalization has especially generated discussions and prompted research regarding the various skills and competencies that are needed in the current and future working life. Consequently, the term *digital competence* has received much attention in educational research (e.g., Ferrari et al. 2012; Oberländer et al., 2020; Spöttl & Windelband, 2021). For instance, Oberländer and colleagues (2020) have recently formed a framework of digital competencies for white-collar workers, encompassing 25 interrelated dimensions (e.g., handling of software, innovative capability and creativity, networking, sharing data with others, problem-solving). Based on this framework, human resource managers can, for instance, "identify the requirements of a job or developmental potential in the current and future workforce" and thus develop and implement more effective and efficient customized training (Oberländer et al., 2020, p. 9).

Providing training and education to ensure appropriate competencies is surely one option. Research on professional learning and development has indeed been dominated by studies focusing on formal processes of education and training (e.g., Bishop, 2017; Boud & Hager, 2012; Havnes & Smeby, 2014; Reich et al., 2015). Notwithstanding the value of this research stream, scholars have simultaneously acknowledged the difficulty in describing future requirements due to the fast-paced technological progress (e.g., Harteis et al., 2020; Oberländer et al., 2020). Thus, when learning needs are not well-known and foreseeable, the importance of "informal forms of learning directly at the workplace and beyond increases" (Harteis et al., 2020, p. 4). In accordance with these arguments, this dissertation does not merely define professional development as formal competence development or a "training issue" (Poell & Van Der Krogt, 2014), that is, characterized by formal training provided and designed by, for instance, the human resource practitioners of an organization, but shares the view that workers themselves also play a substantial role

in organizing their own learning and professional development (e.g., Dachner, et al., 2021; Poell & Van Der Krogt, 2014).

Building on these notions, this dissertation applies a broad view on professional development that recognizes the dialectics between the context and the individual (e.g., Billett & Noble, 2017; Eteläpelto, 2017; Paloniemi & Goller, 2017). On one hand, this entails exploring the relation between digitalization and professional development from the perspective of how digitalization can influence the learning opportunities of a workplace and thereby either support or hinder professional development. Although previous studies have extensively illustrated how workplaces can support and constrain workers' learning and development (e.g., Billett, 2001; Ellström, 2011; Fuller & Unwin, 2004; Kyndt et al., 2016), researchers are only beginning to develop an understanding of how digitalization shapes workplaces as learning environments (e.g., Fischer et al., 2018; Harteis, 2018; Vallo Hult & Byström, 2021).

On the other hand, previous studies on professional development have demonstrated the interrelatedness of professional identity and agency to professional development. For instance, Vähäsantanen and Hämäläinen (2019) takes an identity-centred approach to professional development by illustrating how vocational teachers' can experience both a harmonious and a tensioned relationship between their work and professional identity. Moreover, several scholars have demonstrated the importance of professional agency for professional development (e.g., Dachner et al., 2021; Eteläpelto et al., 2014; Goller, 2017), shown for instance in how workers can craft new learning experiences by adding new work tasks or by deliberately changing work routines (Goller & Billett, 2014). Despite that previous studies have acknowledged the roles played by professional identity and agency in professional learning and development, the role of workers' identities and agency in the interplay between digitalization and professional development is still poorly understood. Thus, this dissertation set out to explore a novel research area by examining how digitalization can influence workers' professional development by shaping how they view themselves as professionals and consequently inducing different agentic actions in the form of identity work and job crafting. Altogether, the empirical findings of this dissertation help to build an understanding of the dialectics between the individual and the context of professional development by illustrating how digitalization may influence workplace learning opportunities and shape work-identity interactions.

In addition to empirically exploring the relation between digitalization and professional development, the methodological aim of this dissertation is to introduce

and further develop a qualitative data collection method called the method of empathy-based stories (MEBS) (e.g., J. Eskola, 1997a; J. Eskola & Wallin, 2015; Särkelä & Suoranta, 2020). In the MEBS, the participants are instructed to imagine themselves in some situation and/or role according to a frame story designed by the researcher, and write short stories based on their own perceptions and thoughts. There are always at least two frame stories, which differ with respect to one aspect. This variation enables the researcher to explore how the stories differ when one aspect is changed.

Thus, in comparison to many other qualitative (and narrative) data collection methods, the MEBS exploits human imagination, and the researchers' aim is not to explore the lived experiences of the research participants but to explore the variations in how the participants perceive, understand, or make sense of some phenomenon (e.g., Publications I and II; Särkelä & Suoranta, 2020). Thereby, as is illustrated in this dissertation, empathy-based stories can be contradictory, optimistic, pessimistic, and even stereotypical. Nonetheless, they are stories that reveal situational and time-bound shared assumptions, perceptions and beliefs that guide our thinking. They are plausible stories, giving us a glimpse of what might have been and what might happen, thereby advancing our sense of possibilities (Meretoja, 2017).

Although narrative research has gained much popularity in social and educational sciences since the “narrative turn” (e.g., Bamberg, 2007; Rutten & Soetaert, 2013), in studies exploring professional learning and development the use of a narrative approach is still scarce, and usually it is applied to gain insight into how the study participants give meaning to their personal experiences (e.g., Kurunsaari et al., 2021; Leeferink et al., 2019; Vanassche & Kelchtermans, 2016). As such, the empathy-based stories of this dissertation provide a novel way of exploring the participants' perceptions on digitalization and professional development – not necessarily from the perspective of the “true” state of events or participants' experiences, but by illustrating possible ways of thinking, plausible scenarios, and future visions that help in recognizing novel perspectives and in stimulating future research avenues. Therefore, one important contribution of this dissertation lies in applying a novel methodological approach and showcasing empirically its usefulness in studying professional development.

## 1.1 Aims and research questions

This article-based dissertation consists of four publications and a summary that synthesizes the findings of the original publications. Overall, this dissertation has twofold aims. First, the methodological aim is to introduce and further develop a qualitative data collection method called the method of empathy-based stories (MEBS). To achieve this first aim, Publications I and II illustrate the diverse ways in which the MEBS has been used in different contexts and discuss its methodological strengths and limitations (Research Question 1 [RQ1]). Publication I is a literature review, which focuses on exploring the use of the MEBS in Finland and especially in educational research, whereas Publication II extends the scope to international MEBS research and discusses its theoretical premises and how it relates to narrative methods. The strengths and limitations of the MEBS are also discussed in the context of the dissertation’s empirical studies.

Second, drawing on 101 empathy-based stories from 81 Finnish government workers, this dissertation empirically illustrates the possible relation between digitalization and professional development. The second, empirical aim of the dissertation, is answered based on Publications III and IV. In both publications, the same qualitative (MEBS) data are used to illustrate government workers’ perceptions on how digitalization might support or hinder professional development. In Publication III, the emphasis is on exploring how digitalization might alter the learning opportunities of the workplace (RQ2). In Publication IV, the focus is on illustrating the possible ways in which digitalization might induce work–identity (mis)alignments and different responses to these (RQ3). An overview of the original publications’ RQs and aims, and this dissertations’ aims and RQs are summarized in Table 1.

**Table 1.** Overview of aims and research questions

Original aims and research questions (RQs)		
I	Literature view	Aim: To explore in what contexts and how the MEBS has been used, and to discuss its limitations, strengths, and future prospects
II	Methodological publication	Aim: To introduce the MEBS internationally and to illustrate the ways in which the MEBS facilitates storytelling and narration
III	Empirical study	RQ1: How is work influenced by digitalization in government workers’ stories? RQ2: How is professional development supported and hindered by digitalization in government workers’ stories?



<b>IV</b>	Empirical study	RQ1: How can digitalization support professional development by inducing different experiences of and responses to work–identity alignments? RQ2: How can digitalization hinder professional development by inducing different experiences of and responses to work–identity misalignments?				
<b>Dissertation aims and research questions</b>			<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
Methodological aim	To introduce the MEBS in an international context and develop the MEBS as a qualitative data collection method  RQ1: What are the methodological strengths and limitations of the MEBS?	X	X	X	X	
Empirical aim	To build an understanding of how digitalization might support or hinder professional development  RQ2: How might digitalization alter the learning opportunities of the workplace?  RQ3: How might digitalization induce work–identity (mis)alignments and different responses to these?			X	X	

## 1.2 (Re)conceptualizing professional development

The field referred to as ‘professional development’ consists of diverse, and potentially conflicting meanings and approaches (e.g., Havnes & Smeby, 2014; Webster-Wright, 2009). Traditionally, the field has been dominated by a training model focusing on professional development programs and training courses designed to ‘update’ professionals (e.g., Boud & Hager, 2012; Collin et al., 2012; Havnes & Smeby, 2014). Thus, this approach draws attention to learning in didactic and formal settings, separate from work practices and workplaces. Consequently, research on professional development has focused on evaluating professional development programs, especially in teaching and health professions (Webster-Wright, 2009). As in this traditional approach the agentic approach to learning is not emphasized and professional learning and development are separated from work contexts, it has been argued that a reconceptualization of professional development is needed for it to have any impact on professional practice or learning (Boud & Hager, 2012; Havnes & Smeby, 2014; Timperley, 2011). In particular, critiques have highlighted how professional development has “become increasingly implicated with the ‘acquisition’ and ‘transfer’ metaphors that constitute the common-sense understanding of learning” (Boud & Hager, 2012, p. 20; see also Havnes & Smeby, 2014; Poell & Van Der Krogt, 2014; Timperley, 2011). As Webster-Wright (2009) argues, there is “a focus on programs and content rather than on learning experiences [...]. Firstly, the term ‘PD’ [professional development] is part of a

discourse that focuses on professionals as deficient and in need of developing and directing rather than on a professional engaged in self-directed learning” (p. 712). Thus, according to Boud and Hager (2012, p. 20), this traditional view on professional development encourages a reductionist perspective and loses the idea of professional development as an “organic unfolding process” – that is, a concept that expresses the idea that professional learning continues across the various stages of a career and that professionals are in a constant process of becoming.

Consequently, scholars have argued that a traditional ‘delivery’ or ‘transfer’ view on professional learning and development is inadequate and have called for a shift in focus from professional development to professional learning that is achieved in everyday work activities, that is, adopting a “practice-based” view on professional learning and development (e.g., Boud & Hager, 2012; Havnes & Smeby, 2014; Reich et al., 2015). This implies a “re-conceptualisation of learning from a didactical transmission-oriented approach to a notion of learning as situated in social practice, institutional cultures and structures in which learning revolves around work” (Havnes & Smeby, 2014, p. 932). The realization of the limitations of formal education in supporting learning and development has led to a growing interest in workplace learning, where a similar shift in view from learning as a ‘product’ to learning as an ongoing process of participation and engagement has occurred (Hager, 2011).

Thus, professionals are perceived as continuously developing their own capacities, and this is always bound to the happenings in their particular work environment (Boud & Hager, 2012). In other words, the current view holds that professional learning and development arise from participation in everyday work activities (both formal and informal<sup>2</sup> ones) and the responsibility for learning has shifted from the training department to the professionals themselves (e.g., Billett, 2015; Billett & Noble, 2017; Collin et al., 2012; Littlejohn et al., 2016; Poell et al., 2018). As Dachner and colleagues (2021, p. 2) argue in their recent review on the future of employee development:

To align with current practice, scholarship needs to adopt the perspective that development is a shared responsibility between employers and employees. The focus of development scholarship must evolve from an ego-centric view that the employer knows best to recognizing the importance of the employee’s entrepreneurial spirit.

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<sup>2</sup> It has been estimated (Cerasoli et al., 2018) that 75–90% of learning in organizations occurs through informal learning (Marsick & Watkins, 1990), for instance, learning from oneself through self-reflection, learning through practicing and testing, learning from others (e.g., peers, supervisors, mentors), and learning from other sources (e.g., reading print or online materials) (e.g., Kyndt et al., 2016; Lohman, 2005).

Rather than passively waiting for organizations to assess, structure, and institute development, employees must view the organization as a development resource and take an active role in developing themselves.

## **The context: workplaces as learning environments**

When situating work and learning in the heart of professional development, it becomes necessary to elaborate more closely on *workplaces as learning environments*. A wide range of literature on workplace learning has demonstrated how workplaces can both support and constrain workers' learning and development (e.g., Billett, 2001; Ellström, 2011; Fuller & Unwin, 2004; Kyndt et al., 2016), and no prevailing model or theory exists. From this point of view, learning at work is “a matter of design” (Ellström, 2011, p. 107; see also Parker, 2017), that is, workplaces are not only designed for production of goods and services but also for supporting learning (Ellström, 2011). As indicated by previous research (e.g., Cerasoli et al., 2018; Ellström, 2011; Kyndt et al., 2009, 2016; Noe et al., 2014; Parker, 2017), workplace learning opportunities (here generally referred to as the various ways that workplaces can afford potentials for learning and development) involve an interplay of several factors, including those related to job characteristics (e.g., autonomy, job demands); availability of social support and a collaborative culture; opportunities for feedback, reflection, and evaluation; and opportunities for knowledge acquisition and access to information. For instance, Ellström (2001) has found that some interrelated factors determine the learning potential of the workplace. Such factors include the following:

- (1) the learning potential of the task in terms of task complexity, variety, and control;
- (2) opportunities for feedback, evaluation, and reflection on the outcomes of work actions;
- (3) the type and the degree of formalization of work processes;
- (4) organizational arrangements for employee participation in handling problems and developing work processes; and
- (5) learning resources, for example, in terms of time for analysis, interaction, and reflection (Ellström, 2011, p. 108).

In a similar vein, Eraut (2004, 2007) has formed a “two-triangle model,” which illustrates how different interrelated learning factors and contextual factors influence

learning at work. Learning factors include 1) confidence and commitment, 2) challenge and value of the work, and 3) feedback and support. These three learning factors form a triangular relation. Confidence and commitment are needed in doing things and being proactive in seeking learning opportunities. Such confidence arises from successfully meeting challenges and valuing one's work. However, feeling confident depends on how learners feel supported in meeting these challenges and receiving feedback. The second triangle consists of contextual factors, which influence learning factors. Contextual factors include 1) allocation and structuring of work, 2) encounters and relationships with people at work, and 3) individual participation and expectations about their performance and progress. These factors highlight the centrality of work design and work organization, as well as the role of managers and social relationships in facilitating learning.

Similar factors are found in Fuller and Unwin's (2004) conceptualization of restrictive and expansive workplace learning environments, which recognizes several factors of the work environment as influencing how workplaces may create opportunities for or barriers to professional learning and development. The characteristics of an expansive learning environment includes for instance chances to learn new skills/jobs, participation in multiple communities of practice, and opportunities to gain support for learning. On the contrary, a restrictive learning environment is characterized, for instance, by barriers to learning new skills/jobs, restricted participation in multiple communities of practice, and lack of support for learning.

These findings on workplaces as learning environments stress the importance of job characteristics, such as challenging tasks and autonomy, for learning at work, resonating with the influential job demand-control (JDC) model (Karasek, 1979) and its extension, the job demand-control-support (JDSC) model (Johnson & Hall, 1988). The original JDC model predicts that a combination of high (but not overwhelming) job demands and high job control is related to effective learning, an expectation referred to as Karasek's active learning hypothesis. In this model, job demands refer mostly to workload but job demands can also be defined more broadly as any "physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (Bakker et al., 2005, p. 170). Job control refers to workers' ability to control their work activities, that is, their degree of autonomy in how they do and plan their work and to what extent they can make their own decisions at work (Fischer et. al., 2018). Lately, the learning hypothesis has been tested by studying how the workload affects employees' experiences of learning

opportunities and how task autonomy acts as a moderator of this relation. This study has found support for the learning hypothesis by showing how workplace learning opportunities increase when both workload and autonomy increase toward a match between high workload and high autonomy (van Ruysseveldt & van Dijke, 2011).

However, since the work environment not only consists of task-related resources, but also social ones, Johnson and Hall (1988) have extended the original JDC model by adding social support as a related factor, thereby formulating the JDCS model. Here, social support refers to the possibility and necessity of socializing with other individuals in the work context to receive feedback and discuss work-related problems and challenges (Fischer et al., 2018; Johnson & Hall, 1988). Thus, Karasek's (1979) original learning hypothesis has been extended, and the current view is that job demands, job control, and social support are drivers of workers' active learning (Goller et al., 2019).

Although the JDCS model is conceptually well-established in the workplace learning literature, valid empirical evidence on how job demands, job control, and social support predict workers' learning and development has so far been limited and ambivalent (e.g., Goller et al., 2019; Parker, 2017; Taris & Kompier, 2005; Wielenga-Meijer, et al., 2010). For instance, while job control has been found to be one of the most important predictors of workers' engagement in active learning efforts (e.g., de Witte et al., 2007; Raemdonck et al., 2014), and also in-service student teachers view high levels of autonomy as supporting learning at work (Gijbels et al., 2017), job control has also been shown as an irrelevant driver of engineering students' learning during internships (Goller et al., 2019). The contradictions found between empirical studies and theoretical accounts may be explained by contextual differences, such as the varying characteristics of specific work domains, as well as the abstract conceptualization of active learning (e.g., Goller et al., 2019; Taris & Kompier, 2005).

### **The individual: professional agency and identity**

Although these practice-based accounts have expanded our understanding of how workplace environments can shape learning and the learning opportunities or affordances available for workers, this perspective alone is too limited as it denies the role that *workers' subjectivities play in learning and development*. In line with the agentic account of self (Billett, 2010), subjectivity refers to the "conscious and unconscious thoughts and emotions and ways of understanding relations with world" (p. 13), and comprise a set of conceptions, procedures, beliefs, values and abilities that are essential to understanding engagement in work and learning. In other words, to

understand professional development, attention should also be paid to how workers elect to engage with learning opportunities, and thus, workers should be recognized as agents who actively construct their own experiences (Billett, 2015; Billett & Noble, 2017; Billett & Somerville, 2004; Paloniemi & Goller, 2017).

Indeed, in recent years, professional agency has been increasingly theorized from various approaches in studies exploring professional learning and development in working life (e.g., Eteläpelto, 2017; Hökkä et al., 2017; Paloniemi & Goller, 2017). The ideas associated with the *subject-centred socio-cultural (SCSC) approach* are especially applied in this dissertation, where professional agency refers to the notion that professionals “have the power to act, to affect matters, to make decisions and choices, and take stances, for example, in relation to their work and professional identities” (Vähäsantanen, 2015, pp. 1–2). Thus, professionals are viewed as being actively able to prioritize, choose, and consider what is important and worth aspiring for in their lives, as well as being capable of continuously renegotiating their professional identities (Eteläpelto, 2017; Eteläpelto et al., 2014). As Billett and Somerville (2004, p. 321) suggest:

Rather than being wholly subject to change, individuals are actively engaged in remaking cultural practices, such as those required for effective work practice. The change or learning that arises from everyday and novel events is associated with how individuals direct their intentionalities and agency when engaging with what they experience through these events. Individual experiences in social practices, such as workplaces, will incrementally, and at times, transformationally contribute to changes in their ways of knowing and sense of self (identity). Individuals’ subjectivity both shapes the kinds of changes that occur and is itself shaped by events, particularly singularly dramatic events, because it shapes their response to those events.

Thus, in light of this agentic perspective, professional learning and development are regarded as socially situated, but not determined by the environment (e.g., Eteläpelto, 2017; Evans, 2017). Individual orientations, such as workers’ interests, values, goals, competencies, motivations, and commitments, that is, their professional identities (e.g., Eteläpelto et al., 2014; Vähäsantanen & Hämäläinen, 2019), influence how they respond to structures and changes in their work environment and how they organize their work. In this way, the practice of professional agency is closely intertwined with professional identities or work identities (e.g., Eteläpelto, 2017).

It is worth mentioning here that in this dissertation, the term professional is used loosely, generally referring to knowledge-based occupational groups (e.g., Evetts, 2003; Havnes & Smeby, 2014), instead of any specific professional group (e.g., doctors, lawyers, or teachers). Consequently, the term *professional identity* is also used at a general level, referring to the way that an individual views oneself as a

professional, based on subjective beliefs, values, goals, experiences, and competencies, as well as social and material conditions (e.g., Eteläpelto et al., 2014; Fitzgerald, 2020; Vähäsantanen, 2015). It is common to find a distinction between a ‘personal’ and a ‘professional’ identity (among multiple identities; see Ramarajan, 2014), where professional identity in a broad sense refers to “professional employees’ identities in relation to their work, as opposed to hobby-like activities” (Eteläpelto et al., 2014, p. 649). Thereby, professional identity is closely related to the term work identity, which can be defined as “a work-based self-concept, constituted of a combination of organizational, occupational, and other identities, that shapes the roles individuals adopt and the corresponding ways they behave when performing their work in the context of their jobs and/or careers” (Walsh & Gordon, 2008, pp. 47–48). Although both professional and work identities commonly refer especially to the actions, behaviors, and perceptions that are related to an individual’s work and profession, and less to the ways an individual behaves or thinks of oneself outside one’s work (e.g., Fitzgerald, 2020; Walsh & Gordon, 2008), the ‘personal’ and the ‘professional’ identities can also be viewed as part of the whole ‘personal’ self. Therefore, personal histories, patterned behaviors, and future concerns can all inform how workers position themselves as professionals, making it difficult to define the boundaries of where the professional begins and ends (Akkerman & Meijer, 2011).

Although professional identities are based on individual subjectivities, there exists a dialogical interrelation between work and identities. Professional identities influence the ways in which workers respond to changes in work; at the same time, professional identities are shaped by these changes. Indeed, identities are increasingly viewed as precarious and malleable, requiring constant construction or “work”, and in this way, “people both enact and *act upon* their identities” (Lepisto et al., 2015, p. 12, emphasis in original). Thus, identity construction can be characterized as a continuous dialogical process of positioning between oneself and the social context (Akkerman & Meijer, 2011).

In this dissertation, the dialogical relation between work and professional identity is explored by using conceptualizations and theories on work–identity interactions, particularly by adapting Kira and Balkin’s (2014) model. According to this model, workers continuously assess whether their work aligns or misaligns with their (professional) identities; consequently, they may experience a match or a mismatch between their professional identities and work contexts. For instance, when a person is able to manifest professional interests at work and feels competent, a sense of *work–identity alignment* is established; consequently, the person experiences thriving,

meaningfulness, and satisfaction. Likewise, when a person, for instance, lacks the necessary competencies for one's current job or feels that one cannot realize one's full potential, one may experience a *work–identity misalignment* and consequently feel useless, inadequate, devalued, anxious, and frustrated (Kira & Balkin, 2014; Pratt et al., 2006; Vähäsantanen & Hämmäläinen, 2019). Deprofessionalization, jurisdictional disputes, and value displacements have been identified as identity threats or challenges that professionals may face (Lepisto et al., 2015), potentially leading to work–identity misalignments.

In these situations, workers may respond in various ways. Individuals generally strive for self-continuity and self-coherence (e.g., Burke & Stets, 2009) by engaging in identity work, which refers to “being engaged in forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence and distinctiveness” (Sveningsson & Alvesson, 2003, p. 1165). Thus, in a work–identity alignment situation, workers are likely to engage in *maintaining identity work* to ensure self-continuity and strengthen their present and future possibilities to work in a meaningful way. Maintaining or retaining an identity is generally about “general upkeep – sustaining, bolstering, or continuing to validate an identity” (Lepisto et al., 2015, p. 20). For instance, recent research illustrates how soldiers with severe disabilities strive to maintain their soldier identity through the continuity of their goals, values, and jobs when facing involuntary career transitions (Kulkarni, 2020).

Likewise, in a misalignment situation, workers may engage in *transforming identity work* to shape their identities in order to meet social demands (Kira & Balkin, 2014; Pratt et al., 2006). Here, different concepts are used to explain the different identity work tactics and strategies, such as distancing and merging (Kreiner et al., 2006); splinting, enriching, and patching (Pratt et al., 2006); and role-model imitation (Ibarra, 1999), to mention a few (for more, see e.g., Brown, 2015; Caza et al., 2018). These tactics specifically show how individuals engage in transformative identity work by *adding* (forming, gaining, enhancing, or otherwise taking on an identity or enriching existing identities) or *subtracting* (partial or full deleting, losing, or eliminating an identity) identities (Lepisto et al., 2015).

However, transformative identity work is taxing because workers are required to critically question their self-definitions. Therefore, when experiencing a misalignment, workers are more likely to strive to first influence the conditions of their work, that is, engage in *job crafting*<sup>3</sup> to transform their work in order to match it

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<sup>3</sup> According to Wrzesniewski's and Dutton's (2001) original definition, job crafting refers to any changes that an individual makes in relation to the task and/or the relational boundaries of the job.



with their professional identities. Similarly, when experiencing work–identity alignments, workers may engage in job crafting to strengthen those aspects of their work that they experience as meaningful (Kira & Balkin, 2014).

Job crafting can take three forms. *Task crafting* refers to job-related changes that result in a different number, scope, or type of job tasks. *Relational crafting* pertains to changes in the quality and/or quantity of interactions at work. *Cognitive crafting* involves perceiving one’s job in a different way (Wrzesniewski & Dutton, 2001). Most recently, these different forms of job crafting have been integrated in a process model that connects a worker’s motives, personal factors, the context and consequences of job crafting based on a distinction between approach and avoidance behaviors. In this model, “*approach crafting* is directed toward solving problems, improving the work situation, and accepting and interpreting stressors in a positive way, whereas *avoidance crafting* seeks to reduce or eliminate aspects of the job” (Lazazzara et al., 2020, p. 4). For instance, approach task crafting refers to strategies such as taking on extra tasks and responsibilities, whereas avoidance task crafting entails reducing the number of tasks and responsibilities (for more examples, see Table 2).

**Table 2.** Job crafting conceptualizations (adapted from Lazazzara et al., 2020, p. 7)

<b>Job crafting dimension</b>	<b>Job crafting form</b>	<b>Examples of job crafting strategies</b>
Approach crafting	Approach task crafting	Adding extra tasks, altering the scope or nature of tasks, developing skills and abilities, expanding the work role, adding responsibilities
	Approach relational crafting	Creating additional relationships, building personal relationships, creating a network, seeking support from supervisor, increasing social support resources
	Approach cognitive crafting	Cognitively emphasizing the positive qualities of work, role reframing, redefining perceptions of the type or nature of tasks or relationships involved in one’s job, foreseeing positive outcomes
Avoidance crafting	Avoidance task crafting	Reducing the number of tasks, responsibilities, requirements, and effort expenditures, reducing the scope of the task, delegating
	Avoidance relational crafting	Reducing relationships and interaction, cutting down meetings and time devoted to socializing with colleagues
	Avoidance cognitive crafting	Withdrawal crafting; passive cognitive job crafting at the individual and team levels; accepting negative things; creating distance

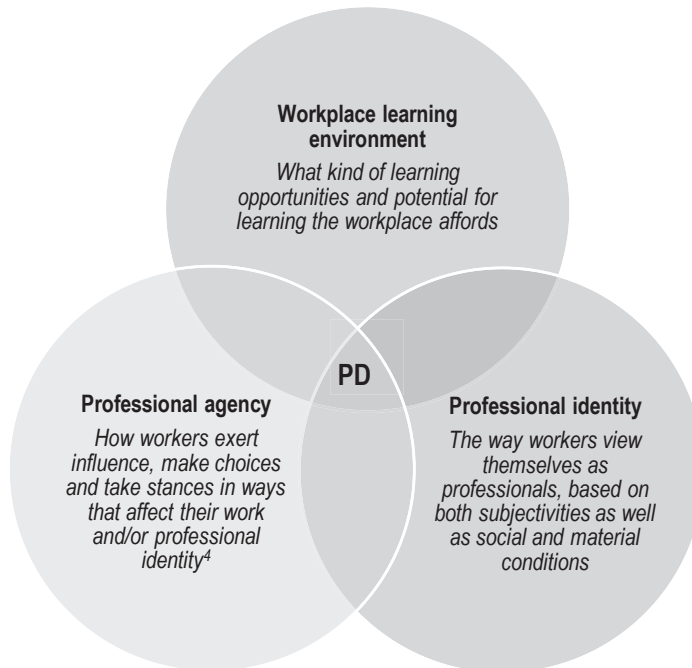
Both identity work and job crafting can be viewed as ways in which workers practice their agency in working life to align their work with their professional identities and achieve desirable outcomes, such as job satisfaction and feelings of meaningfulness, belonging, and authenticity (e.g., Lazazzara et al., 2020; Lepisto et al., 2015). Thus, identity work and job crafting are essential for workers' professional learning and development. For instance, when engaging in identity work, workers learn about themselves as professionals, how to use their strengths at work, and how to find meaning in their work (e.g., Kira & Balkin, 2014; Vähäsantanen, 2015; Vähäsantanen et al., 2017). Likewise, job crafting has been connected to professional learning and development in several studies (e.g., Fuller & Unwin, 2017; Goller, 2017; Goller & Billett, 2014; Lazazzara et al., 2020). When engaging in job crafting workers, for instance, negotiate the contents of their work, learn more about their work and about themselves (e.g., Kira & Balkin, 2014), thereby facilitating workers' professional learning and development.

However, it should be noted that such positive and desirable individual-level outcomes are not always achieved. For instance, job crafting can also lead to negative experiences, such as regrets, work intensification, overload, and stress (e.g., Lazazzara et al., 2020). Likewise, although less examined, identity work may “fail,” for instance, when attempts to maintain an identity lead to a damaged identity (e.g., Cowen & Hodgson, 2015) or when identity work results in a liminal identity, a state of in-between-ness and ambiguity (e.g., Beech, 2011).

To conclude, the various conceptions, theories, and studies presented above illustrate how professional development can be understood from multiple perspectives. It may be viewed as an individual acquisition of new competencies as well as taking place in transformations in work and professional identities. In line with the current view on professional development (e.g., Boud & Hager, 2012; Havnes & Smeby, 2014; Webster-Wright, 2009), in this dissertation, professional development is understood from a broad, life-long learning perspective that emphasizes its continuous and practice-based nature. Professional development is not defined as merely a formal acquisition of competencies and skills but is (re)conceptualized by including the notions of agency and identity in professional development while taking into account the (new) contextual factors that characterize and transform the workplace as a learning environment. In other words, in this dissertation, professional development is understood as a reciprocal process in which workers continuously develop and maintain their competencies, identities, and work throughout their careers by engaging in agentic actions and identity negotiations under the socio-cultural and material conditions of the workplace (see Figure 1). As

such, this dissertation combines practice-, identity-, and agency-based perspectives with professional development, focusing on the dialectics between individuals and contexts (e.g., Billett & Noble, 2017; Eteläpelto, 2017; Paloniemi & Goller, 2017).

**Figure 1.** Conceptualization of professional development (PD) in this dissertation



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<sup>4</sup> Eteläpelto et al., 2013, p. 61

## 2 METHODOLOGICAL CONSIDERATIONS

This doctoral dissertation synthesizes four publications. Publication I is a literature review, Publication II is a methodological article and Publications III and IV are empirical qualitative studies. The common feature of all these publications is that they revolve around a qualitative data collection method called the method of empathy-based stories (MEBS). This section begins by presenting the social constructionist and narrative approach adopted in this dissertation and then introduces the MEBS as a data collection method. Next, it describes the implementation of the empirical studies and concludes by explaining how the literature review was conducted.

### 2.1 Social constructionist and narrativist approach

This dissertation especially draws on the ideas of social constructionism (e.g., Berger & Luckmann, 2011; Burr, 2015; Gergen, 2015) and the narrative approach (e.g., Bruner, 1986, 2004; Spector-Mersel, 2010). The common aspects of both approaches are that no single definition exists, and no single feature could identify a social constructionist or a narrativist position. Instead, several approaches exist, and it has been stated that to identify with a social constructionist position, a researcher should accept one or more of the key assumptions presented in the following paragraphs (Burr, 2015; Gergen, 1985). The narrative approach adopted in this dissertation shares these underlying assumptions of social constructionism, “maintaining that we understand ourselves and our world by way of interpretative processes that are subjective and culturally rooted” (Spector-Mersel, 2010, p. 212). However, in the narrative paradigm, reality is perceived as constructed and interpreted specifically through narratives, or stories, which reflect both individual and cultural meanings (e.g., Lieblich et al., 2011). In its broadest view, a narrative can be referred to as any data in the form of prosaic discourse, in contrast to numerical data or short answers (e.g., names, nationalities) (Polkinghorne, 1995). However, a more limited definition is applied in this dissertation as its focus is on a particular type of discourse – stories. In a story, “events and actions are drawn together into an organized whole by means

of a plot” (Polkinghorne, 1995, p. 7). The stories may be simple, such as “The king died; the prince cried” (Polkinghorne, 1995, p. 7), or longer narratives, comprising many separate elements, such as abstracts, orientations, and evaluations (e.g., Labov & Waletzky, 1997). The rest of this subsection presents the four key assumptions that can be regarded as constitutive of a social constructionist approach and simultaneously discusses how these are shared by the narrativist approach adopted in this dissertation.

First, social constructionism suggests taking a *critical stance toward taken-for-granted knowledge* (Burr, 2015). Constructionist ideas emphasize theoretical creativity rather than “mapping the world as it is”; the invitation is to create intelligibilities that may help us to build new futures (Gergen, 2004). Thus, in accordance with the constructionist tenet of the narrative theory, language is perceived as a way to produce meaning, in comparison to a realist view that regards it as a means to express “real” experience (Burck, 2002; see also Brown, 2017), as further explained by Riessman (2003, p. 6):

Narratives do not mirror, they refract the past. Imagination and strategic interests influence how storytellers choose to connect events and make them meaningful for others. Narratives are useful in research precisely because storytellers interpret the past rather than reproduce it as it was. The “truths” of narrative accounts are not in their faithful representations of a past world, but in the shifting connections they forge among past, present, and future. They offer storytellers a way to re-imagine lives.

Second, social constructionism emphasizes *historical and cultural specificity*; in other words, how we understand the world is strongly influenced by where in the world and when we live (Burr, 2015). Our understandings are not only culturally and historically specific, but they are also “products of that culture and history, dependent upon the particular social and economic arrangements prevailing in that culture at that time” (Burr, 2015, p. 4). In narrative research, a similar idea prevails, as the stories (of the past and the future) are based on the narrators’ current situations and thus, the contexts (e.g., social, cultural, and organizational circumstances) set the scene for what is written or told (e.g., Spector-Mersel, 2010).

Third, from a social constructionist viewpoint, *our understandings and knowledge are socially constructed*. Therefore, a social constructionist has a special interest in social interactions, and in language in particular, to explore how our shared versions of knowledge are constructed. However, this dissertation does not adopt a radical or extreme social constructionist view, which claims that “nothing has any essential, independent existence outside of language” (Burr, 2015, p. 122), thus rendering the

person a “puppet of discursive structures” (Burr, 2015, p. 207). Rather, in this dissertation the relationship between the individuals and society is perceived as a dialectical process, where people are regarded as “being both agentic, always actively constructing the social world, and constrained by society to the extent that we must inevitably live our lives within the institutions and frameworks of meaning handed down to us by previous generations” (Burr, 2015, p. 211; see also Berger & Luckmann, 2011). Thus, in the context of narrative research, this means that we “have a large degree of freedom in ‘writing’ our stories, but this freedom is limited by the contexts in which we tell them, by the ‘honorable’ stories prevailing in our society at a given time and by components of social structure” (Spector-Mersel, 2010, p. 212).

Fourth, social constructionism assumes that *knowledge and social action go together*. In other words, our constructions of the world direct our actions by sustaining some patterns of social action while excluding others. As such, our constructions are also bound with power relations as they influence what is permissible for different people to do (Burr, 2015; Gergen, 1985). This assumption can also be found behind the idea that narratives have the power to shape reality – that is, “our culture’s ‘grand stories’ teach us what ‘worthy’ life is, what we should aspire to and what we should avoid, what is good and what is evil, what is forbidden and what is permitted” (Spector-Mersel, 2010, p. 208). In a similar vein, narrative research shares the view that stories have the power to encourage positive change in the participants and stories might also be used to “give voice” to marginal populations by publishing their narratives (e.g., Chase, 2005; Spector-Mersel, 2010).

Considering the ‘constitutive’ role of language and stories in our lives, this dissertation uses a qualitative data collection method, the MEBS, to make sense of the participants’ various perceptions regarding digitalization and professional development. Despite this research’s adherence to the four assumptions presented above, MEBS research has some special features that inform the narrative approach adopted in this dissertation. These are discussed next, after a brief introduction to the method.

## 2.2 Method of empathy-based stories

The MEBS is a qualitative data collection method in which the participants are asked to write short stories according to an introductory frame story designed by the researcher (e.g., J. Eskola, 1997a, 1998; Särkelä & Suoranta, 2020). In the MEBS,

there exists at least two frame story versions that differ in one element. This variation enables the researcher to analyze how the stories change when one element is varied, imitating the idea of more traditional experimental research. The frame stories can be designed in various ways (as illustrated in Publications I and II). Usually, they describe some situation or event that the participants are instructed to continue, or they are asked to provide illustrations of what might have happened before the described situation.

Although the MEBS can be characterized as a novel data collection method (especially in international contexts), it has a long interdisciplinary history, which is traced back to the 1970s and the discussion concerning the use of deception in experimental studies. This discussion has prompted researchers to develop alternative methods, which preserve the 'logic' of an experimental study design while avoiding ethical issues (e.g., J. Eskola, 1998; Ginsburg, 1978; Mixon, 1972). For instance, in the MEBS, this experimental logic is preserved by using one varying element between different frame story versions, allowing the researcher to study how it influences the produced stories and simultaneously giving the participants the freedom to use analytical thinking when considering different options and deciding how to respond to the researcher's prompts.

In its early years, the MEBS was referred to as passive or non-active role-playing; later, the concept of MEBS was derived from the Finnish concept *eläytymismenetelmä* (A. Eskola, 1988; J. Eskola, 1997b). To understand the use of *empathy* (*eläytyminen* in Finnish) in the MEBS, it is noteworthy that as a concept, empathy in MEBS research refers more to the perspective and role-taking actions (e.g., imagining oneself in the shoes of another or in a fictional situation) and less to the outcomes of the empathic process (i.e., emotional empathy involving personal distress and sympathy). In other words, when using the MEBS, the research participants are assumed to imagine themselves in a hypothetical situation, but this does not necessarily require or evoke empathetic feelings, such as sympathy (Publication II).

Indeed, the concept of empathy brings forth the most distinctive characteristic of empathy-based stories, namely their imaginary nature. In comparison to many other forms of qualitative data (e.g., interview-data), empathy-based stories do not necessarily describe the participants' personal (lived) experiences (e.g., their own emotions and actions) but seek to illustrate how the participants make sense of, understand, or conceptualize some phenomena. Thus, the MEBS is a particularly useful method when the researcher is interested in exploring individuals' perceptions, assumptions, and social representations regarding a particular

phenomenon and in illustrating variations in their understandings (e.g., J. Eskola, 1997a, 1998; Publication II).

Thus, taking into account the imaginary nature of the stories, the narrative approach adopted in this dissertation differs from more traditional narrative research (and especially from narrative inquiry), whose focus is on studying participants' experiences or life histories, also labeled 'big stories' (e.g., Bamberg, 2006; Clandinin & Rosiek, 2012). For instance, in narrative interviews, the participants are encouraged to tell their own accounts of their lives as freely as possible, whereas in MEBS research, the participants are given a frame story as a starting point, encouraging them to imagine themselves in a prescribed situation. Empathy-based stories also differ from traditional narratives in their structure. As mentioned earlier, researchers have suggested that a narrative form requires some distinctive elements, such as abstracts, orientation, and complication (e.g., Cortazzi & Jin, 2012; Labov & Waletzky, 1997), which might not all be found in empathy-based stories. Although empathy-based stories usually have a plot with a story sequence (see, e.g., Elliott, 2012), they are usually relatively short, less descriptive, and more straight-forward compared with other narratives, for instance, those produced during narrative interviews. Thus, adopting a narrative approach in MEBS research makes it necessary to broaden the view on what is considered a story, sharing many ideas in common with the concept of 'small stories' (e.g., Bamberg & Georgakopoulou, 2008), that is, a story can be hypothetical, future-oriented, and short.

Despite these differences, MEBS research shares the view of narrative research that stories have the ability to produce meaning and thus, tell us something about the world we live in. Although empathy-based stories are not necessarily based on 'actual' lived experiences, the stories are not perceived as merely fictional but as based on culturally and socially shared genres and meanings. In this way, the narrative position adopted in this dissertation takes the middle course between realistic and relativist approaches, sharing the view presented by Lieblich and colleagues (2011, p. 17):

We do not advocate total relativism that treats all narratives as texts of fiction. On the other hand, we do not take narratives at face value, as complete and accurate representations of reality. We believe that stories are usually constructed around a core fact or life events, yet allow a wide periphery for the freedom of individuality and creativity in selection, addition to, emphasis on, and interpretation of these 'remembered facts'.

Moreover, given that the purpose of variation in MEBS research is to find "a logic" behind human thinking by exploring how the stories change when one element is



varied (imitating the idea of laboratory experiments), the role of language in the narrative approach adopted in this dissertation is located somewhere between strong cognitive and constructionist approaches yet emphasizing constructionist perspectives (e.g., Brown, 2017). In other words, although in a way, MEBS research seeks to illustrate “a logic” behind human thinking, individuals are not merely perceived as “processors of information” and the stories as reflecting an objective and predictable reality (e.g., Brown, 2017). Rather, empathy-based stories are viewed as subjective constructions, reflecting how the participants make sense of the phenomenon and different ways to understand the topic. In other words, they are not taken as descriptions of “how something is” but as constructions of “how something might be” and “how something might have been,” thereby advancing our sense of possibilities (e.g., Meretoja, 2017).

Building on these ideas, the MEBS was chosen as a data collection method in the empirical studies of this dissertation because it allowed the participants to use storytelling and their imagination when sharing their perceptions. This enabled us to recognize novel perspectives, illustrate variations in participants’ understandings and explore future visions and possibilities which might have been lost with other methods. In addition, as the participants in MEBS research are able to distance themselves from the subject and express themselves with less external pressure than personal interviews, the MEBS was considered a suitable method for researching topics related to digitalization, professional development and identity, which are potentially sensitive, emotive and value-laden.

## 2.2.1 Participants

The empirical data (empathy-based stories) were collected from 81 Finnish government workers in the spring of 2017. Finnish government workers were chosen as research participants because they belong to the category of “information-age knowledge workers,” characterized as working in complex (digital) environments and associated with qualities such as innovation, creativity, and problem-solving skills (A. Eskola, 2018). Furthermore, administrative work has been assumed to be highly influenced by digitalization (e.g., Frey & Osborne, 2013), and government workers, both in Finland (e.g., Ministry of Finance, 2020) and internationally, are dealing with the trend of digital modernization in the public sector, referred to as electronic government or e-government (e.g., Reece, 2008). Finland is also a digital leader in the European Union (European Commission, 2020) and is among the most

advanced countries in Europe in the digital delivery of public services (eGovernment Benchmark, 2020).

The participants were recruited by emailing the attendees ( $N = 790$ ) of a national conference organized for government workers. Some randomly selected government organizations were also contacted. The participants' job positions ranged from secretaries and assistants to managers. "Executives" and "managers" were the most common positions, followed by "specialists" and "inspectors." According to the participants' self-reports, 9 (11.1%) had administrative jobs, 30 (37.0%) were experts, 17 (21.0%) were senior experts, and 22 (27.2%) held managerial positions. Three participants (3.7%) did not report their job titles. The participants' ages ranged between 28 and 67 years ( $M = 50.1$ ;  $SD = 9.483$ ), and 65% of them were born in the 1950s and the 1960s. They consisted of 48 women (59.3 %) and 32 men (39.5%). One participant (1.2%) did not indicate his/her gender.

## 2.2.2 Data collection

In this dissertation, two frame stories (one positive frame story and one negative frame story) were designed, in which the participants described why digitalization had either supported or hindered the professional development of an imaginary person named Charlie (Kaino in the original Finnish versions).

Positive frame story:

Imagine that the year is 2025. Charlie is thinking about his career and notices that digitalization has supported his professional development. Imagine yourself in his situation and describe why he believes that digitalization has had a positive influence on his professional development.

Negative frame story:

Imagine that the year is 2025. Charlie is thinking about his career and notices that digitalization has hindered his professional development. Imagine yourself in his situation and describe why he believes that digitalization has had a negative influence on his professional development.

The design of the frame stories was guided by the idea that the participants would imagine the future and how digitalization might either support or hinder professional development in different ways. Thus, the frame stories instructed the participants to imagine themselves in the year 2025 and to think back on Charlie's professional development. As Finnish government workers are familiar with topics concerning

digitalization and professional development and too much detail and direction could have limited the variation and richness of the data (see, e.g., Braun et al., 2019), the frame stories were purposely left as simple and short as possible to facilitate the participants' imagination and allow them to freely use their interpretations when writing the stories.

Moreover, instead of asking the participants to imagine themselves in the situation, they were instructed to put themselves in the shoes of an imaginary person named Charlie. By doing this, the participants had the option to use their own personal experiences when writing the story, as well as to distance themselves from the topic if necessary. Self-distancing has been shown to help people reframe negative experiences and reconstrue experiences in ways that reduce distress (e.g., Kross & Ayduk, 2011; White et al., 2019). Thus, as topics concerning digitalization and professional development are value-laden and possibly sensitive and emotive, distancing themselves from the storytelling was considered useful as the participants might be able to expand their imagination and write about their thoughts and perceptions more freely.

Charlie (Kaino in Finnish) was chosen as the protagonist's name because it is gender neutral. As the Finnish language lacks gender-specific personal pronouns (the same personal pronoun (*hän*) is used to refer to any gender), the participants could freely choose the protagonist's gender or leave it unspecified. Gender neutrality was chosen because it was not in the researchers' interest to explore gender-related meanings. However, in this dissertation, the pronoun "he" is used when referring to Charlie for clarity and readability of the text.

The data collection started by testing the frame stories in a pilot study. This pilot study involved 10 government workers who wrote handwritten stories about either the positive or the negative version of the frame story during a face-to-face situation in their workplace. These stories were included in the final data set, as an analysis of the stories showed that the frame stories worked well, and they were not modified after the pilot study.

After the pilot phase, the data were collected in person in one organization (18 participants) and via an e-form that was distributed by email to Finnish government workers (53 participants). During the data collection, the participants could choose to write their stories according to the positive version, the negative version, or both (excluding the pilot study, where the participants were randomly handed either the negative or the positive version of the frame story). They were also asked to report their year of birth, gender, and job position. The participants were given an unlimited time to write their stories and they could also continue writing later if needed. In

total, the final data set (101 stories from 81 participants, including the 10 pilot study participants) consists of stories written by 28 participants during a face-to-face situation and stories submitted through an e-form by 53 participants.

### 2.2.3 Data analysis

The participants ( $N = 81$ ) wrote a total of 101 stories. The majority (59.3%) wrote a positive story, 16 % wrote a negative story, and 24.7% wrote both types of stories. The length of the stories varied considerably (from 13 to 870 words) and the total word count of the stories was 15,202 words. The average length of the positive stories was 155 words ( $M = 122.5$ ,  $SD = 132.25$ ), and the negative stories averaged 142 words ( $M = 120$ ,  $SD = 90$ ). The length of the positive stories varied between 17 and 870 words, and the negative stories ranged from 13 to 361 words.

The statistical relation between the nature of the stories (positive, negative, both and positive and negative) and background variables was investigated with Bayesian nominal indicator classification modeling (Myllymäki et al., 2002). This analysis showed that the participants' age, gender, or job title did not predict their preferences for which frame story version to write about.

In **Publication III**, the transcribed stories were first analyzed with inductive qualitative thematic analysis (e.g., Braun & Clarke, 2006). Thematic analysis was used to identify, analyze, and report themes within the data and to provide a rich, overall thematic description of the entire data set (in relation to the RQs). Thus, during this stage, the aim was to identify themes related to how the participants described digitalization as changing Charlie's work and how it either supported or hindered his professional development. The analysis was data-driven, as it was not the aim to code the data according to any pre-existing coding frame (Braun & Clarke, 2006). Additionally, at this first stage, the analysis was conducted at a semantic level, meaning that it focused on identifying the explicit or surface meanings of the data. As such, the analytical process involved a "progression from *description*, where the data have simply been organized to show patterns in semantic content, and summarized, to *interpretation*, where there is an attempt to theorize the significance of the patterns and their broader meanings and implications" (Braun & Clarke, 2006, p. 84; see also Patton, 1990, emphasis in original text).

The thematic analysis involved all the phases of thematic analysis described by Braun and Clarke (2006). NVivo software (version 11) was used in the analysis. First, the data were transcribed and read several times to obtain an overall sense of the

data. When transcribing and organizing the data, the stories were assigned codes (P# for positive stories and N# for negative stories). Second, the entire data set was coded according to the RQs, and sub-themes were formed by collating codes (comprising one or more sentences). These themes (e.g., routine work, automation, remote work, networking, knowledge sharing) were continuously reviewed to ensure that they worked in relation to the coded extracts and the entire data set. During this first stage, the positive and the negative stories (i.e., responses to the two different frame story versions) were analyzed separately. In the second phase, the formed subthemes were compared, and three interrelated main themes (work tasks, work practices, and knowledge development and management) were formed from the similarities and the differences between these sub-themes. Finally, to synthesize the data and to “provide a story line or plot that serves to configure or compose the disparate data elements into a meaningful explanation of the protagonist’s responses and actions” (Polkinghorne, 1995, p. 18), two typical scenarios (one positive and one negative) were constructed. These scenarios are formed by selecting original data extracts that describe the themes formed earlier, guided by Polkinghorne’s (1995) description of narrative analysis. Thus, the scenarios are constructed from several stories, and they summarize the findings (themes) but do not represent a typical story per se.

In **Publication IV**, the data analysis involved many steps similar to those of the analysis described in Publication III. These analyses also overlapped in some respects as the findings of Publication III informed the analysis reported in Publication IV (e.g., with respect to what kinds of changes digitalization caused to Charlie’s work). However, in Publication III, the analysis focused more on how digitalization was described as changing Charlie’s work and the workplace learning opportunities, whereas in Publication IV, the analysis focused on the individual level, that is, how Charlie responded to changes and how the stories described his professional identity.

The data analysis was guided by Polkinghorne’s (1995; see also Bruner, 1986) description of *analysis of narratives*, in which “common themes or conceptual manifestations among the stories collected as data” (Polkinghorne, 1995, p. 13) are located. In the analysis of narratives, the data are in the form of stories, however similar to thematic analysis, the analysis of narratives aims to identify common themes and describe their relationships. Thus, to guide the first stage of our analysis we followed the phases of thematic analysis described by Braun and Clarke (2006) to identify relevant themes and patterns. At the second stage, typifications were constructed based on the thematic analysis to illustrate the variations found between the stories and the narrative nature of the data.

The thematic analysis began by reading the stories and sorting them according to the frame story version. NVivo software (version 11) was used in analyzing the data. In the first step of the thematic analysis, an inductive approach was used to identify initial codes, subthemes, and themes related to how digitalization was described as inducing work–identity (mis)alignments. The themes were identified in relation to how digitalization was described as changing Charlie’s work (work tasks and work practices), how he positioned himself in relation to the changes (approving, critical, or inconsistent), and how he was described as a professional (his personality, interests, needs, values, and competencies). As the analysis proceeded, it assumed a more deductive nature as theories of job crafting and identity work were used to identify the ways in which Charlie responded to the experienced (mis)alignments. Thus, in the second step of the thematic analysis, the different ways in which Charlie engaged in job crafting (approach/avoidance task, relational, and cognitive crafting) and identity work (maintaining and transforming) were identified.

During the second stage of the analysis, typifications were constructed by comparing the stories and the themes to differentiate the types that were similar to each other (e.g., Kuckartz, 2014). In other words, the stories were typified according to what kinds of similarities and differences could be found in relation to Charlie’s initial experiences of work–identity (mis)alignments, his responses and whether he developed professionally. Altogether, four typifications were identified. The positive stories were divided into the thriving developer ( $n = 46$ ) and the loyal transformer ( $n = 17$ ); the negative stories were divided into the stagnant self-doubter ( $n = 25$ ) and the career crafter ( $n = 4$ ). Almost all stories could be included in these typifications, except for nine stories that were excluded for being too short and/or not containing the necessary information. Although the typifications are constructions (i.e., not all the stories ascribed to a certain typification relate to it in the same way), they share some basic characteristics (i.e., similar experiences of work–identity (mis)alignments, similar responses, and a similar storyline describing either professional development or professional stagnation).

## 2.3 Literature review

The literature review aimed to explore in what contexts and how the MEBS had been used in Finnish research, as well as to discuss its limitations, strengths, and future prospects. The overall objective was to introduce the MEBS and provide scholars in educational sciences with information about the scope of MEBS research

and how the MEBS can be used as a data collection method. To achieve these aims, the review explored how the quantity of MEBS research had changed across time (1991–2014) and in what scientific fields and study types the MEBS had been used. The review also illustrated how the MEBS had been used especially in educational research. Given its methodological focus, the review was first and foremost a *methodological review*, however, given its various aims, it can also be characterized as a scoping review and a state-of-the-art review (Grant & Booth, 2009). *Scoping reviews* aim to provide an “assessment of the potential size and scope of available research literature” (Grant & Booth, 2009, p. 101), and they share many similarities with a systematic review in attempting to be systematic, transparent, and replicable. *State-of-the-art reviews* aim to open up new perspectives and to highlight areas in need of further research. As such, they are especially valuable for those who are unfamiliar with the topic and those who seek to identify possible ways for contemporary research: “instead of having to read multiple articles describing specific developments, the reader can derive a feel for the quantity and main characteristics of a topic from a single review article” (Grant & Booth, 2009, p. 101).

The review was conducted from October to November 2013 and updated in November 2014 by using a variety of Finnish databases: Tampub, Melinda, Theseus, and Arto. Melinda and Tampub databases were cross-checked to avoid including the same study twice in the findings. The database search focused on Finnish databases because at that time, only a few international publications used the MEBS (and these were conducted by Finnish researchers). The search term “*eläytymismenetelmä*” (Finnish word for the MEBS) was used, and the search was conducted according to the type of research (doctoral dissertation, licentiate thesis, master’s thesis, polytechnic thesis, and research article). Some (less than 10) studies that were not found in the database search, but the researchers knew as existent were also included in the review. The titles, abstracts, and full texts of the studies were systematically examined, and those that did not meet the search criteria were eliminated. The inclusion criteria were that at least two frame story versions existed and contained variations typical of MEBS studies.

The review focused on examining on how the MEBS research was conducted, when it was published, and in what scientific field. The year of publication, type of research and the scientific field were systematically extracted from all included research, however the examination of how MEBS has been used in the studies focused on studies conducted in the 21<sup>st</sup> century, especially in the last ten years because older MEBS studies had been reviewed earlier (e.g., J. Eskola, 1997a). The full texts of the included studies were examined more closely regarding the aims of

the research, how the study was conducted (e.g., number of participants, analyze methods) and the design of the frame stories.



## 3 OVERVIEW OF THE ORIGINAL PUBLICATIONS

This section provides a summary of the main foci and findings of this dissertations' original publications. Publications I and II focus on introducing and developing the MEBS. Publication I examined in what contexts and how the MEBS has been used in Finland, and discussed its limitations, strengths, and future prospects. Publication II introduced the MEBS internationally and illustrated how the MEBS facilitates storytelling and narration. Publications III and IV are empirical studies which focus on exploring the relation between digitalization and professional development. Publication III illustrated how digitalization may alter the learning opportunities of the workplace, whereas Publication IV explored how digitalization may induce different experiences of and responses to work-identity (mis)alignments.

### 3.1 Publication I

The aim of Publication I was to conduct a literature review of research using the MEBS as a data collection method. It was conducted in 2013–2014 by searching Finnish databases for MEBS research. The literature review explored how the MEBS had been used in Finland: the amount of MEBS research, in what fields, and the types of research. The use of the MEBS in educational research was also described in more detail.

The review found a total of 179 master's theses, 58 polytechnic theses, 16 dissertations, 4 licentiate theses, and 13 research articles where the MEBS was used during the years 1991–2014. Thus, the review showed how the use of the MEBS had gained popularity especially as a data collection method in student theses (in the university and in universities of applied sciences). Regarding the scientific fields of the master's theses, the MEBS had been mostly used in educational fields ( $N = 114$ ), particularly in teacher education ( $n = 66$ ) and general education ( $n = 31$ ). The MEBS had also been used in social sciences ( $N = 37$ ), particularly in social work ( $n = 16$ ) and social psychology ( $n = 12$ ). In universities of applied sciences, the MEBS had been mostly used in the social and health sciences ( $N = 39$ ).

The review showed that the MEBS had been applied to explore various research topics and aims. As a method, it is particularly well-suited to studies whose researchers are interested in investigating individuals' perceptions, logic of thinking and future scenarios. The review found that usually, the frame stories in MEBS research described a situation that was illustrated as positive or negative (e.g., ended successfully or unsuccessfully). However, some new ways of designing the frame stories have recently been constructed, such as varying the time frame or the perspective from which the stories are written (e.g., by varying the protagonists' gender).

The MEBS was found to have several advantages. First, it was seen as a particularly useful method for producing new insights into some topics, as it would allow the participants to use their imagination. Second, empathy-based stories are usually collected anonymously, which is regarded as an asset when exploring sensitive topics. The MEBS was also described as an ethically sensitive method as the participants would not be required to reflect on their own experiences but to describe their views and possible scenarios. Finally, the MEBS could also be perceived as a relatively fast and easy way to collect qualitative data, which might be an asset in some situations. However, even if the data could be collected in a relatively short time, designing the frame stories might sometimes be difficult. When the frame stories would not work properly, they might guide the participants' imagination too much, implicitly predefine some values or insights, and comprise too many varying elements.

Finally, the review highlighted several ways that the MEBS could be used and developed in the future. For instance, digitalization was considered as offering possibilities regarding the collection of empathy-based stories, and the review predicted that in the future, we might see an increase in the use of different online services to collect empathy-based stories. The review also showed that the MEBS had been scantily used in international research; thus, introducing the MEBS internationally was regarded as one of the possible and promising means for its future development. In addition to the use of the MEBS in empirical research, the review suggested that the method could also be a useful method in more pragmatic contexts, such as when the focus of interest is on different actors' (e.g., managers', employees', customers') views of an organization's future in a reform situation.

## 3.2 Publication II

Over the years, the MEBS has mostly been used in Finland and by Finnish researchers. At the time of writing Publication II, all methodological publications presenting the MEBS were written in Finnish (disregarding some early work published in the 1980's). Therefore, Publication II aimed to introduce the MEBS internationally and to illustrate the ways in which the method would facilitate storytelling and narration. The article starts by describing the history of the MEBS, its theoretical premises and how MEBS relates to other narrative methods. It then illustrates some usual ways to conduct MEBS research and presents some considerations for designing and conducting such research. Finally, the method's advantages and limitations are discussed, and the publication concludes by highlighting the methodological possibilities of the MEBS.

Publication II extends and strengthens the findings described in Publication I by focusing on presenting how MEBS studies have been conducted internationally, and by discussing MEBS' theoretical premises and its relation to narrative methods. Publication II illustrates how MEBS differ from traditional narratives and narrative methods in several ways, explains the conceptual premises of MEBS, and discusses in more detail what possibilities and limitations the use of imagination can bring to MEBS research.

## 3.3 Publication III

The aim of Publication III was to explore Finnish government workers' perceptions about digitalization and professional development. The data ( $N = 101$  stories) were collected using the MEBS and were analyzed with inductive thematic analysis and narrative analysis. The findings addressed the following two RQs:

*(RQ1). How is work influenced by digitalization in government workers' stories?*

*(RQ2). How is professional development supported and hindered by digitalization in government workers' stories?*

In the frame stories, the participants were asked to imagine that the year was 2025 and that digitalization had either supported or hindered the professional development of an imaginary person named Charlie. Based on the participants'

stories, the results illustrated two scenarios, one positive (digitalization supporting professional development) and the other negative (digitalization hindering professional development). Both scenarios described how the supporting and the hindering factors stemmed from similar and interrelated changes in Charlie's work (changes in his work tasks, work practices, and knowledge development and management). However, the scenarios differed in how these changes influenced the workplace learning potential as a result.

Regarding *changes in work tasks*, the findings showed how digitalization might influence job demands, for instance, by replacing routine tasks with more challenging tasks and requiring employees to work with new digital technologies. However, the two scenarios showed the ambivalent nature of these changes, as changing work tasks were seen as both hindering and supporting professional development. In the positive scenario, changes in work tasks were associated with a reduced workload and more interesting and demanding tasks, thus offering possibilities for professional development. In contrast, in the negative scenario, the changes were associated with work intensification, increased workload, and feelings of incompetence and redundancy, thereby constraining professional development.

Digitalization was also connected to *changes in work practices*, and in particular to an increase in remote work and online communication. In the positive scenario, changing work practices supported professional development by facilitating social networking and communication across physical distances. In the negative scenario, online communication and remote work were described as resulting in a loss of communality, decreased communication, and feelings of loneliness. Despite these negative aspects, the stories described how the flexibility regarding when and where to work was mostly valued, highlighting the importance of job control and autonomy in professional development.

Digitalization was also frequently connected to *changes in knowledge development and management*, especially in the positive stories. E-learning, online courses and videos were viewed as important resources for professional development, and the positive stories illustrated the importance of up-to-date learning materials and possibilities to share and gather information easily. However, in the negative scenario, the diversity and the massive amount of information were also associated with information overload, consequently hindering professional development.

In sum, the findings of this publication illustrated the double-edged role of digitalization in professional development, as it might both support and hinder professional development by changing work tasks, work practices and knowledge development and management. The findings described how digitalization might alter

the learning potential in the workplace, for instance, by influencing job demands and job control. However, the mixed findings and the variation found between the positive and the negative stories highlighted the need to be aware of contextual and individual factors to efficiently support workers' professional development in their digital working life.

### 3.4 Publication IV

Publication IV aimed to explore government workers' perceptions regarding how digitalization might lead to different experiences and responses to work–identity (mis)alignments and how these might influence workers' professional development. The same data (101 empathy-based stories from 81 Finnish government workers) were used in Publications III and IV. At the first stage of the analysis, thematic analysis was conducted by combining inductive and deductive approaches; at the second stage, typifications were constructed. The findings addressed the following RQs:

*(RQ1) How can digitalization support professional development by inducing different experiences of and responses to work–identity alignments?*

*(RQ2) How can digitalization hinder professional development by inducing different experiences of and responses to work–identity misalignments?*

The findings illustrated four typifications that demonstrated the different ways in which the participants perceived that digitalization could either support or hinder professional development by inducing different experiences of and responses to work–identity (mis)alignments. Two typifications (the thriving developer and the loyal transformer) exemplified the participants' responses to the positive frame story (digitalization supporting professional development). The other two typifications (the stagnant self-doubter and the career crafter) exemplified their responses to the negative frame story (digitalization hindering professional development).

In sum, the *thriving developer* typification illustrated how Charlie considered digitalization as supporting his professional development as it enabled him to realize his full potential, satisfy his interests, and develop his competencies in a way that he found meaningful, leading to his experience of work–identity alignment. To strengthen the aspects of his work and himself that he experienced as meaningful,

he engaged in maintaining identity work and approach job crafting. In the *loyal transformer* typification, digitalization also caused his experiences of work–identity misalignments (i.e., conflicts between his work and professional identity). Despite these challenging experiences, he eventually managed to align his work and professional identity by engaging in cognitive crafting and transformative identity work; thus he was described as developing professionally.

The *stagnant self-doubter* typification illuminated how digitalization transformed Charlie’s work in a way that did not match his interests, competencies, and values, thereby creating his experiences of work–identity misalignments. In contrast to the loyal transformer typification, in the stagnant self-doubter typification Charlie did not manage to realign his work and identity and develop professionally. Instead, he struggled to cope with the frustrating situation and engaged in avoidance job crafting. The *career crafter* typification provided a more optimistic outcome as Charlie eventually managed to align his work and identity by transforming his professional identity and engaging in career crafting. Thus, despite the frustrations and contradictions caused by digitalization, the career crafter typification illustrated how Charlie eventually managed to develop professionally and realign his work and identity by distancing himself from digitalization.

Altogether, the findings highlighted the need to understand how digitalization could influence work–identity interactions to best support workers’ professional development. In addition to emphasizing the importance of understanding how digitalization might lead to experiences of work–identity (mis)alignments, the findings demonstrated the significance of recognizing workers’ professional agency in their professional development by illustrating how digitalization could induce them to engage in identity work and job crafting in different ways.

## 4 MAIN FINDINGS AND DISCUSSION

This section presents the main findings of this dissertation and discusses how these contribute to existing research. As the aims of this dissertation are both methodological and empirical, this section begins by discussing the methodological findings and then moves on to explaining the empirical findings in relation to the dissertations' research questions.

### 4.1 MEBS: methodological strengths and limitations

To act 'with imagination' is to act with freedom, with spontaneity: it is to break away from the trammels of the orthodox, of the accepted; it is to be original, constructive (Furlong, 2013, p. 25)

One of the most prominent and defining features in MEBS research is the use of the imagination – a cognitive capacity sometimes described as “the creative power of the mind” (Given, 2012, p. 420). Indeed, this imaginary aspect is usually mentioned as a major strength in MEBS research (e.g., Särkelä & Suoranta, 2020), providing the researchers with opportunities to find new perspectives and invent propositions, thus “making the method suitable for mapping out divergent and upcoming research areas (and for extending research areas)” (Publication I, p. 527). The use of self-distancing and imagination has also been regarded as useful when studying sensitive topics (e.g., Clarke et al., 2019). Moreover, the MEBS has been characterized as an ethically sensitive method as it allows the participants to write about plausible events and their perceptions instead of noting down their own experiences (e.g., Publication I and II; Särkelä & Suoranta, 2020). In addition, the stories are usually written anonymously and voluntarily (Publication I and II).

Indeed, imagination brings many methodological possibilities and advantages. However, the MEBS' imaginary nature also requires researchers' awareness of its premises and limitations in order not to lose “sight of the epistemological value of their data” (Greenberg & Eskew, 1993, p. 225). In other words, similar to story-completion methods (e.g., Clarke et al., 2019) and studies using role playing as a method (e.g., Greenberg & Eskew, 1993), when using the MEBS, researchers need

to acknowledge that the method's value does not lie in predicting how the participants would actually behave. Thus, researchers need to be careful not to draw too far-reaching conclusions between the empathy-based stories and the "reality" (i.e., people's actions and behaviors). Following this idea, the stories presented in this dissertation do not state much about how digitalization has (or will influence) influenced workers' professional development. Rather, the stories illustrate the kinds of beliefs and perceptions that the workers associate with the phenomenon.

Although empathy-based stories are products of the imagination, they are not perceived as merely fictional constructions but "aim to describe culturally bound tacit knowledge that may reflect the contextual and time-bound reality" (Publication II, p. 525). In other words, the fictionality in empathy-based stories is bound to reality – that is, the respondents imagine things based on their existing schemas. In this way, empathy-based stories can be viewed as possible stories, describing plausible events and ways of acting and thinking. They are not necessarily descriptions of the "actual world," defined as what has happened to the respondents in real life, but they are always descriptions of "possible worlds" connected to "actual worlds" (see Ryan, 2012). Thus, imagination in the MEBS can be considered "possibility thinking" (Given, 2012), enabling individuals to imagine possible selves, futures, and connections, or, as Särkelä and Suoranta (2020, p. 410) state, "they can be seen as 'an array of real utopias' which are not-yet realized alternatives of the state of events, but which are nevertheless achievable." The ability of the MEBS to bring forth possible connections can be regarded as cultivating perspective-awareness, defined as "the ability to perceive the world and particular situations from a variety of perspectives and the recognition that one's own perspective is only one among many" (Meretoja, 2014, p. 302).

In addition to imagination, the idea of variation is another unique feature of the MEBS, distinguishing it from several other qualitative methods. The idea of variation in MEBS studies is based on the desire to retain the "logic" of experimental studies, with many different ways of conduct (Publications I and II). For instance, the frame stories may vary in how the described situation proceeds, the time frame, or from whose perspective the stories are told. The basic premise behind the idea of variation is to examine how the variation affects the stories; thus, ideally, only one aspect in the stories should vary. However, in practice, the variation is more complex and nuanced, and thus controlling the variables in the frame stories "in the sense that experimental psychologists talk about control, is quite simply impossible" (A. Eskola, 1988, p. 242; see also Publication II). Consequently, it has been stated that "the whole idea of experimental logic in MEBS needs to be taken as a metaphor and



think MEBS as a *heuristic instrument* inspiring its users to cultivate their sociological and pedagogical imagination” (Särkelä & Suoranta, 2020, p. 401, emphasis in original text; see also A. Eskola, 1988). For instance, in this dissertation, the variation embedded in the frame stories provides an opportunity to explore what kind of “logic” is found among the participants’ stories (e.g., how the participants associate similar changes with both supporting and hindering professional development).

However, in order to gain the most advantage from the frame stories and their variation, the researcher needs to carefully consider how to best design the frame stories to support the participants’ imagination. An ill-constructed frame story limits the participants’ imagination too much, might be difficult to understand, or could contain too many varying elements, thus failing to provide answers to the RQs at hand (Publications I and II). Therefore, even if collecting data with the MEBS is relatively time-efficient (usually it is enough to reserve about 30 minutes to write the stories), designing functional frame stories might be time-consuming. Similar to the case of other study-designs (e.g., an interview study), it is recommended that researchers always conduct a pilot-study before collecting data to ensure “fit for purpose” (e.g., Barbour, 2018). The variation also makes the data analysis more time-consuming as the analysis is two-phased. The data are first analyzed as a whole, followed by comparisons of how the variation influences the findings (e.g., themes).

In comparison to many other qualitative self-report methods, the MEBS lacks face-to-face interaction between the researcher and the participants, which may be an asset as this can reduce the risk of social desirability bias (e.g., Publication II; see also Clarke et al., 2019). However, the lack of interaction can also be considered as a drawback as it limits the researchers’ possibilities to ask follow-up questions and thus, avoid “thin data,” characterized by shortcoming. Such limitations include “respondents who are not very forthcoming or expansive; ‘missing data’, where certain questions have not been addressed or information has not been gathered; a lack of data relating to key concerns of the research; or data that does not readily lend itself to linkages with theoretical concepts or frameworks” (Barbour, 2018, p. 217). Typically, the data collected with the MEBS are highly diverse, including both ‘thin’ and ‘thick’ descriptions or ‘small’ and ‘big’ stories (e.g., Bamberg, 2006; Bamberg & Georgakopoulou, 2008). However, usually even the shortest and most straightforward responses can elucidate some aspects relevant for the study.

Empathy-based stories are usually collected during face-to-face gatherings, such as lectures or meetings, where the participants’ write their stories about either one or more frame story versions. However, as demonstrated in this dissertation, empathy-based stories can also be collected electronically, for instance through

email, online forms, or social media. From the researchers' point of view, electronic data collection might help in reaching relevant participants more efficiently, and no time would be spent in transcribing the stories. From the respondents' perspective, this might provide a more flexible way of participating in research as they can freely choose when to participate and how much time they will devote to writing the stories. Nonetheless, gathering data electronically requires a larger sample than doing so face-to-face as the response rate is usually low. Furthermore, some participants, who may not necessarily participate on their own time, may choose to write the stories during a face-to-face situation, such as a work community meeting (see also J. Eskola et al., 2017).

Finally, empathy-based stories can be analyzed by applying various methods, with qualitative content analysis and thematic analysis the most frequently used ones, but discourse analysis and narrative analysis have also been employed over the years (Publication II). However, as discussed earlier, although empathy-based stories are usually rich in meanings, they might also be relatively brief and even presented in the form of individual bullet points, limiting the use of several analysis methods, such as narrative analysis. Therefore, the prominence of narrative features in MEBS research depends not only on the focus of the study but also on what type of data has been produced (see also Publication II).

In sum, the Publications I and II illustrate how the MEBS has several methodological strengths and limitations (see Table 3). In particular, the use of imagination and the variation of the frame stories makes MEBS a unique method that carries much potential. However, the list of strengths and limitations presented in Table 3. is not intended to be an exhausting one but intends to serve as a starting point for researchers to consider the usefulness and relevance of the MEBS in the context of their own research.

**Table 3.** The MEBS' methodological strengths and limitations

<b><i>Strengths</i></b>	<b><i>Limitations</i></b>
The use of imagination brings many methodological possibilities. It makes the method especially useful for studies interested in producing new insights, finding new perspectives, developing future scenarios, and exploring possible ways of thinking.	Researchers need to be careful not to draw too far-reaching conclusions between the empathy-based stories and the "reality" (i.e., people's actions and behaviors).
An ethically sensitive data collection method as the stories are written anonymously, voluntarily and the MEBS allows the participants to imagine themselves as others and write about plausible events.	The variation is ostensible because in practice it is difficult to control all the varying elements
The use of variation in the frame stories enables the researcher to examine how the stories change when one essential element is varied	

A time-efficient way to collect qualitative data

The lack of face-to-face interaction between the researcher and the participants can reduce the risk of social desirability bias

Enables electronic ways of collecting data, which might help in reaching participants and no time is spent in transcribing the stories

The data can be analyzed with a variety of different qualitative methods

Designing functional frame stories might be time-consuming

Lack of interaction limits the researchers' possibilities to ask follow-up questions and avoid "thin data"

A larger sample is required when collecting data electronically as the response rate is usually low

Empathy-based stories might be relatively brief and lack a story format, which limits the use of certain analysis methods. The variation in the stories makes data analysis time-consuming.

## 4.2 Digitalization and the learning opportunities of the workplace

The first empirical publication (Publication III) provides insights on *how digitalization might alter the learning opportunities of the workplace (RQ2)* by changing work tasks, work practices, and knowledge development and management. The participants' stories share a quite similar view regarding how digitalization potentially transforms work tasks, work practices, and knowledge development, emphasizing developments such as automation, AI, virtual collaborations, remote working, and online knowledge development and management. Regarding changes in work tasks, the stories resonate with many previous estimations, highlighting how routine tasks requiring a lower level of cognitive complexity are at risk of being automated in contrast to cognitively more complex tasks (e.g., Autor et al., 2003; Frey & Osborne, 2013; Nokelainen et al., 2017). However, the stories differ in how they describe these changes as influencing the learning opportunities of the workplace and consequently, professional development. For instance, in the positive scenario, automation of routine tasks is associated with a decrease in workload, thus providing opportunities to focus on more demanding tasks and developmental activities:

My work tasks have changed, so I only focus on genuinely challenging jobs that require human reflection. [...] 90% of my administrative decisions and solutions are made automatically using artificial intelligence, robotics, and solution databases. For me, it means that I only do interesting jobs. Routine jobs have been left to the machines. The change has also made it possible for me to develop professionally, unlike in the past, since nowadays, I have time to study and develop myself (P48).

This finding resonates with those of previous studies, demonstrating how automation of menial work activities is associated with a reduced workload and more interesting and challenging work tasks (e.g., Fischer et al., 2018; Parker & Grote, 2020). Thus, although digitalization is associated with a decreased workload and more interesting work tasks, it simultaneously increases job demands as the dull routine tasks are replaced by more complex and cognitively more challenging tasks. In the positive scenario, these changes are viewed as supporting professional development, whereas the negative scenario paints the opposite picture. In the negative stories, changes in work tasks are regarded as hindering professional development as they increase workload and job demands. Constantly learning to use new, complicated, and often malfunctioning digital technologies is perceived as a burden that hinders the execution of ‘primary’ tasks, and working with digital technologies is associated with multitasking, a hectic work pace, and overwhelming job requirements.

Thereby, although the findings indicate that digitalization may support professional development by positively affecting job demands, task variety, and complexity (e.g., Ellström 2011; Eraut, 2007), the effects may also be controversial due to various individual and contextual factors. The variety of possible negative and positive effects of technologies has also been recognized in a recent publication focusing on the relation between technologies and work design (Parker & Grote, 2020), suggesting no predetermined effect of technology on work design and work characteristics. Whether technologies influences workplace characteristics, such as job demands, in a positive or a negative way depends on a variety of factors, such as the technology itself and individual factors (Parke & Grote, 2020, p. 24).

In a similar vein, the stories illustrate how changes in work practices, such as the increasing amount of remote work and digital communication, may act as a double-edged sword regarding professional development. On one hand, the participants perceive that these changes may increase opportunities for networking and interaction. On the other hand, they are regarded as decreasing interaction and communality, thus hindering knowledge sharing and social support:

According to Charlie, it would be important to get face-to-face with other experts in the same field, because only then can you really deepen your thoughts and exchange ideas. In Charlie’s opinion, he is often left alone with the computer, and the employer also requires the work to be done in an open-plan office and, when necessary, with headphones and remotely. The work is lonely and virtual, and Charlie longs for human contact through which he could deepen different aspects of the work. (N45)

In accordance with many previous theories and studies, these findings highlight the importance of social support and relationships in professional learning and development (e.g., Dachner et al., 2021; Ellström, 2011; Kyndt et al., 2016; Noe et al., 2014). The results also demonstrate how changes in work practices due to digitalization transforms how workers view work relationships and learn from others (see e.g., Littlejohn & Margaryan, 2014). However, the discrepancy between the two sets of stories illustrates how the role of digitalization in supporting interactivity is perceived as twofold, suggesting that it may act as both a resource and a constraint regarding professional development. Previous research exploring the interaction between digital technologies and workplace learning has often highlighted the opportunities and benefits of virtual collaboration and online interaction. Such studies emphasize how the use of collaborative technologies (e.g., social media, email, videoconferencing) can support workplace learning and professional development by extending collaboration beyond face-to-face interactions, thus supporting social knowledge construction and knowledge sharing (e.g., Breunig, 2016; Littlejohn & Margaryan, 2014; Noe et al., 2014; Seraji & Khodaveisi, 2019). Although the findings of this dissertation echo these studies' results, they also complement the latter by illustrating how replacing face-to-face interactions with digital forms can pose challenges to professional learning and development. These negative aspects have also recently gained prominence since an increasing number of workers have been working remotely because of the coronavirus pandemic, bringing forth challenges related to technology-mediated communication, such as loneliness, inefficiency of communication, or "Zoom fatigue", (e.g., Wang et al., 2020; Wiederhold, 2020).

Interestingly, even if the negative stories emphasize how digital ways of working and learning can reduce interaction and social support and thus hinder professional development, the flexibility of choosing when and where to work and learn is mostly valued. Thus, with respect to the roles of job control and autonomy, the findings support earlier studies highlighting the importance of job control in learning and development (e.g., Ellström, 2001; Gijbels et al., 2017). In line with previous studies as well, the present research shows how digitalization can support learning by helping workers to organize their work more flexibly regarding location and time (Fischer et al., 2018).

Likewise, the increased role of digitalization in knowledge development and management is perceived as mainly supporting professional development. E-learning, online courses, and videos are considered as important resources for professional learning and development. The participants describe how up-to-date

learning materials and the opportunity for self-directed information acquisition and sharing in a networked environment support professional development. These findings resonate with those of many earlier studies, demonstrating how digitalization can increase information and knowledge sharing opportunities that facilitate learning and professional development by providing self-directed and informal ways to learn and develop competencies (e.g., Beach, 2017; Dachner et al., 2021; Fischer et al., 2018; Littlejohn & Margaryan, 2014). However, although to a lesser extent, the empirical findings also connect the diversity of information and constant change to information overload, suggesting the need for new knowledge management skills to buffer the negative effects of digitalization.

Given previous studies' finding that the flexibility to engage in digitalization whenever and where-ever may cause blurring between work and leisure time and thus, may lead to difficulties in disconnecting from work (e.g., Bordi et al., 2018; Vuori et al., 2019), it is interesting that the opportunity to combine work and non-work domains is perceived as mainly positive, that is, supporting professional development (e.g., by providing opportunities to participate in professional networks and courses regardless of time and place). However, the absence of this negative aspect in the stories may be explained by the fact that the participants were instructed to write about professional development, not about aspects related to work-related strain or wellbeing, among others. Thus, although flexibility to learn and work whenever and wherever may support workers' professional learning and development, it may simultaneously result in problems with recovery and workers' wellbeing, as suggested in previous studies (e.g., Bordi et al., 2018).

Altogether, the findings show how digitalization, by changing work tasks, work practices and knowledge development and management, potentially alters a variety of factors related to workplace learning opportunities, such as job demands, the level of job control, task variety and complexity, and social support. Thus, the findings resonate with Dachner and colleagues (2021) findings, indicating that "job design features, such as control, autonomy, and the social and relational aspects of work likely now play a key role in the extent to which employees are able to initiate learning activities and the type of employee development they choose to engage in" (Dachner et al., 2021, p. 5; see also Parker, 2017). What makes these findings particularly interesting is that the differences among the participants' stories illuminate the ambivalent role of digitalization in altering the learning opportunities in the workplace, indicating that there is no predetermined effect of digitalization on the learning opportunities and on professional development. In line with the agentic view on professional development (e.g., Eteläpelto, 2017), the findings show how

the potential impact of digitalization on professional development depends not only on workplace affordances but also on workers' identities (e.g., values, beliefs, interests, and competencies) and how they respond and position themselves in relation to digitalization.

### 4.3 Digitalization and work-identity (mis)alignments

The second empirical publication (Publication IV) shifts the focus to explore *how digitalization can induce work–identity (mis)alignments and different responses to these (RQ3)*, and thus support or hinder professional development. The findings illustrate how digitalization may not only change work characteristics, but at the same time, it can challenge how the workers view themselves as professionals and influence their possibilities to work in meaningful ways. As the previously described findings illustrate, there are many ways in which digitalization can alter the learning opportunities of the workplace, and workers' perceptions of these vary significantly. For instance, some workers may perceive changes from familiar routine work tasks toward new, more complex tasks as presenting welcomed opportunities for professional development. In contrast, others may regard changes in their work tasks as merely burdens, as illustrated in a participant's story:

“Oh, it was much better before,” Charlie thought while opening the door to his workplace. “I knew precisely in advance what my day would include in terms of work tasks, and my work was scheduled. I got to focus on reports and produce them so that they could be analyzed by others. [...] We have always done things in a certain way, and things have worked well. I feel I work best when I get to do things that I am familiar with, and that is why I was hired here.” (N22)

This finding resonates with those of a recent study (Långstedt, 2021) that illustrates how automation and the implementation of intelligent technologies (e.g., AI) at work may lead to a work–values misalignment. The reason is that the pre-automated, more routine, and structured work relates to values, needs and skills different from those required in the new work environment after automation, characterized by more creative and investigative work.

Consequently, the findings indicate that as digitalization changes work tasks and work practices, it requires the workers to not only update their skills and knowledge, but also to assess how their new work aligns with their personal values, interests, and competencies (i.e., their professional identities). In accordance with studies exploring work–identity encounters (e.g., Kira & Balkin, 2014; Pratt et al., 2006), the different

scenarios and typifications presented in Publication IV illustrate various possible ways in which digitalization may induce both work–identity misalignments and alignments and thus influence workers’ professional development. For instance, the thriving developer typification shows how the participants think that digitalization may create work–identity alignments by transforming work tasks and practices to better match workers’ career aspirations, interests, values, and competencies. Thus, this typification illustrates how digitalization can enable the workers to engage in more meaningful and demanding work tasks, allow them to help others facing problems with technologies, or enable them to use their competencies and strengths. The stagnant self-doubter typification describes a contrary scenario, where digitalization hinders professional development by creating adversities and a mismatch between one’s work and professional identity. This typification demonstrates how misalignments may occur if digitalization diminishes aspects of work that are valued and if workers are unable to use their competencies or satisfy their professional interests.

Furthermore, previous studies on work–identity interactions have substantially explored how workers strive to maintain a coherent identity and how they respond to work–identity (mis)alignments (e.g., Alvesson, 2010; Caza et al., 2018; Fuller & Unwin, 2017; Kira & Balkin, 2014; Pratt et al., 2006; Sveningsson & Alvesson, 2003). The findings of this dissertation contribute to this stream of research by illustrating how digitalization can stimulate workers to engage in identity work and job crafting. The stories show how digitalization can induce workers’ involvement in both maintaining and transforming identity work, as well as approach and avoidance job crafting, causing various consequences for professional learning and development. For instance, the stagnant self-doubter typification illustrates how digitalization can hinder workers’ professional development by causing work–identity misalignments to which workers may respond to by engaging in avoidance job crafting or merely coping with the situation.

The various ways in which workers may respond to work–identity (mis)alignments induced by digitalization highlights the importance of recognizing workers’ professional agency in professional development, that is, acknowledging how workers are active agents who evaluate changes and decide how to involve and position themselves in said changes (e.g., Vähäsantanen, 2015; Vähäsantanen & Billett, 2008; Vähäsantanen & Eteläpelto, 2011; Ylijoki & Ursin, 2013). Although previous studies have often examined teachers and educational reforms as their contexts, their findings resonate with those of this study, showing how workers can manifest their agency in multiple ways in changing work contexts. For instance,



Vähäsantanen and Billett (2008) show how vocational teachers may adopt five different personal strategies (professional development, passive accommodation, active participation, balancing act, and withdrawal strategies) when negotiating their professional identities in a reform context. Along similar lines, Vähäsantanen and Eteläpelto (2011) demonstrate how teachers may exercise their professional agency during educational reforms by maintaining or transforming their professional identities.

When examining the different responses and their relation to professional development, it is interesting to note that when Charlie is described as exercising his agency by transforming his professional identity or by engaging in approach job crafting, he is able to align his work and professional identity and thus develop professionally. As the stagnant self-doubter typification demonstrates, when Charlie merely struggles to cope with digitalization or engages in avoidance job crafting, such as distancing and withdrawal, his professional development becomes hindered by digitalization. These findings resonate with Day's (2018) argument that in addition to understanding how professional identities are negotiated and transformed positively or negatively during changing working contexts, it is important to understand what is required in managing changes, as distinct from coping with them: "Coping' implies survival, whereas 'managing' implies being able to meet challenges in such a way that success is achieved, i.e., the individual progresses beyond the use of coping strategies" (Day, 2018, p. 61; see also Day & Hong, 2016).

On one hand, this raises questions on what is needed in 'managing' professional development successfully amid changes. The stories presented in this dissertation especially share the view that workers need to proactively engage in digitalization and actively take initiative to develop their skills and competencies in order to stay professionally current, ensure their employability, and avoid falling by the wayside professionally. In this sense, the findings align with previous studies' results, suggesting that the "ideal 'new' employee is a self-directed, proactive, networking entrepreneur, taking responsibility for his or her own performance and development" (van den Heuvel et al., 2010, p. 124; see also Dachner et al., 2021). The need to constantly engage in self-initiated or self-directed learning in today's digital work has been recognized in several studies on workplace learning (e.g., Lemmetty & Collin, 2020), and it has been suggested that proactivity be incorporated in the definition of employee development (Dachner et al., 2021).

On the other hand, the negative stories cited in this dissertation illustrate the 'dark side' of proactivity and self-directed learning, that is, what can occur if workers lack the qualifications associated with 'the ideal new employee' and if too much

responsibility for learning is thrust upon workers. The stagnant self-doubter typification illustrates how the participants perceived that not all workers have the capabilities or the willingness to proactively develop themselves amid changes and how sometimes, their opportunities are restricted by their organization. Thereby, the findings align with those of other studies, demonstrating how self-directed learning is not always perceived as positive but may be regarded as a burden and a stressful obligation (e.g., Lemmetty & Collin, 2020).

This implies that emphasizing workers' proactivity and professional agency in professional development should not mean that workers are left completely on their own, trusting that "employees themselves would somehow find their way if their work changed or jobs disappeared" (Saari et al., 2019, p. 300). If workers are viewed as solely accountable for their professional development, this poses the risk that learning and growth opportunities will not be equally distributed and a "system of exclusion" will evolve (Dachner et al., 2021).

Altogether, the findings highlight the importance of work–identity interactions in workers' professional development. Through the four typifications, the findings demonstrate how digitalization can induce work-identity (mis)alignments in several ways, and how the workers may respond to these by engaging in identity work and job crafting. Overall, the findings echo those of earlier studies that illustrate how digitalization can both reinforce and threaten workers' identities (e.g., Mishra et al., 2012; Nach, 2015; Stein et al., 2013), simultaneously highlighting the importance of individual subjectivities in understanding professional learning and development (e.g., Billett, 2010). Thus, this dissertation builds an interdisciplinary bridge between studies exploring how technologies and work interact with one's identity and studies illustrating the importance of subjectivities and professional identity in professional development, indicating the need to understand how digitalization influences work–identity interactions to best support workers' professional development.

## 5 CONCLUSIONS

This dissertation aimed to introduce and further develop the MEBS as a qualitative data collection method, and to build an understanding of how digitalization might support or hinder professional development. In this section the theoretical and methodological contributions of this dissertation are discussed in relation to the dissertation aims. Finally, this section presents some practical implications, evaluates the research, and suggests ideas for future studies.

### 5.1 Theoretical and methodological contributions

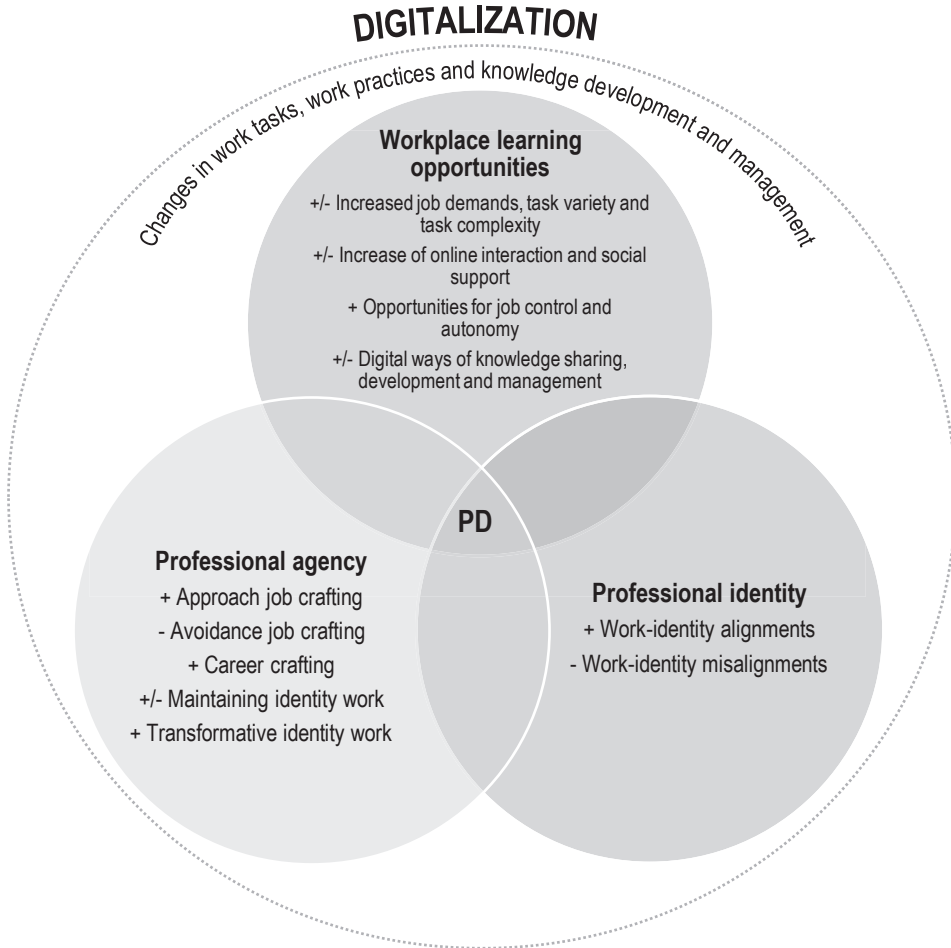
The empirical findings of this dissertation provide many timely and thought-provoking insights on the interplay between professional development and digitalization from the workers' perspective. Altogether, the above-described findings – on how digitalization can alter the learning opportunities of the workplace and how it can induce work–identity (mis)alignments and different responses to these – help build an understanding of *how digitalization might support or hinder professional development*. The findings' complexity shows how there is not an easy or straightforward answer to this question. Rather, the findings indicate that due to many possible contextual and individual factors, no “one-size-fits-all” solution can be provided regarding how digitalization may support workers' professional development. Given that the data were collected with the MEBS, the findings present alternative, possible scenarios and ways of thinking, thereby advancing our imagination about the possible ways in which digitalization might influence professional development.

On one hand, the stories illustrate how digitalization can support professional development, for instance, by increasing job control and autonomy, social support and interaction, and the ways to proactively enhance knowledge and competencies. The stories describe how attaining flexibility in different forms of technology-enhanced learning (e.g., online courses, collaborative technologies, distributed work) may help workers share and develop knowledge, learn new competencies and skills, build social networks, and gain social support. On the other hand, the stories

illustrate how technology-mediated work practices can reduce interaction and increase job demands (e.g., workload), as well as how automation may even make workers' competencies completely redundant. These differences highlight the need to pay attention to work design and work characteristics when striving to support workers' professional development, as well as the need to be aware of individual differences regarding what workers perceive as important or meaningful in their work and professional development. As demonstrated in this dissertation regarding the variety of ways that digitalization can cause work–identity (mis)alignments, individuals differ in their personal values, needs, interests, and competencies, all of which may influence how a worker perceives digitalization as valuable or as a threat to one's work and professional development, and subsequently influencing how one exercises one's agency amid changes.

Altogether, this dissertation's findings imply that an understanding of how digitalization can either support or hinder workers' professional development requires a theoretically complex view that acknowledges the interrelations among digitalization, workplace learning opportunities, professional identity, and professional agency. In this dissertation, these relations are illustrated by examining how digitalization can change work tasks, work practices and knowledge development and management, subsequently altering the workplace learning opportunities and inducing work–identity (mis)alignments and workers' engagement in agentic actions, such as job crafting and identity work (see Figure 2).

**Figure 2.** Digitalization supporting (+) or hindering (-) professional development (PD)



The framework presented in Figure 2 is not intended to be an exhaustive approach or theoretical model. Instead, it offers a possible way of conceptualizing the complex relation between professional development and digitalization from the workers' perspective. Researchers may want to revise the framework by integrating additional dimensions or applying other theoretical approaches and conceptualizations, for instance, regarding professional agency or the workplace as a learning environment. In line with the views of several scholars (e.g., Billett, 2001; Dachner et al., 2021), the framework illustrates how professional development requires a dialogical relation between the context and the individual. The framework

also expands this view by illustrating the possible role of digitalization in altering this relation by changing workplace learning opportunities and inducing work–identity (mis)alignments and agentic actions. In particular, the framework extends the perception about digitalization beyond merely a “tool-perspective” (i.e., digitalization as a means to enhance professional learning and development), highlighting how it is a broad phenomenon that interacts in different ways with workers’ professional identities and agency, thus creating various possibilities for and constraints to working, learning, and developing in meaningful ways. By illustrating (through the four typifications) the ways by which digitalization relates to identity and agency, this dissertation contributes by providing a richer and deeper understanding of how digitalization might support or hinder professional development. This is an important contribution since the role of workers’ identities in the interplay between digitalization and professional development is still poorly understood.

Furthermore, this dissertation contributes to the field of professional learning and development by introducing a novel methodological approach. By providing empirical evidence on the suitability of the MEBS in studying professional development, this dissertation shows how MEBS can serve as an alternative methodological approach in research on professional learning and development, especially when the researcher is interested in the use of imagination to explore possible ways of thinking and to produce possible scenarios. Additionally, by providing an overview of the MEBS history and the ways of conducting research with the MEBS and by discussing its strengths and limitations, this dissertation helps researchers evaluate the usefulness and appropriateness of the MEBS in their own research. For instance, Publications I and II provide researchers with insights into how frame stories can be designed, how data can be collected with the MEBS, and what kinds of research topics have been explored, while Publications III and IV showcases in more detail the use of the MEBS in educational research. Moreover, by presenting the MEBS in an international context (Publication II), this dissertation serves as a new opening and expands the knowledge about the method worldwide. Consequently, by introducing the MEBS and empirically showcasing its uses, this dissertation hopefully generates methodological discussions and inspires researchers to find new possible ways of using the MEBS in diverse research contexts.

## 5.2 Practical implications

In addition to the theoretical and the methodological contributions discussed above, this dissertation also has some implications for practice. First, in addition to scientific purposes, the MEBS has the potential to be employed for more practical purposes, benefitting from the use of creativity, imagination, and empathy. For instance, most recently, Särkelä and Suoranta (2020) have demonstrated the use of the MEBS as a teaching method that encourages discussion, stimulates students to think differently and builds a connection between the students' living world and the contents that they study. Aside from educational settings, the MEBS could also prove useful in organizational contexts, for instance as a tool for developing workplace gender equality (Vilkkä & Ylöstalo, 2016). It could also be applied during strategy-planning processes or organizational transformations, especially given that the power of storytelling has established a foothold as a means for advancing organizational goals (e.g., Reissner & Pagan, 2013; Tyler, 2007).

Second, considering the empirical findings of this dissertation, the results especially serve managers, supervisors, and practitioners in human resource development by offering insights on the complex relation between digitalization and professional development from the workers' perspective. The diversity of the perspectives illustrated in this dissertation shows how individuals ascribe various meanings to digitalization and professional development, suggesting that the relation between digitalization and professional development should not be reduced merely to a "tool-view of technology" (e.g., Kim et al., 2020; Orlikowski & Iacono, 2001), that is, considering digitalization as only a tool to enhance learning and professional development.

In practice, this implies that human resource professionals and scholars exploring digitalization and professional development should be cautious not to over-emphasize the role played by technologies in learning and development. Although the positive stories illustrate, for instance, how online communication can support professional development, the negative stories frame the opposite picture. Thus, a 'proxy view' or an 'ensemble view' of technology (e.g., Kim et al., 2020; Orlikowski & Iacono, 2001) is necessary for understanding the relation between digitalization and professional development. Both views highlight the importance of the human agency of technology adopters, with the ensemble view also acknowledging "the importance of social contexts within which technological artifacts are formulated, enacted, interpreted, and appropriated" (Kim et al., 2020, p. 6).

Thus, the findings illuminate how it is important for human resource managers and professionals in human resources to recognize that workers engage in digitalization and in professional development based on their own motives and interests (see also Poell & Van Der Krogt, 2017). Therefore, besides focusing on how to upskill workers, organizations should discuss how work and technologies could be adapted to the workers' needs and interests in support of their professional development (e.g., Parker & Grote, 2020). As recently noted by Harteis and colleagues (2020), workers can lose some of their sense of agency if work becomes "a black box" by using digital systems. Thus, when designing digital systems, it is important to apply a human-centered approach in which workers needs and characteristics are considered.

Following this line of thought, the findings of this dissertation's findings also stress the importance of "conceptual change" (Harteis et al., 2020) in professional development, for instance, illustrated in how the participants' describe Charlie as engaging in cognitive crafting. For example, when facing digital changes at work, workers could benefit by preparing them for changes through workshops where they are given the opportunities to collectively imagine how their jobs may change due to digitalization (see also Saari et al., 2019). As previously noted, a possible way of stimulating workers' imagination during transformations at work is by using the MEBS, designed for the needs in a specific organizational context.

### 5.3 Research evaluations

As qualitative research is based on assumptions about reality that differ from those in quantitative research, applying traditional criteria (e.g., validity, reliability, and generalizability) in the evaluation of qualitative studies, has been questioned (e.g., Guba & Lincoln, 2005; Larsson, 2009; Tracy, 2010). Indeed, over the recent decades, several conceptualizations have been established regarding the evaluation of qualitative research, some of which are tied to specific theories or paradigms (e.g., Creswell, 2007; Guba & Lincoln, 2005), while others are more universal (e.g., Larsson, 2009; Merriam & Tisdell, 2016; Tracy, 2010). To provide a structure for its evaluation, this dissertation applies the conceptualization provided by Tracy (2010), who delineates eight universal criteria for quality in qualitative research.

The first criterion is a *worthy topic*, meaning that "good qualitative research is relevant, timely, significant, interesting, or evocative" (Tracy, 2010, p. 840). Given that the current COVID-19 pandemic has required workers worldwide to engage in



digitalization more than ever before (e.g., by increasing the number of people working from home), this dissertation deals with a highly relevant and timely topic. However, digitalization has certainly been a much-debated topic even before the pandemic, for instance, illustrated in several predictions regarding how digitalization may change future work (e.g., Autor et al., 2003; Brynjolfsson et al., 2018). Despite the broad interest in digitalization, research on how it may influence workplace learning and professional development remains scarce, and scholars have called for more studies from the individual worker's perspective (e.g., Harteis, 2018; Kim et al., 2020; Vallo Hult & Byström, 2021), raising the significance and value of this dissertation. The interesting and evocative nature of the topic is further enhanced by applying a novel data collection method (the MEBS) in exploring digitalization and professional development, as well as providing insights on its usefulness, limitations, and strengths.

Second, high-quality qualitative research is *rigorous*, marked by a rich complexity of abundance and face validity. Here, the importance of sufficient, abundant, appropriate, and complex theoretical constructs, data and time in the field, samples, contexts, and data collection and analysis processes are emphasized (Tracy, 2010). In this dissertation, much care and time have been devoted to the design, collection, and analysis of the data, and various theoretical constructs have been applied. Additionally, the data collection method, the research process, and the findings have been described and explained as precisely and extensively as possible.

Third, *sincerity* is defined as another criterion of quality, closely related to that of rigor. Sincerity can be achieved “through self-reflexivity, vulnerability, honesty, transparency, and data auditing” (Tracy, 2010, p. 841). In writing this dissertation, I have honestly brought forth all the necessary information to enable the readers to evaluate the research, as well as to illuminate my own point of view. I have been as transparent as possible regarding the choices made in different phases of the research (e.g., data collection and analysis) and the premises (i.e., the social constructionist and narrativist approaches) that have guided the research. Likewise, sincerity has been demonstrated by honestly acknowledging the limitations of the empirical studies and by evaluating in more detail the methodological strengths and limitations of the applied data collection method.

Fourth, *credibility* is marked by the trustworthiness, verisimilitude, and plausibility of the research findings. Thick description is regarded as one of the most important means for achieving credibility, as explained by Tracy (2010):

To illustrate data's complexity, researchers are advised to *show*, meaning that they provide enough detail that readers may come to their own conclusion about the scene.

This is contrasted from the author *telling* the reader what to think. (p. 843, emphasis in original).

Thick description has been applied in the empirical studies by illustrating the interpretations, using original quotations from the data, and summarizing the findings in different scenarios and typifications. However, it should be noted that the data were originally written in Finnish; thus, in this dissertation, the excerpts are translated from Finnish to English. In translating the excerpts, I was mindful about how it might change the meanings and therefore I aimed to be as accurate and true to the original texts as possible. However, translation always poses the risk of losing some unique expressions and subtle meanings, which might influence the credibility of the findings.

Although the MEBS is well-suited for answering the empirical RQs of this dissertation, the credibility of the empirical findings could have been increased, for instance, by using multiple data sources. Especially the use of qualitative methods (e.g., interviews) other than the MEBS could have yielded a deeper and richer understanding of the phenomenon. Moreover, the literature review mostly includes publications in electronic format; therefore, some printed publications may be missing. However, the credibility of the findings is strengthened by using several theoretical frameworks, analyzing methods, and paying attention to tacit knowledge, that is, delving “beneath the surface to explore issues that are assumed, implicit, and have become part of participants’ common sense” (Tracy, 2010, p. 843). The multivocality of the research is also increased by the participants’ diverse backgrounds (age, gender, and job title), enabling different viewpoints and multiple voices to surface. However, it is important to acknowledge that most participants have chosen to respond to the positive frame story version. One could ponder, does this reflect the fact that Finnish government workers in general hold more positive than negative views on digitalization and professional development? Or perhaps this reflects a self-selection bias, that is, the participants with a positive stance have been more willing to take part in the study? However, the analysis showed that the statistical relation between the participants’ background variables and which frame story version is answered did not predict their preferences for which version they chose to write.

The use of member reflections (i.e., sharing the findings and dialoguing with participants), is also viewed as one way of increasing a study’s credibility. However, the empirical studies of this dissertation have had limited possibilities for this input as most of the data have been collected anonymously online. Furthermore, because in this dissertation reality is viewed as constructed by multiple meanings and the view

of a single true reality is contested, I agree with Tracy (2010) that the usefulness of member reflections does not lie in finding “correspondence between the researcher’s findings and the understandings of the participants being studied” (p. 844). Thus, member reflections are “less a *test* of research findings as they are an opportunity for *collaboration* and reflexive *elaboration*” (p. 844, emphasis in original). The use of member reflections provides additional new data; therefore, such use in this dissertation has also been limited by the fact that it would have required more time for further analysis. However, although I did not use member reflections, in each of the four publications, the research findings, interpretations and theoretical views have been frequently discussed and reflected on among all the authors.

Fifth, *resonance* (i.e., the research’s ability to reverberate and affect an audience) can be achieved through aesthetic merit, evocative writing, and transferability. In this dissertation, the statistical generalization of the empirical findings is limited. Although the sample size ( $N=81$ ) is large compared with those of most studies using the MEBS as a data collection method, the sample is non-representative and relatively small to generate any statistical generalizations. Furthermore, despite the studies being based on a multi-organizational sample, all participants are Finnish government workers. Thus, the findings are context-dependent and as such, might not be applicable to other contexts (e.g., other professional fields or cultural contexts). The findings are also time-bound, reflecting the participants’ views in 2017. Indeed, it would be interesting to explore how their views might have changed due to the ongoing COVID-19 pandemic. Likewise, regarding the conducted literature review (Publication I), the findings are clearly time-bound, and the use of the MEBS has evolved since the review was conducted (2013–2014).

Although it is important to acknowledge the limited value of this research in statistically generalizing the findings, it does not mean that they completely lack the capacity for generalization. In fact, the potential to generalize in this study can be conceptualized through a recognition of patterns, in which

generalization is about the potential use of a piece of research: generalization is an act, which is completed when someone can make sense of situations of processes or other phenomena with the help of the interpretations, which emanate from research texts. [...] Here, there is no *a priori* assumption that an interpretation can be generalized to similar contexts: It is not enough. The generalization is loosely related to contexts in the sense that the researcher cannot predict in which cases the interpretation is useful, only suspect in which contexts one might look for it. It is often more a matter of ‘realization’ – someone who is familiar with a piece of research realizes that the original interpretation ‘fits’ cases they have met.” (Larsson, 2009, p. 34, emphasis in original).

Indeed, in qualitative research, the concept of transferability is considered more helpful in understanding generalization compared with a formal, quantitative understanding of it (e.g., Tracy, 2010). *Transferability* (e.g., Lincoln & Guba, 1985; Tracy, 2010) is achieved “when readers feel as though the story of the research overlaps with their own situation and they intuitively transfer the research to their own action” (Tracy, 2010, p. 845). Transferability can be increased by writing accessibly, evocatively, and invitationally, thus creating a feeling in readers as if they have experienced the same thing in another context. This is closely related to what Tracy (2010) calls aesthetic merit, meaning that “the text is presented in a beautiful, evocative, and artistic way” (p. 845), which is seen as a key to achieve resonance in qualitative studies.

The different scenarios, typifications and illustrations presented in this dissertation aim to increase the evocativeness of the findings and provide the readers with possibilities to recognize familiar “patterns” or interpretations, thus enhancing the resonance of the studies. However, it is important to recognize that in MEBS research, the frame stories are usually divided into two opposites, illustrated in this dissertation by the use of positive and negative frame stories. Although this variation is fruitful in exploring logical thinking and in illustrating how this variation influences the stories, presenting the findings through two opposing poles might limit the evocativeness of the findings as they might seem artificial or extreme. Additionally, in this dissertation the typical scenarios have been constructed by using original data excerpts from several stories, which might also have influenced the aestheticity of the findings. Thus, this dissertation certainly has limits in its evocativeness or aesthetic merit, and the final evaluation is left to the readers.

The sixth criterion of quality is *significant contribution*, which can be assessed by evaluating how the research is theoretically, heuristically, practically, or methodologically significant. The research contributions are discussed in this dissertation summary, as well as in the original publications, showing how this research extends existing theories, influences a variety of audiences (ranging from academic scholars to practitioners), and provides methodological insights, as well as inspirations for future research.

*Research ethics* represents the seventh criterion of quality in qualitative research. For this dissertation, the ethical principles for research with human participants (European Commission, 2021; Finnish National Board on Research Integrity, 2019) were considered throughout the research. The research was conducted in a way that avoided causing any harm to the participants, communities, or other subjects of the research. Respecting the participants’ dignity and autonomy was ensured by their

voluntary participation, based on informed consent. The participants were informed about the research content and aims, the procedures related to the study (e.g., the processing of personal data, anonymization, publishing the results in journals), and the possibility to discontinue their participation in the research at any time without any consequences. During the face-to-face data collection situations, the participants were informed both orally and in writing, and those who wrote their stories via the online form were informed in writing. The participants were also offered the possibility to ask the researcher questions about the research during the face-to-face data collection situations or by contacting the researcher by email or telephone. The face-to-face data collection situations were organized during work hours in the participants' workplaces, with the permission of their superiors.

Considering the processing of personal data and the protection of the participants' privacy, ethical guidelines were also followed. The participants wrote their stories anonymously, and they could choose not to answer any of the demographic questions (gender, age, and job title). They were also informed that only the researchers would have access to the data, and they were promised complete anonymity. Thus, any information that could have been used to identify the participants had been removed when reporting and publishing the results. Moreover, the data were securely stored electronically and only the researchers who processed the data were allowed access.

Finally, the last criterion of quality is *meaningful coherence*. According to Tracy's (2010) conceptualization, meaningfully coherent studies

achieve their stated purpose; (b) accomplish what they espouse to be about; (c) use methods and representation practices that partner well with espoused theories and paradigms; and (d) attentively interconnect literature reviewed with research foci, methods, and findings. (p. 848)

This dissertation has set out to empirically explore the relation between digitalization and professional development from the workers' perspective, together with the methodological aim of introducing and further developing the MEBS. These overall aims of the dissertation are addressed based on the four publications, each bringing its own contribution as part of the whole. The research design is also meaningfully coherent with the theoretical framework used, illustrated in how the combined social constructionist and narrativist approach is applied in exploring various perceptions, associations, and possibilities instead of aiming towards revealing a single truth.

## 5.4 Future research avenues

This dissertation concludes by presenting some theoretical and methodological suggestions for future research. First, regarding the conceptualization of professional development, this dissertation suggests that future investigations adopt a broad view on professional development, which goes beyond the (formal) development of the competencies and skills needed in current and future working life, recognizing that professional development also relates significantly to how workers define themselves as professionals, how they view learning opportunities at work, and how they exercise their agency in relation to their work and professional identities. Regarding research on the relationship between digitalization and professional development, a valuable area for future research lies in exploring more deeply how workers' subjectivities and professional identities both shape and are shaped by digitalization, and thus can influence how they develop professionally. A more in-depth and detailed investigation into how workers' values, interests, and competencies influence what kinds of work–identity misalignments and alignments could be induced by digitalization, as well as their relations with different contextual and individual factors would help to build a more profound understanding of the relations between professional development and digitalization.

Previous studies on digitalization and professional learning and development have often explored the possibilities that digitalization can bring for learning and how it can be harnessed for learning and professional development (e.g., Beach, 2017; Breunig, 2016; Littlejohn & Margaryan, 2014). Management and organization studies have also tended to “celebrate the positives of digitalization” (Trittin-Ulbrich et al., 2021, p. 10). Nonetheless, sharing the views by Trittin-Ulbrich and colleagues (2021), this dissertation advocates the need for future research to focus on the dark side of digitalization as well, for instance, what kinds of problems or adversities it may bring regarding a workers' professional identity, professional agency, or career development. It is important to identify the challenges and technology-related demands caused by digitalization and the resources needed to buffer these demands to be able to provide workers with possibilities for professional development in meaningful ways.

Another promising direction for future studies is to diversify the scenarios regarding what kinds of agentic strategies (e.g., job crafting actions, professional identity negotiations) are induced by digitalization and how these relate to professional development in different contexts. The four typifications described in Publication IV illustrate some possible ways that workers may manifest their agency

amid digital changes. However, it is important for future investigations to broaden and deepen these findings. Given that the stories cited in this dissertation emphasize the role of proactivity in professional development, it would also be interesting to further explore workers' perceptions on how proactivity and self-directedness are related to what kinds of identity negotiations or job crafting attempts are undertaken by workers and how they develop professionally.

Furthermore, although this dissertation has not aimed to explore the role of emotions in digitalization and professional development, the findings clearly indicated that these are highly relevant. The stories frequently mention how digitalization evokes emotions ranging from frustration to satisfaction. Therefore, in the future, a closer probe into what kinds of emotions is caused by digitalization and how they are related to professional development would be valuable. This is in line with the findings of a recent meta-synthesis focusing on the relation between professional agency and emotions at work, suggesting that emotions play an important role in professional learning and development, especially when bound up with professional identity negotiations (Hökkä et al., 2017).

Obviously, in addition to theoretically expanding and complementing the findings, a valuable future avenue could include diversifying the research context. This dissertation has focused on exploring Finnish government workers' perspectives; therefore, research in other contexts (e.g., occupations, professions, cultures) is needed in the future. A more in-depth examination of how workers' employment histories and demographic information (e.g., age, educational level) influence how they respond to digital changes in their work would be valuable as well. Moreover, as acknowledged during the research evaluation, the empirical findings of this dissertation are solely based on MEBS data. Therefore, in future research, it is important to deepen and expand the findings by using other data collection methods, such as interviews exploring the lived experiences of workers.

Given that this dissertation serves as an opening to pluralize the methodological approaches used in the field of professional learning and development, this dissertation also generates several ideas on how the MEBS could be used in future research in the field. For instance, the MEBS could be a particularly useful method when the researcher is interested in conceptualizing complex concepts related to learning and development (such as identity and competence), providing different scenarios and perspectives in relation to work-identity (mis)alignments, and exploring the relation between different emotions and professional development.

Finally, looking at the methodological possibilities of the MEBS, one future prospect stands out as highly relevant – laying out more thoroughly the

methodological foundation of the MEBS. In recent years, the MEBS has gained popularity both internationally and nationally in Finland, and as illustrated in this dissertation, the MEBS can be used in several ways and in many different contexts. The multifaceted nature of MEBS research raises many questions regarding its limits and opportunities, as well as the epistemological and ontological premises behind its use. Therefore, a closer investigation into the MEBS epistemological connections and ontological possibilities could offer researchers different ways to construct knowledge, knowing and truth. For example, future avenues could further illuminate what roles are played by imagination and empathy in producing the stories. Specifically, what is the relationship between the produced stories and the “actual world” or “truth”? Are the produced stories regarded as fictional or factual? What kinds of knowledge could become possible, and who produces knowledge in MEBS research? This dissertation accounts for a step forward in answering some of these questions. Hopefully, this dissertation also inspires and encourages researchers to continue with this endeavor in the future, despite the likelihood that universal and straightforward answers may be difficult to find.



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# ORIGINAL PUBLICATIONS

- Publication I Wallin, A., Helenius, J., Saaranen-Kauppinen, A., & Eskola, J. (2015). Eläytymismenetelmän ensimmäiset kolme vuosikymmentä: menetelmällisestä erikoisuudesta vakiintuneeksi tutkimusmetodiksi. *Kasvatus*, *3*, 247–259.
- Publication II Wallin, A., Koro-Ljungberg, M., & Eskola, J. (2019). The method of empathy-based stories. *International Journal of Research and Method in Education*, *42*(5), 525–535.  
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- Publication III Wallin, A., Pylväs, L., & Nokelainen, P. (2020). Government workers' stories about professional development in a digitalized working life. *Vocations and Learning*, *13*, 439–458.  
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- Publication IV Wallin, A., Nokelainen, P., & Kira, M. (2022) From thriving developers to stagnant self-doubters: An identity-centered approach to exploring the relationship between digitalization and professional development. *Vocations and Learning*. Advance online publication.  
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# PUBLICATION

I

**Eläytymismenetelmän ensimmäiset kolme vuosikymmentä:  
Menetelmällisestä erikoisuudesta vakiintuneeksi tutkimusmetodiksi.**

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## Eläytymismenetelmän ensimmäiset kolme vuosikymmentä: menetelmällisestä erikoisuudesta vakiintuneeksi tutkimusmetodiksi

Wallin, Anna – Helenius, Jenni – Saaranen-Kauppinen, Anita – Eskola, Jari. 2015. ELÄYTYMISMENETELMÄN ENSIMMÄISET KOLME VUOSIKYMMENTÄ: MENETELMÄLLISESTÄ ERIKOISUUDESTA VAKIINTUNEEKSI TUTKIMUSMETODIKSI. *Kasvatus* 46 (3), 000–000.

Eläytymismenetelmän ensimmäiset yksittäiset käyttökokeilut toteutettiin 1970-luvulla. Vuosien saatossa menetelmää on käytetty ja sovellettu monenlaisiin tutkimustarkoituksiin. Eniten menetelmää on tähän mennessä hyödynnetty kasvatusta ja sosiaalitieteissä niin pro gradu -tutkielmissa, väitöskirjoissa kuin muissakin tutkimuksissa. Nykyisin eläytymismenetelmä on vakiinnuttanut paikkansa muiden laadullista aineistoa tuottavien menetelmien joukossa. Tässä katsausartikkelissa esitellään eläytymismenetelmän taustaa ja käytännön toteutusta sekä tarkastellaan tietokantahaun pohjalta, millä tieteenaloilla ja missä konteksteissa menetelmää on käytetty 2000-luvulla ja miten sitä on varioitu. Lopuksi pohditaan menetelmän vahvuuksia, haasteita ja tulevaisuutta.

Asiasanat: eläytymismenetelmä, laadullinen tutkimus, tutkimusmenetelmä

### Johdanto

Eläytymismenetelmä on aineistonkeruumenetelmä, jossa tutkittaville annetaan kehyskertomukseksi kutsuttu orientaatioteksti. Vastaajan tehtävänä on kirjoittaa lyhyehkö tarina kehys-

kertomuksen herättämien ajatusten pohjalta. Yleensä kirjoittajat joko vievät tarinan alkua eteenpäin tai kertovat, mitä on tapahtunut ennen kehyskertomuksessa kuvattua tilannetta. (Eskola 1997a, 5–6.)

Eläytymismenetelmään liittyvän kehittämistyön tavoitteeksi on kuvattu *"sellaisen menetelmän kehittäminen, jolla voisi konkreettisesti tutkia niitä toimintalogiikoita, joiden mukaan sosiaalinen maailma pyörii"* (A. Eskola 2009, 95). Menetelmällä pyritään saamaan esille kulttuurisidonnaista hiljaista tietoa, joka voi heijastaa ajallista ja paikallista todellisuutta. Menetelmä kytkeytyy konstruktionistisiin ja relativistisiin näkemyksiin, joissa sosiaalisen todellisuuden ajatellaan rakentuvan sosiaalisessa vuorovaikutuksessa (Berger & Luckmann 1998; Eskola 1998; Suoranta 1995, 178–179). Keskiössä ovat kielelliset ja yleensä tekstuaaliset aineistot, joiden avulla saadaan tietoa esimerkiksi asenteista, arvoista, käsityksistä, mielikuvista ja uskomuksista – siis sosiokulttuurisista representaatioista ja samalla subjektiivisista ajattelun logiikoista. Eläytymismenetelmän tuottamia vastauksia voidaan käsitellä mahdollisina tarinoina esimerkiksi siitä, mitä erilaiset asiat ja ilmiöt ihmisille merkitsevät (Eskola 1997a, 5–6).

Eläytymismenetelmän yleistyminen suomalaisessa kasvatusta ja yhteiskuntatieteellisessä tutkimuksessa on poikkeuksellisen tarkasti rajattavissa. Menetelmä kehitettiin 1970-luvulla Yhdysvalloissa (Mixon 1972, 1974, 1979; ks. myös Ginsburg 1978, 1979; A. Eskola 1984, 2009, 98; Eskola 1998) kokeellisen tutkimuksen kritiikistä, joka sai alkunsa tunnetusta Milgramin (ks. esim. 1984) oppimiskokeeksi naamioidusta tottelevaisuuskokeesta. Milgramin kokeiden jälkeen keskusteltiin siitä, saako suhteellisen vähämerkityksellisten tieteellisten tulosten takia tutkittavia huijata, tuottaa heille tuskaa ja jopa romuttaa heidän minäkuvansa. Kritiikin perusteella pyrittiin kehittämään tutkimusmenetelmiä, joissa säilytettäisiin kokeellisen tutkimuksen logiikka (eli muutetaan yhtä tekijää muiden pysyessä samana), mutta jossa tutkittavat saisivat toimia ihmiselle tyypillisellä tavalla varioiden kieltä, punniten eri vaihtoehtoja ja ajatteluaan hyödyntäen – nykykielellä puhuttaisiin varmaankin tarinallisuudesta – vailla perinteisen laboratorion tai kyseylomakkeen vastaajille antamia rajoituksia.

Antti Eskola toi menetelmän Suomeen keväällä 1982 kokeellista tutkimusta ja sen ongelmia käsitellelle kurssille ja rakensi samalla menetelmän ympärille tutkimusryhmän, jonka jäsenet tekivät menetelmän avulla opinnäyteitä. Sittenmin vuonna 1988 julkaistun sosiaalipsykologisen kokoomateoksen artikkelissa (A. Eskola 1988) julkaistiin kokemuksia eläytymismenetelmäkokeiluista.

Eläytymismenetelmän kehitystyön toinen vaihe alkoi, kun Jari Eskola ja Juha Suoranta lähtivät kehittämään menetelmää ennen kaikkea laadullisten aineistojen analyysimenetelmiin kohdistuneen työnsä osana. 1980-luvun lopulla ilmestyi muutama yksittäinen artikkeli (Eskola 1989, 1990) ja 1990-luvun alussa ilmestyi erityisesti kasvatustieteilijöille suunnattu artikkeli eläytymismenetelmästä laadullisen tutkimuksen aineistonkeruumuotona (Eskola & Suoranta 1991). 1990-luvulla julkaistiin myös *Eläytymismenetelmäopas* kahtena laitoksena (Eskola 1991, 1997a) ja siihenastista kehitystyötä sekä menetelmän käyttöä kartoittava väitöskirjatutkimus (Eskola 1998). Eläytymismenetelmää käsiteltiin 1990-luvun lopulla ja 2000-luvun alussa esimerkiksi *Johdatus laadulliseen tutkimukseen* -oppikirjassa (Eskola & Suoranta 1998) ja muissa menetelmällisissä teksteissä (ks. esim. Eskola 2001; Eskola & Pietilä 2002; Saaranen-Kauppinen & Puusniemi 2006), joiden avulla tietous menetelmästä levisi. Nykyisin eläytymismenetelmä voidaan lukea yhdeksi suhteellisen vakiintuneeksi laadullisen tutkimuksen menetelmäksi erityisesti kasvatusta ja sosiaalitieteissä.

Tässä artikkelissa esittelemme aluksi eläytymismenetelmän taustan ja käytännön toteutuksen, minkä jälkeen tarkastelemme systemaattisen kirjallisuushaun pohjalta, millä tieteenoilla ja missä konteksteissa menetelmää on käytetty ja miten sitä on varioitu. Lopuksi pohdimme menetelmän vahvuuksia, haasteita ja tulevaisuutta.



## Eläytymismenetelmä käytännössä

Eläytymismenetelmässä keskeistä on kehyskertomusten variointi. Tutkija tekee samasta orientaatiotekstistä eli kehyskertomuksesta tavallisimmin 2–4 versiota, joissa varioidaan yhtä asiaa tai ilmiötä. Näin rakennetaan perinteisen koeasetelman kaltainen tilanne, jossa tiettyä tekijää muuttamalla voidaan tutkia, millainen vaikutus kyseisen tekijän varioinnilla on kertomuksiin. Aineistonkeruutilanteessa jokaiselle vastaajalle jaetaan sattumanvaraisesti yksi kehyskertomusversio.

Eri kehyskertomusversioissa varioitava tekijä muotoillaan tutkimustehtävän mukaisesti siten, että kehyskertomus sisältää tutkimuskysymyksen ja tehtävän ymmärtämisen kannalta oleelliset vihjeet. Kehyskertomuksissa pyritään yleensä välttämään kirjoittajan liiallista johdattelua, joten kehyskertomukset voivat olla hyvinkin pelkistettyjä. Toisinaan eläytymismenetelmätutkimuksissa on käytetty varsin lyhyitä kehyskertomuksia, esimerkiksi seuraavaa: "Askolla on ollut *hyvä/huono* päivä. Mitä on tapahtunut?" (Teräväinen 2011) (hyvä/huono viittaa kehyskertomuksen variaatiovaihtoehtoihin). Mainitussa Teräväisen (2011) tutkimuksessa tarkasteltiin Asperger-erityisoppiilaan sosiaalista integraatiota koulu yhteisöön. Asperger-lapsen (Askon) luokkatoverit kirjoittivat tarinat, ja näin tutkija sai tarinoista laadullista aineistoa Asperger-lapsen päivästä ja muiden oppilaiden suhtautumisesta häneen.

Tutkimusaineistoksi riittävä kirjoitettujen tarinoiden määrä riippuu esimerkiksi aiheen monimutkaisuudesta. Eläytymismenetelmätutkimuksissa sovelletaan laadulliselle tutkimukselle tyypillistä saturaation periaatetta, jolloin yleensä tarvitaan 15–20 tarinaa jokaisesta kehyskertomusvariaatiota kohden. (Eskola 1997a, 24.) Useimmiten eläytymismenetelmäaineistot ovat koostuneet siis vähintään 30 vastauksesta, mutta joissakin tutkimuksissa vastaajia on ollut huomattavasti enemmän, erityisesti silloin, jos tutkimuksissa on pyritty vastaajaryhmittäisiin vertailuihin (ks. esim. Tuorila & Koistinen 2010).

Eläytymismenetelmän tuottamaa aineistoa voidaan analysoida laadulliselle tutkimukselle tyypillisten analyysimenetelmien avulla. Tutkija analysoi ja tulkitsee aineistoaan tutkimustehtävän mukaisesti ja suhteessa valitsemaansa teoreettiseen kehukseen sekä tutkimusperinteeseen. Esimerkiksi narratiivisesti suuntautunut tutkija saattaa tarkastella sitä, miten eri kehystarinoiden jatkeeksi kirjoitetut tarinat eroavat toisistaan ja onko tarinoissa tiettyä rakennetta tai logiikkaa. (Eskola 1997a, 16–18.) Aineiston tarinallisen luonteen vuoksi on ollutkin tyypillistä, että analyysissa korostuvat esimerkiksi erilaiset tarinalinjat tai tarinan vaiheet (ks. esim. Helenius 2009; Suoninen & Jokinen 2011). Lisäksi eläytymismenetelmäaineiston analyysimenetelminä yleisiä ovat olleet aineistolähtöinen teemoittelu ja tyypittely (Eskola & Suoranta 1998; ks. esim. Hulkari 2006; Rasinairo 2008; Simolin 2013) ja tarinoissa heijastuvien diskurssien tarkastelu (ks. esim. Isosomppi 2008; Keskinarkaus & Sykkö 2012; Kujala 2013).

## Tiedonhaun toteutus

Tiedonhaun tarkoituksena oli selvittää eläytymismenetelmän käytön yleistymistä sekä tarkastella sitä, millaisilla tieteenaloilla ja millaisissa tutkimuksissa menetelmää on vuosien aikana käytetty. Tiedonhaku toteutettiin lokamarraskuussa 2013 ja päivitettiin marraskuun alussa 2014 hakemalla Tampub-, Melinda-, Theseus- ja Arto -tietokannoista julkaisuja hakusanalla "eläytymismenetelmä". Tiedonhaku keskitettiin suomalaisiin tietokantoihin, koska perinteisistä kansainvälisistä kasvatus- ja sosiaalitieteellisistä tietokannoista löytyi pääasiassa vain joitakin viittauksia suomalaisten tutkijoiden kansainvälisiin julkaisuihin. Haku suoritettiin avoimella haulilla kohdistettuna kaikkiin sanoihin ja toteutettiin aineistoittain (väitöskirjat, lisensiaatintyöt, pro gradu -tutkielmat, ammattikorkeakoulujen opinnäytetyöt, artikkelit, erillisteokset). Hakujen tulokset sisällytettiin katsaukseen pääosin tiivistelmän ja koko tekstin perusteella. Mikäli julkai-

suista ei ollut saatavilla koko tekstiä tai tiivistelmää, sisällytettiin hakujen tulokset mukaan otsikon perusteella.

Tapauksissa, joissa oli saatavilla tiivistelmä ja koko teksti, oli kriteerinä tutkimusten ja tutkielmien mukaan ottamiselle se, että kehyskertomuksia oli vähintään kaksi ja että niissä oli otettu huomioon eläytymismenetelmälle tyypillinen variaatio. Julkaistuista tutkimuksista ja tutkielmista tarkasteltiin erityisesti tutkimuksen toteutusta ja julkaisuvuotta (ks. taulukko 1) ja kirjattiin ylös tieteenala. Melinda- ja Tampub-tietokantoja tarkasteltiin rinnakkain, jotta välttyttiin laskemasta samaa tutkielmaa kahdesti mukaan. Katsaukseen on sisällytetty myös muutamia (alle 10 kappaletta) tutkimuksia ja tutkielmia, joita tietokantahaussa ei löytynyt. Nämä julkaisut olivat kirjoittajaryhmän tiedossa menetelmän kehitysohjon ja käyttöön liittyvän laajan kokemuksen, lukeneisuuden ja verkostojen kautta. Valtaosa katsauksen tutkimuksista ja tutkielmista on kuitenkin löydetty tietokantahaun avulla. Keskityimme katsauksessamme esittelemään pääasiassa 2000-luvulla ja viimeisen kymmenen vuoden aikana toteutettuja eläytymismenetelmätutkimuksia (yhteensä 37 kappaletta), koska eläytymismenetelmän varhaistyö on esitelty varsin kattavasti jo aiemmin (ks. esim. Eskola 1997b).

Tarkasteltaessa tietokantahakujen tuloksia huomattiin, että erityisesti opinnäytetöissä eläytymismenetelmään viitattiin usein, vaikka kriteerit kehyskertomusten variaatiosta eivät täytyneet. Esimerkiksi Theseus-tietokantahaun tuloksena löydettiin yhteensä 156 kappaletta ammattikorkeakoulujen opinnäytteitä, joista ainoastaan 58:ssa täyttivät eläytymismenetelmän kriteerit. Tämän voidaan tulkita viittaavan paitsi siihen, että menetelmää on ryhdytty soveltamaan ja kehittämään erilaisissa konteksteissa, myös siihen, että käsitteenä eläytymismenetelmää saatetaan käyttää, vaikka eläytymismenetelmän alkuperäiset kriteerit eivät täytyisi.

## Eläytymismenetelmän käyttö eri tieteenaloilla ja tutkimuksissa

Eläytymismenetelmää on käytetty 1980-luvulta tähän päivään asti eniten kasvatus- ja sosiaalitieteissä, joiden piirissä menetelmä lanseerattiin. Vähitellen käyttö on laajentunut myös monille muille tieteenaloille. Taulukossa 1 havainnollistetaan eläytymismenetelmätutkimusten ja -tutkielmien yleistymistä vuodesta 1991 alkaen.

Kasvatustieteissä menetelmää on käytetty laajimmin luokanopettajaopiskelijoiden ja yleisen kasvatustieteen opiskelijoiden keskuudessa (ks. kuvio 1), vaikka menetelmä aikoinaan esiteltiin ensimmäisten joukossa nimienomaisesti aikuiskasvatustieteilijöille (ks. Eskola & Suoranta 1991). Kasvatustieteen tutkimuksissa ja opinnäytetöissä eläytymismenetelmän avulla on tutkittu hyvin monenlaisia aiheita, jotka useimmiten liittyvät kouluun, oppimiseen, opettajuuteen, lapsuuteen ja vanhemmuuteen. Seuraavaksi esittelemme muutamia esimerkkejä tutkimuksista, jotka liittyvät opetuksen ja oppimisympäristöjen tutkimukseen, asenteiden tutkimiseen ja lapsi-vanhempi-suhteeseen.

Kasvatustieteissä eläytymismenetelmää on käytetty esimerkiksi tutkittaessa virtuaalisen kouluyhteisön hyötyjä ja haasteita yliopisto-opintoihin kiinnittymisen tukemisessa (Annala, Mäkinen, Svärd, Silius & Miilumäki 2012). Tutkimuksessa yliopisto-opiskelijoita pyydettiin eläytymään tulevaisuuteen, vuoteen 2015, ja tarinoissa vastaajat kirjoittivat ajatuksiaan siitä, miksi virtuaalinen kouluyhteisö on tullut hyvin suosituksi ja vastaavasti, miksi virtuaaliyhteisöä ei katsota hyödylliseksi. Tutkimuksen perusteella virtuaalinen kouluyhteisö voi tukea opintoihin kiinnittymistä esimerkiksi tarjoamalla mahdollisuuksia vastavuoroisuuteen, verkostoitumiseen, opiskelijoiden ja opettajien väliseen kollegiaaliseen tukeen ja asiantuntemuksen kehittämiseen.

Tulevaisuuteen orientoitumista on hyödynnetty myös koululiikunnan puhetaipojen tarkastelussa (Kujala 2013). Tässä tutkimuk-

TAULUKKO 1. Eläytymismenetelmän käyttö vuosina 1991–2014

Vuosi	Pro gradu	Amk:n opinnäyte	Väitöskirja	Lisensiaatintyö	Artikkelit
1991	1				1
1995	1				
1996	1				
1997	2				
1998	9		1		
1999	4				2
2000	12		1		1
2001	9				2
2002	11		1		
2003	7				1
2004	5		2	2	
2005	15	1	1		
2006	10	1	2		
2007	13	1	2		
2008	22	2			
2009	10	9	1	1	1
2010	11	9	1	1	1
2011	12	8	2		3
2012	9	6			
2013	11	14	1		1
2014	4	7	1		
<b>Yhteensä</b>	<b>179</b>	<b>58</b>	<b>16</b>	<b>4</b>	<b>13</b>

nessa luokanopettajaopiskelijat eläytyivät vuoteen 2030 ja kuvittelivat koululiikunnan joko onnistuneen tai epäonnistuneen tehtävässään. Tutkimus osoitti, että epäonnistuneeseen koululiikuntaan liitetään erityisesti suorituskeskeisyys, kun taas onnistunut koululiikunta nähdään monipuolisena ja korostavan yhdenvertaisia osallistumismahdollisuuksia.

Oppimisympäristöjen ja opetuksen tutkimisen lisäksi eläytymismenetelmällä on kerätty aineistoa erilaisista lapsuuden, nuoruuden ja vanhemmuuden ilmiöistä. Esimerkiksi eräässä pro gradu -tutkielmassa analysoitiin

peruskoulun yhdeksännen luokan oppilaiden käsityksiä hyvän ja huonon vanhempisuhteen merkityksestä lapsuudenkodista itsenäistyessä (Helenius 2009). Yhdeksäsluokkalaisten käsitysten mukaan hyvä vanhempisuhte näkyi muun muassa nuoren haluna vieraillla lapsuudenkodissaan, perheenjäsenistään huolehtimisena ja yhteisen vapaa-ajan viettämisenä. Sen sijaan huonossa vanhempisuhteessa ilmenee esimerkiksi epäluottamusta nuoren pärjäämiseen, vanhempien välinpitämättömyyttä ja konflikteja, jotka pakottavat nuoren muuttamaan kotoaan.

Edellä esitellyissä tutkimuksissa eläytymismenetelmää on käytetty eri toimijoiden käsitysten tutkimisessa, mihin tarkoitukseen menetelmää onkin sovellettu runsaasti, mutta eläytymismenetelmällä on saatu myös tietoa ihmisten asenteista ja suhtautumistavoista. Esimerkiksi eräässä pro gradu -tutkielmassa (Rasinairo 2008) tarkasteltiin opettajien asennoitumista tyttöihin ja poikiin neljän kehyskertomuksen avulla, joissa varioitiin päähenkilön sukupuolta ja häiriökäyttäytymistä. Tutkielmassa havaittiin, että opettajat suhtautuvat tyttöihin ja poikiin eri tavoin riippumatta oppilaan häiriökäyttäytymisestä.

Kasvatustieteellisissä tutkimuksissa kehystarinan päähenkilöitä ovat olleet esimerkiksi opiskelija ja opettaja, lapsi ja vanhempi tai kiusattu ja kiusaaja – riippuen kontekstista ja tutkittavasta ilmiöstä. Tutkimuksista saatua tietoa on voitu hyödyntää esimerkiksi opetustieteiden arvioinnissa (Hulkari 2006). Kyseisessä väitöskirjassa on muodostettu eläytymismenetelmäaineiston avulla työssäoppimisen laadun 12-osainen laatukäsitteistö, jota käytettiin myöhemmin työssäoppimisen laadun arvioinnissa.

Kasvatustieteiden lisäksi menetelmää on käytetty monilla muilla tieteenaloilla, joista yleisimmin yhteiskunta- ja sosiaalitieteiden

pro gradu -tutkielmissa (kuviokuva 1). Ammattikorkeakouluissa menetelmää on käytetty eniten sosiaali- ja terveystalalla erityisesti hoitotieteen, sosionomin ja sosiaalipedagogiikan koulutusohjelmissa (ks. kuviokuva 2). Sosiaali- ja yhteiskuntatieteellisissä tutkimuksissa eläytymismenetelmällä on saatu tietoa esimerkiksi siitä, miten lapset ja nuoret käsitteellistävät erilaisia asioita, kuten taloudellista eriarvoisuutta (Hakovirta & Rantalaiho 2012), hyvää elämää ja sen uhkia (Helavirta 2011) ja tulevaisuuttaan (Ollila 2008). Eri tieteenaloilla on menetelmällä lähestytty hyvin laajaa kirjoa erilaisia aiheita (ks. esim. Jokela, Leinonen, Tukiainen & Vahteri 2006; Kokkonen 2005; Maijala 2012; Tuorila & Koistinen 2010), ja kooten voidaan todeta, että eläytymismenetelmä soveltuu monenlaisiin tutkimuksiin, joissa ollaan kiinnostuneita ihmisten ajattelun logiikasta, käsityksistä ja toiveista (vrt. Tuorila 2011).

Toistaiseksi eläytymismenetelmää on käytetty yhdysvaltalaisista alkujuuristaan huolimatta enimmäkseen Suomessa. Kansainvälisiä tutkimuksia, tutkielmia ja artikkeleita, joissa hyödynnetään eläytymismenetelmää, on esiintynyt vuosien aikana vain muutamia ja nekin ovat pääosin suomalaisten tekemiä (ks. Mustonen 2006; Posti-Ahokas 2013; Simonen 2013; Simpura, Fahrenkrug, Hyttinen

#### KASVATUSTIETEET

(yhteensä 114 kpl)

Yleinen kasvatustiede (31)

Opettajankoulutus (66)

Aikuskasvatus (7)

Kotitalous- ja käsityötieteet (5)

Erityispedagogiikka (3)

Ammattikasvatus (2)

Varhaiskasvatus (1)

#### YHTEISKUNTA- JA SOSIAALITIETEET

(yhteensä 37 kpl)

Sosiaalityö (16)

Sosiaalipsykologia (12)

Sosiologia (7)

Sosiaalipedagogiikka (1)

Hyvinvointiala (1)

#### MUUT TIETEENALAT

(yhteensä 28 kpl)

Kauppa- ja hallintotiede (9)

Kehitysmaantiede (1)

Terveystieteet (7)

Liikuntapedagogiikka (2)

Taiteiden tieteet (3)

Viestintätiede (2)

Informaatiotiede (1)

Fysikaaliset tieteet (1)

Tietojenkäsittelytiede (1)

Sotilaspedagogiikka (1)

KUVIO 1. Eläytymismenetelmän käyttö pro gradu -tutkielmissa eri tieteenaloilla ja oppiaineissa



KUVIO 2. Eläytymismenetelmän käyttö ammattikorkeakoulujen oppinäytetöissä

& Thorsen 1989). Posti-Ahokkaan (2013) tutkimus, jossa selvitettiin tansaniaalaisten nuorten käsityksiä siitä, millaisten tekijöiden koetaan olevan merkityksellisiä opinnoissa menestymiselle, on toistaiseksi ainoa nykypolven eläytymismenetelmätutkimus, joka on toteutettu kokonaan ulkomailla ja täysin erilaisessa kulttuurisessa ympäristössä. Lisäksi on tehty vertailevia kansainvälisiä tutkimuksia suomalaisten ja intialaisten opiskelijoiden käsityksistä turismin eettisyydestä (Mustonen 2006), ja alkoholin asemasta arkielämässä Suomessa, Saksan liittotasavallassa ja Tanskassa (Simpura ym. 1989). Näiden tutkimusten lisäksi on tehty yksi pro gradu -tutkielma Kambodzassa, jossa tutkittiin sitä, miten lainansaajat selittävät mikrolainaustapahtuman onnistumista tai epäonnistumista (Simonen 2013). Myös 1980-luvun alkupuolen pilottitutkimuksissa oli kerätty aineistoja eri Euroopan maista (ks. A. Eskola 2009, 95–97).

### Eläytymismenetelmän kehittelyitä

Perinteisesti eläytymismenetelmän avulla on tutkittu jonkin ilmiön logiikkaa pyytämällä tutkittavia eläytymään kehyskertomuksessa kuvattuun tilanteeseen ja kertomaan esimerkiksi siitä, kuinka tilanne jatkuu tai mitä ennen kyseistä tilannetta on tapahtunut. Toisistaan yhdeltä elementiltään poikkeavissa kehyskertomuksissa on useimmiten kuvattu jokin tilan-

ne, joka on yhdessä kehyskertomusversiossa myönteinen tai onnistunut ja toisessa puolestaan kielteinen tai epäonnistunut (ks. esim. Haapa 2014; Helenius 2009; Jokela ym. 2006; Kujala 2013; Tuominen-Leppäaho 2008). Nytemmin eläytymismenetelmän kehyskertomuksia on varioitu useilla erilaisilla tavoilla. Eräs suhteellisen uusi tapa soveltaa menetelmää on ajan varioiminen, eli kehyskertomuksissa varioidaan tilanteen sijasta tarinan ajajännettä (kursivoinnit artikkelin kirjoittajien):

*Ajattele hetki tulevaa työuraasi. Kuvittele nykyhetkestä 5 vuotta/15 vuotta/25 vuotta eteenpäin ja kirjoita lyhyt tarina siitä, mitä työurallasi on mahtanut tapahtua ja minkälaisessa tilanteessa olet työelämässä tuolloin. Älä kirjoita nimeäsi paperiin. Voit tarvittaessa jatkaa tarinaasi paperin kääntöpuolelle.*

Kyseisessä tutkielmassa (Simolin 2013) tavoitteena oli tarkastella niitä mahdollisuuksia ja uravaihtoehtoja, joita nuoret opettajat näkivät itsellään olevan, sekä selvittää, millaisia suunnitelmia, odotuksia ja toiveita he liittivät tulevaan uraansa. Koska tutkielman tarkoituksena oli kiinnittää huomiota opettajien työuraan liittyviin tulevaisuuden suunnitelmiin, oli kehyskertomuksissa luontevaa varioida juuri aikaa. Tutkielmassa ajan varioinnin arvioitiin onnistuneen – joskin tutkielmassa todettiin, että tarinat, joissa eläydyttiin 15 ja 25 vuoden päähän olivat sisällöltään hyvin samantyyppisiä ja siten kaksikin kehyskertomusversio-

ta olisi riittänyt hyvin. Eläytymismenetelmälle tyypilliseneen tapaan tämän kuitenkin saattoi päätellä vasta, kun aineistoa oli kerännyt kolmella eri kehyskertomusversiolla.

Ajan varioinnin lisäksi tutkimuksissa on käytetty myös eläytyjän variointia, jolloin kehyskertomuksessa on muunneltu sitä, kenen näkökulmasta tarina kerrotaan (Suoninen & Jokinen 2011; kursivoinnit artikkelin kirjoittajien):

Kuvittele mielessäsi samana vuonna kanssasi syntynyt *Minna/Mika* ja siirry ajatuksissasi 10 vuotta eteenpäin eli vuoteen 2021. *Minna/Mika* muistelee syntymäpäivänään ristiriitaista menneisyyttään, sitä kuinka on kohdannut monia, joskus jopa ylitsepääsemättömältä tuntuneita ongelmia. Nyt hän kuitenkin huomaa elävänsä kaikin puolin mielekästä elämää. *Kerro Minnan/Mikan tarina sellaisena kuin hän sen kokee.*

Kuvittele mielessäsi samana vuonna kanssasi syntynyt *Minna/Mika* ja siirry ajatuksissasi 10 vuotta eteenpäin eli vuoteen 2021. *Minnan/Mikan* syntymäpäivänä hänen pitkäaikainen tuttuensa muistelee hänen ristiriitaista menneisyyttään, sitä kuinka *Minna/Mika* on kohdannut monia, joskus jopa ylitsepääsemättömältä vaikuttaneita ongelmia. Nyt *Minna/Mika* kuitenkin näyttää elävän kaikin puolin mielekästä elämää. *Kerro Minnan/Mikan tarina sellaisena kuin se hänet pitkään tunteneelle henkilölle näyttäytyy.*

Tutkimuksen (Suoninen & Jokinen 2011) tarkastelun kohteena oli umpikuijiin ajautuminen ja niistä selviytyminen, ja siinä kiinnitettiin huomiota sekä kertomusten sisältöön että siihen, millä tavoin umpikuijiin ajautumisesta ja umpikujista selviytymisestä kerrottiin. Eläytyjän varioinnin kautta tarkasteltiin sitä, millainen merkitys kertomuksen rakentumiselle on sillä, eläydytäänkö kertomukseen päähenkilön vai toisen henkilön näkökulmasta. Tutkimuksessa havaittiin, että kuvattaessa toisten ihmisten elämänkulkua otetaan mallia elokuvista, lehdistä ja kirjoista tutuista juonenkuluista. Näissä tarinoissa umpikuijiin liitettiin usein raju pohjakosketus ja päähenkilön läheisillä kuvattiin olevan myönteinen rooli päähenkilön elämänkulkuun. Vastaavasti päähenkilön näkökulmaan eläydyttäessä korostui yksilökeskeinen näkökulma, eli vaikeista ti-

lanteista selvittiin oman tavoitteellisen toimijuuden avulla. Muiden ihmisten rooli ei siis ollut yhtä ratkaiseva kuin toisen henkilön näkökulmasta kirjoitettaessa. (Suoninen & Jokinen 2011, 55–59.)

Perinteisesti kehyskertomuksissa on käytetty eläytymistä kolmannessa persoonassa, kuten esimerkiksi edellä esitellyssä kehyskertomuksessa *Minnana* tai *Mikana*. Tutkittava voi tällöin valita, kumman sukupuolen rooliin hän kertomusta kirjoittaessaan asettuu. Nytemmin kehyskertomuksissa on kokeiltu myös yhden sukupuolineutraalin nimen käyttämistä (Hakala, Kujala & Vuolio 2009; Saaranen-Kauppinen, Rovio, Wallin & Eskola 2011; Wallin, Saaranen-Kauppinen, Rosenberg & Eskola 2014), jolloin vastaajan on mahdollista olla ottamatta kantaa sukupuoleen. Sukupuolineutraalin nimen (kuten *Kainon* tai *Eelian*) valitseminen on perusteltua erityisesti silloin, kun halutaan tutkia, tuodaanko sukupuolta jollakin tavalla esiin vastaajien kertomuksissa.

Vastaustilanteessa kehyskertomusten tukena voidaan käyttää esimerkiksi piirtämistä (Hakovirta & Rantalaiho 2012; Mesimäki 2010). Tarinoiden kirjoittamisen virikkeenä on käytetty myös valokuvien esittämistä valkokankaalla: arjen elämyksiä tarkastelleessa tutkielmassa (Urponen 2011) näytettiin vastaajille ennen tarinoiden kirjoittamista lyhyt kuvasarja, jonka tarkoituksena oli toimia inspiraationa tarinoiden kirjoittamiselle. Kuvasarjan käyttötarve perusteltiin sillä, että arjen elämys voi olla vaikeasti lähestyttävä ilmiö sen henkilökohtaisuuden ja nopeasti ohikiitävän luonteen vuoksi. Visualisointia (kuten kuvia tai videoita) on toistaiseksi hyödynnetty hyvin vähän eläytymistarinan tuottamisen virikkeenä, ja tietävästi kuvallisia kehyskertomuksia ei ole vielä käytetty. Kuvien käyttö eläytymismenetelmässä voi olla haasteellista niiden tuottamien lukuisten kulttuuristen vihjeiden vuoksi, koska vaarana on, että variaatio saattaa hukuttaa virikkeiden joukkoon.

Tutkimustarkoitusten lisäksi eläytymismenetelmää on käytetty käytännön kehittämistoiminnassa, kuten koulutukseen liittyvässä

työnohjauksessa (Huhtinen 2005) ja opetusmenetelmänä ilmiöpohjaisessa opetuksessa (Helenius 2010). Oppilaat voidaan saada menetelmän ja yksinkertaisen analyysin avulla pohtimaan esimerkiksi tarkasteltavaan ilmiöön liittyviä asenteita. Opetusmenetelmänä eläytymismenetelmää on kokeiltu esimerkiksi Mannerheimin Lastensuojeluliiton (MLL) yhteistyössä perusopetuksen kanssa järjestämällä itsetuntoaiheisilla oppitunneilla. Tässä kokeilussa erityistä oli eläytymistarinan kirjoittaminen ryhmissä. Oppilaat saivat kirjoittaessaan keskustella pienryhmissä itsetuntoon liittyvistä ajatuksistaan ja tuottaa yhteisesti loogisena pidetyn tarinan. (Helenius 2010, 22–32.) Ryhmissä kirjoitetuista eläytymismenetelmäkokeiluista ei ole tiettävästi tehty tieteellisiä julkaisuja.

### **Eläytymismenetelmän vahvuuksia ja haasteita**

Eläytymismenetelmän yhtenä keskeisenä vahvuutena on nähty sen kyky tuottaa uusia näkökulmia. Lisäksi menetelmä on potentiaalinen vaihtoehto, kun tarvitaan tietoa esimerkiksi jonkin ilmiön variaatioista ja marginaaleista sekä käsitysten ja ajattelun logiikasta. (Eskola & Suoranta 1998, 116–117.) Tutkimuksissa ja tutkielmissa menetelmää on käytetty paitsi ainoana aineistonkeruutapana, myös esitutkimuksena ja yhdessä muiden tiedonhankintamenetelmien, kuten teemahaastattelun (Jokela ym. 2006; Vehkanen 2008), ryhmäkeskustelun (Ollila 2008), havainnoinnin (Teräväinen 2011) tai kyselylomakkeen kanssa (ks. esim. Hulkari 2006; Sinivuori 2002). Menetelmän käyttöä on perusteltu sillä, että se mahdollistaa tutkittaville oman ajattelun ja mielikuvituksen käytön eikä rajaa heidän vastaamistaan siinä määrin kuin strukturoidummat menetelmät (ks. esim. Tuorila 2011).

Eläytymismenetelmän etuna on nähty myös se, että vastaukset kerätään lähes poikkeuksetta anonyymeina. Vastaajien anonymiteetti sekä kuvitteelliseen tilanteeseen eläytyminen voi olla eduksi esimerkiksi arkaluon-

toisia aiheita tutkittaessa. (Holma 2004; Nuikinen 2009; Terenius 2009; Vehkanen 2008.) Menetelmää on pidetty eettisesti sensitiivisenä, koska aineistoa kerätessä ei pyydetä kirjoittamaan suoraan omista kokemuksista, vaan sellaisista näkemyksistä ja tapahtumasarjoista, jotka voisivat vastaajan mielestä olla mahdollisia (ks. esim. Holma 2004; Salonen 1999).

Eläytymismenetelmän valintaa on puoltanut usein menetelmän käytön (näennäinen) helpous: aineisto on mahdollista kerätä suhteellisen lyhyessä ajassa ja aineisto saadaan suoraan kirjallisessa muodossa, mikä tekee literoinnista nopeaa (Eskola & Wallin 2015, 57). Toisaalta, vaikka aineisto onkin mahdollista koota nopeasti, voi hyvän kehystarinan laatiminen ja sen kohdentaminen tutkimuskysymystä vastaavaksi olla haasteellista (ks. Eskola & Wallin 2015). On havaittu, että huonosti laadittu kehystarina voi ikään kuin syöttää näkemyksiä tutkittavalle, rajata näkökulman liian kapeaksi tai määritellä valmiiksi arvoja, joita on tarkoitus selvittää. Jos taas tarina rakentuu useamman kuin yhden muuttujan ympärille, analyysissä ei saada selville, mikä kriteeri on määrittänyt tarinan kulkua. Toisinaan puolestaan kehystarina ja tutkimuskysymykset eivät vastaa toisiaan. Kehystarina voi olla mielenkiintoinen, mutta sen avulla ei saada kirjoittajaa kertomaan siitä aiheesta, jota tutkimuskysymysten perusteella on tarkoitus selvittää. (Ks. esim. Eskola 1995.)

Eläytymismenetelmä tuottaa tietoa kulttuurisesti mahdollisista tapahtumasarjoista ja tutkittavien subjektiivisista käsityksistä: tarinoista ei voida tehdä suoria johtopäätöksiä esimerkiksi siitä, kuinka vastaajat itse toimisivat kehystarinaa vastaavassa tilanteessa, vaikka joitakin vihjeitä subjektiivisista todellisista kokemuksista onkin mahdollista saada. Kun jotakin ilmiötä lähestytään tarinallisesti, nähdään tarinat yhteisestä kulttuurisesta varannosta ammennettuina eli kertomuksilla nähdään olevan yhteiset kulttuurisesti jaetut mallit ja lajityypit. Narratiivisessa tutkimuksessa tarinoiden kyky ilmentää yhteisön kulttuuria

on siis oleellisempaa kuin niiden autenttisuus. (Hänninen 2000, 18, 94.)

## Eläytymismenetelmän tulevaisuus

Katsauksemme eläytymismenetelmän käyttöön suomalaisessa tutkimuksessa viime vuosikymmenten aikana osoittaa, että menetelmän käyttö on yleistynyt erityisesti opinnäytetöiden ja tutkielmien aineistonkeruumenetelmänä. Eniten menetelmää on hyödynnetty kasvatus- ja sosiaalitieteissä, joskin sen käyttö on yleistynyt myös muilla tieteenaloilla. Eläytymismenetelmää on sovellettu monipuolisesti erilaisiin tutkimusaiheisiin ja -tarkoituksiin, ja menetelmänä se soveltuu erityisesti tutkimuksiin, joissa ollaan kiinnostuneita ihmisten käsityksistä, ajattelun logiikasta, tulevaisuuden skenaarioista ja uusien näkökulmien tuottamisesta.

Eläytymismenetelmä kehitettiin aikoinaan perinteisen kokeellisen tutkimuksen pohjalta eettisesti mahdollisimman kestäväksi menetelmäksi. Menetelmää voidaan edelleen pitää eettisenä tutkimusmenetelmänä, mutta nykyisin sen käytön perusajatukset voidaan löytää erityisesti narratiivisuudesta ja narratiivisesta tutkimuksesta. Yhteiskunnan yksilöllistymiskehityksen myötä kiinnostus ihmisten äänen, tunteiden ja kokemusten esiin nostamiselle on noussut esiin tutkimuksen tekemisessä (Merrill & West 2009, 2–4). Sosiaalitieteissä voidaan puhua narratiivisesta ja elämänkerallisesta käänteestä (Chamberlayne, Bornat & Wengraf 2000; Syrjälä 2015, 257) siinä missä aiemmin puhuttiin kielellisestä käänteestä (ks. esim. Eskola & Suoranta 1998).

Samalla kun kiinnostus tarinallisuuteen on voimistunut, on suhde kirjoittamiseen muuttunut. Vielä 1980-luvulla ihmiset olivat tottuneet esimerkiksi peruskoulun ainekirjoituksen johdosta kirjoittamaan säännöllisesti käsin, kun taas 2010-luvulla kirjoitetaan enenevässä määrin näppäimistöjen ja kosketusnäyttöjen avulla. Arkisessa viestinnässä pyritään tiiviyyteen tekstiviestien ja twiittien myötä. Toisaalta taas esimerkiksi blogimuotoisen kirjoittami-

sen suosio viittaa siihen, että tarinoilla ja kuvauksilla on edelleen paikkansa yksilöiden elämässä ja sosiaalisessa vuorovaikutuksessa. Kirjoittamisen siirtyminen vahvemmin verkkoon tarjoaa uusia mahdollisuuksia aineistonkeruuta ajatellen. Tulevaisuudessa eläytymismenetelmäaineistojakin voidaan kerätä yhä enemmän internetin ja sen erilaisten foorumeiden ja palveluiden kautta, jolloin tarinoita pystytään kirjoittamaan ajasta ja paikasta riippumatta, ja vastaukset saadaan tallennettua näppärästi. On myös mahdollista, että eläytymistarinan kirjoittamisen voi liittää menetelmällisen triangulaation hengessä osaksi perinteisempää määrällistä tai laadullista verkkokyselytutkimusta.

Eläytymismenetelmän lanseeraus kansainvälisille tutkimusyleisöille ja -käyttäjille näyttäytyy yhtenä menetelmän keskeisistä tulevaisuuden kehittämismahdollisuuksista. Menetelmää voitaisiin esimerkiksi käyttää vertailtaessa eri maiden välisiä käsityksiä, käytäntöjä ja merkityksiä. Kansainvälisissä tutkimuskonteksteissa eläytymismenetelmästä on käytetty ja voidaan käyttää erilaisia ilmauksia. Ginsburg (1978; 1979) suosi aikoinaan termiä *non-active role-playing* (tai *passive role-playing* tai *role-playing of the non-active sort*). Suomessa (ks. Eskola 1998) on puolestaan lanseerattu termi *the method of empathy-based stories* eli MEBS, joka on tällä hetkellä vakiintunein eläytymismenetelmän käänös Suomessa (ks. esim. Anala ym. 2012; Hakala, Kujala & Vuolio 2009; Mustonen 2006; Posti-Ahokas 2013; Simonen 2013).

Tieteellisen tutkimuskäytön ohella eläytymismenetelmää voisi käyttää nykyistä enemmän pragmaattisesti orientoituneissa tutkimuksissa ja kehittämistöissä. Erilaisia tarinallisia menetelmiä on hyödynnetty työyhteisöjen kehittämisessä (ks. esim. Aaltonen & Heikkilä 2003) ja intuitiivisessa tulevaisuusskenaarioiden laatimisessa (ks. esim. Häyrynen 2009, 26–32). Eläytymismenetelmällä voisi olla myös annettavaa lukuisissa erilaisissa tilanteissa, joissa pohditaan menneisyyttä, nykytilaa ja tulevaisuutta erilaisista näkökulmista, kuten



esimerkiksi tarkasteltaessa erilaisten toimijoiden (johto, esimiehet, toimihenkilöt, työntekijät, sidosryhmät, asiakkaat) näkemyksiä yrityksen tulevaisuudesta organisaatiomuutostilanteessa.

Katsauksen perusteella voidaan päätellä, että menetelmää on mahdollista myös tulevaisuudessa soveltaa eri käyttötarkoituksiin. Esimerkiksi kehyskertomusten rakennetta, muotoa ja esittämistapoja on mahdollista kehittää huomioiden erilaiset tutkimusaiheet ja kohde-ryhmät. Jatkossa olisikin kiinnostavaa ja tarpeellista syventyä tarkastelemaan lähemmin erilaisissa tutkimuksissa käytettyjä kehyskertomuksia, niiden toimivuutta sekä menetelmän käyttöä eri konteksteissa.

Vaikka eläytymismenetelmää voidaan käyttää monin eri tavoin, ankkuroituu eläytymismenetelmä käsitteenä variointiin tukeutuvalla menettelytavalla, koska menetelmän perusajatuksena on alusta lähtien ollut kokeellisen tutkimuksen imitointi eettisesti hyväksyttävällä tavalla. Kuten katsauksen tiedonhaussakin tuli esille, tulevaisuudessa menetelmän pohjalta varmasti kehitetään erilaisia eläytymiseen ja kirjoittamiseen perustuvia tiedonhankintamenetelmiä. Se, kuinka näitä sovelluksia tullaan kutsumaan, nähdään aikanaan.

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# PUBLICATION II

## **The method of empathy-based stories**

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## **The Method of Empathy-Based Stories**

This paper focuses on the processes of the method of empathy-based stories (MEBS) and illustrates the ways in which MEBS facilitates storytelling and narration. In MEBS, the participants narrate stories based on the frames and prompts provided by the researcher, and two different versions of the frame story offer variations in the story elements. This variation enables the researcher to study how the stories change when one element is varied – an idea that imitates traditional experimental research. MEBS is well-suited for examining the informants' perceptions, reasoning, expectations, and values regarding a specific phenomenon or experience. Additionally, MEBS enables researchers to map out a research area, because the stories might provide new and unexpected insights into the topic. In this paper, we present the history of MEBS, outline how to design and implement MEBS research, discuss the advantages and limitations of the method, and conclude by exploring some methodological possibilities.

Keywords: MEBS, storytelling, narratives, data collection method, frame story, variation, future research

## Introduction

The method of empathy-based stories (MEBS), similar to fictional narrative role-playing, is a qualitative data collection method where the informants compose short imaginary writings according to an introductory frame story provided by the researcher. The variation in the story frame and its elements enables the researcher to study how the stories change when one element is varied, similar to more traditional experimental research. The frame stories usually describe a particular event or situation, and the participants are instructed to continue the story or explain what has happened before the described situation, i.e., to describe the antecedents of the situation (Eskola and Wallin 2015; Wallin et al. 2015).

MEBS has a long interdisciplinary history. In its early years MEBS was referred to as passive or non-active role-playing (A. Eskola 1988). Later on, the concept of MEBS was introduced as a translation of the Finnish concept *eläytymismenetelmä* (Eskola 1997b, 173). However, the Finnish language makes a distinction between empathy as an emotion (*empatia*) and as an action (*eläytyä*), and this difference was lost when translating MEBS into English, which defines empathy more broadly. More specifically, it has been used in sociology, social psychology, and the educational sciences to gain information and insights on the views and ideas embedded in the narratives produced by the participants. The developmental motivation of MEBS arose from the need to develop a method that could illustrate the logic and reasoning behind human actions and the ways in which social worlds operate. Empathy-based stories also aim to describe culturally bound tacit knowledge that may reflect the contextual and time-bound reality. The method was originally developed in the 1970s in the United States as a modification of active role-playing to study individuals' interpretations of different situations (Mixon 1972, 1974, 1979; see also Ginsburg 1978, 1979; Eskola 1998). Role-playing has been used in psychology and social psychology as an assessment technique and therapeutic procedure – and later on as a substitute for deception in experimental social psychology (Ginsburg 1978). During the 1960s and 1970s, considerable discussion emerged concerning the use of deception in experimental studies, and the developmental work of MEBS also stems from this discussion. The critique of experimental studies prompted scholars to develop research methods that could preserve the 'logic' of an experimental study design while avoiding ethical issues. For example, MEBS enables the participants to take part in research in ways that simulate and follow everyday experiences, allowing participants to consider different options while responding to the researcher's prompts and questions (Eskola 1997a; A. Eskola 1988).

MEBS started to be used more frequently in Finland in the early 1980s, and since then the method has been introduced in two MEBS guidebooks (Eskola 1991, 1997a), one doctoral dissertation that presents the use and development of MEBS (Eskola 1998), and in several methodological texts (e.g., Eskola and Suoranta 1998; Eskola and Wallin 2015; Wallin et al. 2015). Our 2017 literature search<sup>1</sup> revealed that the method has been used in 21 international articles, one methodological text, and four doctoral dissertations written in English. MEBS research has been conducted in many different research fields (although mostly in educational studies) and the amount of international MEBS research has increased in recent years. However, it is noteworthy that in most of the international articles, the research has been conducted in Finland and/or by Finnish researchers. For example, Posti-Ahokas (2013) has collected MEBS data in Tanzania and Mustonen (2006) has collected MEBS data in India. In 1985, MEBS data were also collected in Denmark and Germany in order to make cross-cultural comparisons (A. Eskola 1988).

In MEBS, the participants are expected to create connections and empathize with the story and presented characters, and to imagine themselves in someone else's situation and role. Study



participants are given two kinds of instructions: '*Imagine-self instructions* direct the participants to imagine how they themselves would feel if they were in the target's position; *imagine-target instructions*, in contrast, ask the participants to imagine what the target is thinking and feeling' (Davis et al. 2004, 1627, emphasis by the authors). Likewise, role-taking actions can be divided into "'*situational*" role taking, where the judge simply imagines what he or she would do in the target's circumstances (i.e., 'putting oneself in another's shoes'), and '*individual*' role taking, where the judge must infer what the target would do, given the target's different characteristics (i.e., 'seeing the world through another's eyes')' (Higgins and Wells 1986, 203, emphasis by the authors).

These different perspectives and role-taking instructions are aimed at relating to the broader concept of empathy (Gerace et al. 2013), especially when empathy is defined as 'the imaginative transposing of oneself into the thinking, feeling, and acting of another' (Dymond 1950, 343). However, the concept of empathy also includes the outcomes of the empathic process: these outcomes can be understood as what is referred to as emotional empathy, including personal distress, sympathy, and empathic anger among other things (Gerace et al. 2013). It is important to note that in MEBS, empathy refers less to the emotion of empathy but more to perspective or role taking actions, i.e., 'applied empathy' to a situation or role. For example, Kinnunen and Haahti (2015) used a frame story that described a successful festival and asked the participants to describe what events and activities took place in such a scenario. This kind of 'applied empathy' requires participants to imagine themselves in a fictional situation, but does not necessarily require or evoke empathetic feelings.

Theoretically, MEBS is grounded in constructivist and relativist epistemologies, which consider social reality as contextually and socially constructed (see also Berger and Luckmann 1984; Eskola 1998). The method treats the research participants as competent members of their culture (Ginsburg 1979), while the narrator 'shapes, constructs and performs the self, experience, and reality' (Chase 2005, 657). MEBS assumes that the reality and narrative both reflect and imitate each other and that 'eventually the culturally shaped cognitive and linguistic processes that guide the self-telling of life narratives achieve the power to structure perceptual experience, to organize memory, to segment and purpose-build the very 'events' of a life' (Bruner 2004, 694). In social constructionism, reality is constructed within social events, resulting in socialization and diverse social roles. The self is relational and realities are negotiated, dialogue is transformative, and knowledge is produced within interactions (see Gergen 1999; Gergen and Gergen 2003). According to Gergen, 'theoretical a priori is not located in individual minds, but in social interchange. In effect, all that we take to be knowledge emerges from and is dependent upon agreements established within social groups. And, given the values inherent in any social group, there is no fundamental separation between fact and value.' (Wang 2016, 566.)

MEBS produces textual and linguistic data that is suitable for examining the participants' perceptions, expectations, mental images, and values regarding a specific phenomenon, i.e., sociocultural representations and logical thinking. Empathy-based stories are not necessarily literal descriptions of reality, but plausible imaginary stories (Eskola 1998). The role of plausibility, possibility, and imagination is important here. Rather than stories presenting 'the truth', they portray plausible, possible, and potential connections and insights. It is useful to acknowledge here that in comparison to other narrative methods, MEBS does not focus on researching personal lived experiences or life histories. The constructed stories might be based on the participants' own experiences, but they may also be the result of their imagination. This imaginary aspect also makes the method suitable for mapping out divergent and upcoming research areas (and for extending research areas), because the participants' stories can provide new and unexpected insights into the topic and research areas (Eskola 1998; Eskola and Wallin 2015; Wallin et al. 2015).

In addition to MEBS imaginary nature, MEBS differ from traditional narratives and narrative methods in several other ways. For example, narratives are often long stories that have narrative structure, i.e. they are structured ‘around sets of events over time, usually to develop a plot in which one event causes another that affects people and/or their social contexts’ (Bold 2012, 17). Temporality and the placing of events in a sequence have been widely identified as the key feature of narrative form (Elliott 2012). However, it has also been suggested that only a sequence of events is not enough to form a complete narrative, but fully formed narratives have six separate elements, which all answer to different questions. These elements include an *abstract*, that summarizes the story in advance, an *orientation*, that gives background information of for example the time, place or situation, a *complication*, that shows a turning point and gives the main event sequence, an *evaluation*, that gives meaning to the story, a *resolution*, that tells what finally happened and a *coda*, which returns the perspective to the present. (Cortazzi and Jin 2012; Labov and Waletzky 1997.) Although empathy-based stories usually have a plot with a story sequence, the stories might not contain all of the previously described elements. MEBS stories are generally relatively short compared to other narratives and thus, the narratives in MEBS research are more compact, straight-forward, less descriptive and personal compared to narratives that are produced during in-depth interviews and diary writing.

Another key feature that distinguishes MEBS from other narrative methods has to do with the frame story which is used as a starting point for the story. In the frame story the participants are asked to elaborate and extend the story further and the frame story might define the context as well as some background information including the time and place. This might be quite different for narrative interviews and life histories, which encourage the participants to provide and tell their own accounts of their lives as freely and detailed as possible (e.g. Elliott 2012).

Lastly, similar to narratives there is no single analysis method which is only suitable for MEBS and this type of data. However, it is important to note that in contrary to many other narratives, empathy-based stories are usually written anonymously and without any information about the individual participants’ background, demographics, and social characteristics. Thus, it might be difficult to index and note who is writing the stories and from which position. However, if the researcher is interested in comparing the stories according to the participants’ age, gender, or other background variables it is possible to ask these questions before or after writing the stories.

### **Designing and Conducting MEBS Research**

The format of the frame stories or introductory scripts always depends on the research question(s), and therefore it is not possible to formulate any generalizable instructions on how to design the frame stories. Even though it is not possible to give any direct instructions regarding the format of the frame stories, scholars have found some methodological and design-related practices more helpful than others. For example, it has been suggested that the frame stories be kept relatively short and simple – consisting of one or a few sentences – to ensure that the participants are not disoriented (Eskola 1997a, 17–18). The frame stories do not necessarily have to be long or guiding to be successful and to work in meaningful ways. For example, in a study focusing on the social integration of Asko – a student with Asperger Syndrome – and on how his classmates perceived and conceptualized Asko’s day, Teräväinen (2011) used two very short frame stories: ‘Asko had a good/bad day. What happened?’ However, sometimes further guidance and frame stories are appropriate in order to receive more detailed stories, but longer frame stories also provide many potentially contradictory cues, and the variation of the stories might be lost in the details.

Usually MEBS research is constructed around two frame stories that differ with respect to one element or detail. An illustration of this can be found in recent MEBS research (Koski-Heikkinen et al. 2014) that aimed to gain a deeper understanding of vocational education students' perceptions of teacher authority. The researchers used two frame stories connected to teacher authority, one positive and one negative. The stories were written from either Hannah's or Mike's perspective. For clarity, we present below only the frame story version where Hannah is the main protagonist:

Imagine, that Hannah studies for her last year at a vocational school. Her studies have gone well and she is satisfied with her education and that she is well-prepared professionally. In Hannah's opinion, the most important vocational education teacher to her knows teaching well. During this teacher's lessons, students learn the basics of the vocation and the teacher enjoys Hannah's respect. Write a description of what this good teacher is like and how this teacher acts, because Hannah tells that she has learned well and is satisfied with education and her teacher.

Imagine, that Hannah studies for her last year at a vocational school. Her studies have not gone well and she is dissatisfied with her vocational education. In Hannah's opinion, the most important vocational education teacher to her is not doing teaching well. During this teacher's lessons, students do not learn the basics of the vocation, nor does the teacher enjoy Hannah's respect. Write a description of what this bad teacher is like and how this teacher acts, because Hannah tells that she has not learned well and is dissatisfied with education and her teacher.

It is noteworthy that even though ideally there should be only one aspect of the stories that varies, in practice the variation is more layered, complex, and nuanced. For example, in the previous example (Koski-Heikkinen et al. 2014), the designed variation had to do with the quality of teaching, but in practice the stories may also vary regarding the school where Hannah was studying, her vocation, her learning abilities, and so on. When using multiple varying story elements, combinations of potential story frames and the resulting narrations also multiply. It is possible that some variations and combinations might seem unfamiliar, unnatural, surprising, stimulating, and expansive to the participants, and these variations might lead, enable, or encourage the participant to answer in a certain or perhaps unexpected way (see also Wallin et al. 2015).

In addition to considering the varying story elements, it is also important to consider the quality and content of those elements. It is relatively common to use a division between positive and negative elements, such as success and failure regarding a phenomenon (e.g., Halttunen 2003; Kinnunen and Haahti 2015; Koski-Heikkinen, Määttä, and Uusiautti 2014; Rautiainen 2015). However, it is equally possible to construct the variation around gender (Juntunen and Saarti 2000; Katila and Eriksson 2013) and time frame (Kinnunen and Haahti 2015).

**The use of different protagonists.** Obviously, empathy-based stories always have a protagonist from whose perspective the stories are told. This enables participants to gain a sense of the feelings, thoughts, and perspectives of the other (in this case, the story character). The participants may be instructed to imagine themselves as the protagonist and to imagine themselves in the described situation. In more traditional applications, the main character is presented in the third person, as shown in our previous example where Hannah was studying in a vocational school. Acting, thinking, and feeling as the other can offer the participants an opportunity to step out of themselves and expand their experiences and imagination, and to externalize possibly painful, joyful, problematic, or enjoyable experiences. On the other hand, this kind of perspective-taking might also lead to the activation of the participant's self-schemas, i.e., when imagining the target's point of view, 'observers may try to estimate what their own thoughts and feelings would be, perhaps by recalling relevant experiences from their past; such mental activity might in turn activate self-related knowledge structures' (Davis et al. 2004, 1626).

Sometimes gender is mentioned in the frame stories and the participants are instructed to imagine themselves as females or males. However, more recently there has been studies where the use of one gender-neutral name has been tested (Hakala, Kujala, and Vuolio 2009; Saaranen-Kauppinen et al. 2011; Wallin et al. 2014). Gender-neutral characters may be useful if the researcher does not want to determine the gender beforehand but desires to leave this decision to the participant or give the participant the option to leave the gender unconsidered when responding to the prompts. The use of gender-neutral characters could be beneficial especially when the researcher is interested in studying if and how the participants bring forth gender and gendered discourses and practices in the stories. However, it is also possible that participants will assign a gender to the story characters when reading their examples. To further explore the role of gender in the frame narratives as well as participants' responses could offer additional insights into data construction processes.

**Considerations for data collection.** MEBS research has been conducted with many different age groups, the youngest being second graders. Age is usually not an issue in MEBS research as long as the participants are able to communicate through writing. When participating in a MEBS study, the participants are generally given 15–30 minutes to write their stories, and often they are handed only one frame story version, so they are unaware of the existence of alternative scenarios when writing the stories. However, some studies have experimented with MEBS applications where the participants respond to all story frames (see, e.g., Kultalahti 2015; Mustonen 2006; Posti-Ahokas 2013). In all of these studies, the quality of the data resembled traditional MEBS data where the participants responded to only one frame story version. Answering more than one frame story is risky, since the participants might not have the time or the energy to concentrate on writing several essays, and therefore the quality of the data may be affected.

In addition to face-to-face meetings and personal interactions between the participant and researcher, empathy-based stories have also been collected via email, mail, and social media. For example, in Kultalahti's (2015) study, the researcher posted a request for participation on her Facebook wall. The request included a brief overview of the research and a link to an electronic survey, which included some background questions and the different versions of the frame story. In this research, the use of an electronic survey and social media was successful, as the researcher gathered 309 participants, each of whom answered four different frame story versions. In Kultalahti's study, the average story was 60 words long. The length of stories and the number of participants and collected stories vary considerably in MEBS research. In early MEBS studies (Eskola 1988), it was discovered that the stories started to resemble each other as the number of

stories increased, and as such, 15–20 stories per frame story are enough for analysis purposes (see also Eskola 1997a). If the researcher wants to collect more responses, Eskola (1997a) suggests that instead of collecting additional stories with the same frame story, the researcher could develop new variations of the frame stories. This idea of a saturation point has also later been strengthened by other scholars (e.g., Kinnunen and Haahti 2015). However, there are several MEBS studies where the size of the data is significantly larger (e.g., Annala et al. 2012; Kultalahti 2015; Paaso, Uusiautti, and Määttä 2013), and conversely there are studies where the number of stories remains below this saturation point (e.g., Hyrkäs, Appelqvist-Schmidlechner, and Kivimäki 2005; Juntunen and Saarti 2000; Kontkanen et al. 2015; Uusiautti et al. 2014). For example, Hyrkäs et al. (2005) studied first-line managers' perceptions of clinical supervision by collecting 11 stories from ward sisters (n=7) and nursing managers (n=4) with four variations of the frame story. In their study the researchers concluded that despite the small number of participants, data collection with MEBS produced rich material and the results also supported earlier findings on the topic.

MEBS can be carried out from various theoretical perspectives and triangulated with other data collection methods, such as surveys and interviews (e.g., Halttunen 2003; Ikonen 2013; Kinnunen and Haahti 2015). In addition, the generated data can be analyzed with many different qualitative analysis methods. For example, data-driven qualitative content analysis and thematic analysis are frequently utilized methods in MEBS research (e.g., Annala et al. 2012; Hyrkäs et al. 2005; Koski-Heikkinen et al. 2014). MEBS stories have also been analyzed with discourse analysis (e.g., Katila and Eriksson 2013; Kinnunen and Haahti 2015; Paaso et al. 2013) and narrative analysis (e.g., Moisander and Pesonen 2002).

### **MEBS: Advantages and Limitations**

This method made it possible to the participants to have a look at their work from a distance and reveal their perceptions in an open manner that might not have been necessarily reached, for example, in a personal interview. This viewpoint can be considered enhancing the credibility and reliability of the data (see e.g., Shenton, 2004). (Uusiautti et al. 2014, 179)

MEBS has several methodological advantages. As Uusiautti et al. (2014) state above, MEBS can be considered an ethically sensitive data collection method, as it provides the participants an opportunity to freely express themselves without limiting their thinking or adding any external pressures (see, e.g., Eskola 1998, 44–47). In comparison to personal interviews, MEBS lacks face-to-face interaction, which may be an asset in some studies: it has been stated that interviewees are more likely to give socially desirable answers, i.e., they seek to please the researchers (Hyrkäs et al. 2005), and be more agreeable or acquiesce in interview situations (e.g., Janis 1982; Krumpal 2013; Schuman and Presser 1981; van der Heijden et al. 2000). MEBS offers the participants an opportunity to imagine themselves as others and to write about their perceptions and a plausible chain of events. This scenario is unlike an interview, where the participants are asked directly about their personal experiences, so MEBS can be useful especially when researching sensitive topics. In this way, empathy-based stories may 'serve as a strategy to give voice to people whose voice may not otherwise be heard in research' (Posti-Ahokas 2013,

1290). Moreover, the stories are always written anonymously and voluntarily.

MEBS has multiple epistemological and methodological uses and it can be a particularly suitable method for research that aims to investigate diverse meanings participants assign to a phenomenon. For instance, Annala et.al. (2012) studied university students' perceptions of online community environments (OCEs) and how they experience community engagement. More specifically, MEBS was used to investigate the students' views on an imaginary OCE and alternative scenarios on OCE's benefits and challenges. MEBS can also be a suitable method when the researcher is interested to know how a concept or a phenomenon is conceptualized by the participants. Moisander and Pesonen (2002) used the method to explore the dominant discourses of green consumerism. The focus was to analyse 'the discursive strategies through which some types of green consumerism are normalised and others – the more radical green consumers – are marginalised or positioned as the other' (Moisander and Pesonen 2002, 330). Thus, in this study the researchers presumed that when writing the empathy-based stories, the participant would be using the dominant discourses of representation and reproducing culturally shared meanings that reflect green consumerism.

Additionally, MEBS can be used to study what kind of factors are associated with a less known phenomenon, as in Kultalahti's (2015) study on work motivation. Kultalahti used MEBS to study what kind of factors Millennials see as motivating or demotivating at work and in the workplace. MEBS activated the participants to use their imagination and to write about unexpected or unlikely scenarios thus assisting researchers to design future studies. Another study (Hyrkäs et al. 2005) described first-line managers' perceptions of the long-term effects of a clinical supervision intervention they were currently participating in. This kind of approach could be useful when designing education events and supervision practices which would align with the participants hopes, fears and expectations for the future.

As MEBS aims to spark the participants' imagination, it is a suitable method when the researcher is interested in finding new perspectives, inventing propositions and arguments, and verbalizing tacit knowledge. MEBS provides the researcher with an opportunity to collect unexpected viewpoints and knowledge about the margins of some phenomenon that might have been lost with other methods. This imaginary aspect makes the method especially well-suited for research that is in its initial stages or is conducted in an unfamiliar (cultural) context (e.g., Posti-Ahokas 2013).

On the other hand, even if the data collection in MEBS studies can take less time than interviews or longitudinal observations, an ill-constructed frame story might force the participants to write about certain perceptions, limit the participants' imagination, or define in advance the values that the researcher is studying. In turn, sometimes the frame story and the research problem do not correspond: even though the frame story might be interesting and designed carefully, it might not solicit responses that answer the research questions at hand. Furthermore, if a frame story contains more than one varying element, it might not be possible to locate which of the varied elements determined how the story proceeded.

Empathy-based stories contain information about a plausible chain of events and the participants' subjective perceptions, not necessarily about actual lived experiences. In accordance with some narrative traditions, the ability of the stories to reflect and express personal meaning is considered more relevant than the factual occurrence of the events described in the stories (Bell 2002; Polkinghorne 2007). As Lieblich, Tuval-Mashiach, and Zilber (2011, 7–8) state, 'stories are usually constructed around a core of facts or life events, yet allow a wide periphery for freedom of individuality and creativity in selection, addition to, emphasis on, and interpretation of these "remembered facts."'

Furthermore, when discussing MEBS and narratives, it is important to clarify that although MEBS shares many features with narrative methods and empathy-based stories can be considered and analysed as narratives, narrativity is not always a strong and most prevalent feature in MEBS research. In addition, research participants might base their stories on their personal experiences but the stories can also be completely imaginary. Since the difference between imagined or 'real life' story is not an essential feature for MEBS, scholars are not asking participants to separate stories or label them either imagined or 'real'. Furthermore, MEBS data is usually written in story format, with a clear temporal plot, story sequence and contingency but this is not necessarily always the case. The participants may as well write their answers as individual bullet points and as a list of thoughts that lack causation, plot or interrelation. Furthermore, as mentioned before, the data can be analysed with a variety of different qualitative methods and therefore the prominence of the narrative features depends on the focus of the research and the researcher, and the type of data produced with this method in each singular context.

Even if the MEBS stories might give some clues about real experiences, the stories do not necessarily correspond to how the participants would act in a similar situation or how some phenomenon actually develops. Empathy-based stories do not tell 'the truth' or the true state of events or past actions and behaviors, but rather the possibilities, hopes, threats, and values people associate with different phenomena and experiences. However, it is noteworthy that although the stories might not be based on actual lived experiences, the stories are not necessarily fictional; they are often based on culturally shared genres and meanings. From a social constructionist perspective, many individuals understand and make sense of the world through interpretative processes that are subjective and culturally rooted: 'reality is shaped largely by the way in which we perceive it, know it, interpret it and respond to it' (Spector-Mersel 2010, 212; see also Shlasky and Alpert 2007, 43). Narratives do not reflect or mirror a real, essential, and objective reality, but instead construct a subjective and constructed view of reality (see also Spector-Mersel 2010; Paaso et al. 2013).

### **Thinking about the Future of MEBS**

During the last two decades, MEBS has been increasingly used in different research fields and for many different research purposes. In the future, the method could be developed further in several ways. First, MEBS research has been rather seldom conducted in theory-driven ways, and epistemological variations have not been a part of the typical MEBS design or problem space. A closer examination of epistemological connections and ontological possibilities could offer MEBS, the design of the frame stories, and the analysis new opportunities to construct knowledge, knowing, and truth differently. For example, researchers could carefully consider and make explicit how they approach knowledge, truth, and reality. How might frame stories portray reality and what kinds of knowledges could become possible? Who generates knowledge in this kind of research approach – researchers or participants or both? What happens when matter and materiality are introduced to the stories? What would change if frame stories would be non-sensical, unrealistic, and maybe created by the participants themselves or by other participants?

Second, triangulating MEBS with other data collection methods – such as surveys and interviews – has been increasingly popular in MEBS research, but there are still many other methods that could be used side by side with empathy-based stories and/or integrated in the story frame designs. For instance, applying the Think Aloud method (e.g., Fonteyn, Kuipers, and Grobe 1993) might prove useful in MEBS research, especially in describing the participants' thinking and reasoning processes. Likewise, the use of timelining (Sheridan, Chamberlain, and

Dupuis 2011) or other visual methods (Pink 2001; Rose 2007) could extend and supplement MEBS data to explain timing, time-space connections, or the imaginary associated with stories.

In addition to developing the method for research purposes, one future possibility includes the use of MEBS for more practical purposes. For instance, MEBS has been used in Finland as a teaching method by the Mannerheim League for Child Welfare (MLCW), the largest child welfare organization in Finland. MLCW experimented with the method during school classes: students in the seventh grade had the opportunity to produce empathy-based stories that related to self-esteem. The experiment was not only unique because of its practical focus, but also because the stories were produced by student groups instead of individual students. More specifically, these middle-school students had an opportunity to discuss their reactions and thoughts in small groups and to collectively produce a logical story based on a given frame story. Afterwards, the stories were read aloud to all students. As a teaching method, the experiment proved to be successful: the students produced the stories together in small groups and were encouraged to listen to other student's perspectives and thoughts. Furthermore, they were asked to compromise regarding their own mental images, question each other's assumptions, and consider various possible chains of events together. The imaginative nature of MEBS was also utilized, since instead of discussing their own self-esteem and relationships, the students had an opportunity to externalize their thoughts by discussing the topics from the perspective of a fictional character. (Helenius 2010.)

The various potential modifications of MEBS raise multiple questions about methodological boundaries, traditions, variations, and hybrid uses of methods (see also Greckhamer and Koro-Ljungberg 2005; Koro-Ljungberg and Bussing 2013). One might wonder which modifications and methodological adaptations would still enable the recognition of MEBS. When does a methodological adaptation become unrecognizable? How do methodological traditions develop and who controls these traditions? Who defines and guards the uses of methodological labels, and how might MEBS continue to produce and develop different variations without becoming another method? Or do labels matter less: should scholars be more concerned with the usability of their methods and research approaches? How could MEBS move beyond its limits, how could continuously different iterations of MEBS function, and what unexpected yet meaningful outcomes might these different adaptations and methodological developments produce? From our perspective, these questions might not be immediately answerable, but they could provoke new thinking and alternative ways of creating strategies and inquiry approaches, and they could at the very least challenge scholars to think about methodologies and methodological traditions differently.

## Notes

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<sup>1</sup> The literature review is unpublished and is available by author request.

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# PUBLICATION III

## **Government workers' stories about professional development in a digitalized working life**

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# Government Workers' Stories about Professional Development in a Digitalized Working Life

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## Abstract

In this article, we explore workers' stories about digitalization of work and professional development. The data (101 stories) were collected from 81 Finnish government workers through the method of empathy-based stories (MEBS). MEBS is a qualitative data collection method in which participants write short imaginary texts based on an introductory script (frame story) designed by the researcher. In this study, participants were presented with two frame stories in which they were asked to imagine why digitalization had either supported or hindered professional development. The stories were analyzed inductively using qualitative thematic analysis. The findings illustrate the double-edged nature of digitalization, as it may both support and hinder professional development and learning by changing work tasks, work practices and knowledge development and management. Overall, the stories revealed that the participants perceived that digitalization may support professional development and learning, especially by providing opportunities for job control in terms of flexibility, and new ways for knowledge development and management.

**Keywords** Professional development · Professional learning · Workplace learning · Digitalization · The method of empathy-based stories

## Introduction

The nature of work has changed profoundly and continues to do so for a range of issues, including globalization, automation, and digitalization. The growing use of information and communication technology (ICT) is slated to remodel the nature of work, as it enables

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efficient and fast knowledge flow, autonomous work tasks, synchronicity, mobility, independence, and co-creation. Furthermore, from a corporate point of view, digitalization is expected to enhance productivity, efficiency, and knowledge use in organizations. However, digitalization might also lead to information overload, challenges of time management, fragmented work settings, procrastination, and technological shortcomings (Vuori, Helander, and Okkonen 2018). In all, advances in technology and an expanded knowledge economy require individuals to “adapt to working within newly structured, distributed, dynamic environments that are technologically-mediated” (Littlejohn, Milligan, and Margaryan 2012, p. 227). Adopting new technologies changes work tasks and work practices in many ways, which further influences the factors affecting learning at work, such as job demands, job control and social support (Fisher et al. 2018). Thus, digital changes pose new challenges for workers and require them to learn and develop constantly in order to maintain and improve their capacity for effectiveness.

Although several institutions have provided possible scenarios in relation to the impact of digitalization on working life (e.g., Muro et al. 2017), empirical research investigating digitalization and professional development is still scarce (e.g., Eteläpelto 2017; Fisher et al. 2018; Harteis 2018). Overall, professional development research has traditionally focused on professional development programs and training courses. Recent studies have called for a shift in focus from formal processes of education and training to learning experiences in the workplace and professional settings (e.g., Havnes and Smeby 2014; Webster-Wright 2009). Empirical studies in work contexts have often applied such traditional methods as interviews and surveys. However, it has been stated that in personal interviews, interviewees are more likely to answer in a socially desirable way and be more agreeable in interview situations (e.g., Janis 1982; Krumpal 2013; Schuman and Presser 1981; van der Heijden et al. 2000) and thus, the lack of face-to-face interaction with the researchers can be regarded as an asset. As digitalization is a value-laden and possibly sensitive topic, in this study we have applied a novel qualitative method of empathy-based stories (MEBS) that may allow the participants to express themselves with less external pressure. A third-person perspective in narratives aimed to provide the participants an opportunity to step out of themselves to expand their experiences and imagination (see Wallin et al. 2018). In this article we respond to the above-mentioned calls by studying how digitalization might shape work tasks and professional development in the future. More specifically, in this research, the interest is in exploring Finnish government workers ( $N = 81$ ) and their perceptions, to address the following research questions:

- 1) *How is work influenced by digitalization in government workers' stories?*
- 2) *How is professional development supported and hindered by digitalization in government workers' stories?*

## **Professional Development and Learning in a Digitalized Working Place**

### **Professional Development**

Several terms are used to describe the generic field of professional development, such as continuing professional development or continuing professional learning. It also

includes diverse, and potentially conflicting framings and approaches (Havnes and Smeby 2014). The field has been especially dominated by a training model through which the focus is on professional development programs and training courses rather than learning experiences in the workplace and professional settings (Webster-Wright 2009). According to Webster-Wright's critical review, "the term 'PD' [professional development] is part of a discourse that focuses on professionals as deficient and in need of developing and directing rather than on a professional engaged in self-directed learning" (2009, p. 712).

It thus follows that scholars have called for a shift in focus from professional development to professional learning, with work itself as the focal point, alongside the "notion of learning as situated in social practice, institutional cultures and structures in which learning revolves around work" (Havnes and Smeby 2014, p. 932; see also Timperley 2011; Webster-Wright 2009). Consequently, the range of possible learning activities related to professional development has been broadened. Today, this range includes both the informal and unintended activities (e.g., observing, listening) of the workplace as well as formal and intended ones (e.g., guiding, mentoring, courses) (e.g., Cheetham and Chivers 2001; Collin, Van der Heijden, and Lewis 2012). Thus, the current view is that professional development and learning are achieved through participation in everyday work activities, and the responsibility for learning has shifted from the training department to the professionals themselves (e.g., Billett 2015; Billett and Noble 2017; Littlejohn et al. 2016; Poell et al. 2018).

In previous research on workplace learning, much emphasis has been placed on the opportunities and affordances different social and physical circumstances offers workers (e.g., Ellstrom 2011; Eraut 2007; Fuller and Unwin 2004). It has been found that "the readiness of the workplace to afford opportunities for individuals to participate in work activities and access direct and indirect support are key determinants in the quality of learning that arises from that learning" (Billett 2001, p. 209). According to Ellstrom (2001), the learning potential of a workplace is determined by a complex interplay of several factors. Such factors include: (a) task characteristics, for example, task complexity, variety and control; (b) opportunities for feedback, evaluation and reflection; (c) the type and degree of formalization of work processes; (d) organizational arrangements for employee participation in problem handling and developmental activities; and (e) learning resources in terms of, for example, time for analysis, interaction and reflection (Ellstrom 2011, p. 108).

Likewise, Eraut (2007) has identified three interrelated context factors and learning factors, which play a significant role in building a learning-intensive work environment. The learning factors include 1) the professional's confidence and commitment, 2) challenges in one's work, and 3) feedback and support. According to Eraut (2007), learning at work "occurs through doing things and being proactive in seeking learning opportunities, and this requires confidence" (p. 269). Moreover, challenges in one's work need confidence, which in turn is dependent on how learners feel supported in meeting challenges in one's work. In addition to learning factors, context factors also affect learning in the workplace, and these include: 1) allocation and structuring of work, 2) expectations of each person's role, performance and progress, and 3) encounters and relationships with people at work. These factors highlight the importance of the organization of work within the organization, as well as the role of managers and social relationships in facilitating learning.

The above described factors can also be found in the demand-control-support model (DCS) (Johnson and Hall 1988; Karasek 1979; see also Fisher et al. 2018), which proposes that for attaining high levels of learning opportunities, workplaces should afford their workers with highly demanding work activities, high levels of job control and social support. In the DCS model, a demanding job consists of high task variety, task complexity and a requirement for problem solving. Job control refers to the opportunities a worker has in regard to “(a) method autonomy, the discretion to choose different methods or means to accomplish a work goal; (b) planning autonomy, the autonomy to decide in what sequence different (sub-)tasks are approached and when this is done; and (c) decision autonomy, the general degree to which incumbents can make their own decisions at work.” (Fisher et al. 2018, p. 232). Additionally, social support in the form of social interaction with other individuals to discuss work-related problems and challenges is needed in a workplace that supports learning (Fisher et al. 2018). Finally, it is also acknowledged that professional learning is a reciprocal process that combines the affordances of a workplace —such as resources, materials, and people—with the individual’s ability and motivation to engage with what is afforded (e.g., Billett 2015; Littlejohn et al. 2016). Thus, how workers coordinate their professional development depends on both the sociocultural conditions of the workplace and on the workers’ motivation, beliefs, ideals, interests, goals, competencies, work history, and personality (Eteläpelto 2017; Goller and Harteis 2017).

## Digitalization of Work

Regarding digitalization, scholars have found that digitalization alters work in several ways and thus presents new opportunities and challenges regarding professional development and learning. Digitalization is a broad concept, which encompasses “the growing use of information and communication technologies (ICT) in every area of life” (Vuori, Helander, and Okkonen 2018, p. 1) while also referring to “the ways that digital media structure, shape, and influence the contemporary world” (Brennen and Kreiss 2014, para. 18). In contrast to digitization, which can be defined as “the material process of converting individual analogue streams of information into digital bits” (Brennen and Kreiss 2014, para. 5), digitalization or digital transformation refers to more fundamental changes in social life and changes in its structure due to digital technologies.

In this article, digitalization is approached especially from the perspective of how it may change work and learning in the future. There are several analyses of how digitalization, and especially automation, alters job skill demands and the labor market (e.g., Autor et al. 2003; Balsmeier and Woerter 2019; Frey and Osborne 2013; Muro et al. 2017). Digitalization is associated with increased employment of especially high-skilled labor (e.g., Balsmeier and Woerter 2019; Frey and Osborne 2013). It has been suggested that jobs involving routine work tasks and a lower level of complexity are more likely to be automated than non-routine tasks requiring highly cognitive skills (Autor et al. 2003; Frey and Osborne 2013). Recent large-scale analysis (Chui, Manyika, and Miremadi 2015) indicated that 45% of work tasks could be automated using current automation technologies, and 58% in the near future. Frey and Osborne (2013, Frey et al. 2016) state that even high salary jobs (e.g., administrative managers and airplane pilots) are not safe from automation. Adoption of new digital tools can increase job demands, as digitalization requires the workers to add new tasks to their old jobs, which changes their job

descriptions and competence requirements (Fisher et al. 2018). The change in the competencies required might result in concerns regarding worker's employability, especially for employees who are not experienced or confident with using new digital technologies (O'Driscoll et al. 2010; Rintala and Suolanen 2005).

Additionally, digitalization may result in a higher perception of job control by providing more freedom regarding the organization of work and in the assistance of more menial tasks (Fisher et al. 2018). It has been stated in several studies that as the accessing, sharing, gathering and analyzing of information becomes easier, employees will have new ways to collaborate with each other and access a broader range of work tasks, and have increased flexibility and freedom regarding where and when the work is done (e.g., Day et al. 2010; Dimicco et al. 2008; Fisher et al. 2018; O'Driscoll et al. 2010). However, the increased access to information may also lead to information overload, i.e., "a feeling of being overwhelmed by the quantity of incoming information and the need to respond to it" (O'Driscoll et al. 2010, p. 275). Consequently, asynchronous communication and the increased accessibility and availability have been found to facilitate the spillover of work to leisure time (Bordi et al. 2018). For instance, previous research has found that employees clear and check their email in the evenings and weekends in order to manage their work-related communication load and their overall workload (Barley et al. 2011; Bordi et al. 2018). Furthermore, the employees may feel strong pressure to be available and react immediately through digital communication devices in order to manage their work (Bordi et al. 2018). Thus, this increased access to information and striving for efficiency is closely related to work intensification, which occurs if employees feel the pressure to complete more tasks within a working day (Kubicek et al. 2014). According to Kubicek et al. (2014) work intensification is characterized by increased demands regarding 1) work pace and multitasking, 2) independent work planning and decision making, 3) independent career management and planning, 4) knowledge and learning, and 5) skills. Thus, the freedom to plan the work and workday autonomously according to individual preferences also increases the job requirements and requires the workers to take responsibility for their time and task management (Fisher et al. 2018).

Scholars have also found that new ICTs open new channels for finding and exchanging information, increased flexibility and control over workers' learning experiences, and a space for building social capital (e.g., Brookshire, Lybarger, and Keane 2011; Dimicco et al. 2008; Gerard 2012; Gruzd and Goertzen 2013; Vuori et al. 2018). For instance, social and mobile technologies can help workers to identify experts, solve problems, generate ideas and to share knowledge (DiMicco et al. 2009; Ellison et al. 2015; Turban et al. 2011), which will help employees who work remotely at different locations and at different times (Bordi et al. 2018; Day et al. 2010). Past research has indicated that users of social technologies in workplaces value especially the interactivity, peer support, and instant feedback offered by said technologies (Leino, Tanhua-Piironen, and Sommers-Piironen 2012). However, despite its potential, automation has replaced human work at a slower pace than expected (Autor 2015). The main factors behind this are firstly related to *social acceptance* (to provide purposeful and meaningful life for the members of society; Nussbaum 2011), secondly to *technological "bottlenecks"* (social perception incl. Skills related to empathy, caring and negotiation; Deming 2015), and finally, to *creativity* (fine arts and originality; Frey and Osborne 2013).

## Methods

### Participants

The data were collected from 81 Finnish government workers by using the method of empathy-based stories (MEBS) (Wallin, Koro-Ljungberg, and Eskola 2018) during spring 2017. The participants worked in various positions that ranged from secretaries and assistants to managers. The most common positions were “executives” and “managers” followed by “specialists” and “inspectors”. Based on participants’ self-reports, 9 (11.1%) worked in administrative tasks, 30 (37.0%) were experts, 17 (21.0%) were senior experts, and 22 (27.2%) were in manager positions. Three participants (3.7%) did not report their work title. The participants ranged between 28 and 67 years of age ( $M = 50.1$ ;  $SD = 9.483$ ), and 65% of the participants were born in the 1950s and 1960s. The participants consisted of 48 women (59.3%), 32 men (39.5%) and one blank answer (1.2%) in relation to the participant’s gender. The request to take part in the research was distributed by email to all participants taking part in a national conference for government workers. In addition, the researchers contacted directly randomly selected government organizations.

Finnish government workers were chosen as the participants in this study because they represent an employee group which is currently working in an environment of continuous digital change and it has also been estimated that digitalization highly influences administrative work (Frey and Osborne 2013). The participants were also chosen because they belong to the category of “information-age knowledge workers,” as they typically work in complex environments and are associated with qualities such as creativity, innovation, problem-solving, learning, ethics, and morale (Eskola 2018). Internationally, the trend of modernizing the public sector by using ICTs is referred to as electronic government or e-government, “a term that blurs the borders between public administration, new technology and changing administrative methods” (Nygren 2012, p. 616; see also Bekkers and Homberg 2007; Yildiz 2007). Furthermore, Finland was considered as a suitable country of choice for our study, as it is among the more advanced digital economies in the European Union. According to the Digital Economy and Society Index (DESI 2018), it is considered as one of the European Union leading countries in digitalization, especially in digital skills and public services. Additionally, digitalization in Finland is a prevalent theme in the program of the current government, and the Finnish State Treasury has been tasked with assisting in making government services more client-oriented and digital (State Treasury 2016).

### Method

MEBS is a qualitative method of data collection through which participants write short imaginary texts based on an introductory script (i.e., frame story) designed by the researcher. With MEBS, there are at least two versions of a frame story, and these versions differ in respect to one aspect. This variation enables the researcher to study how the stories change when one element is varied. The varied element and format of the frame stories are derived *from* and are dependent *on* the research question(s), and there is usually a division between positive and negative elements, such as success and failure regarding a phenomenon. However, it is also possible to construct the variation

around other elements (e.g., gender, time frame). Typically, frame stories describe an event or situation, and participants are instructed to continue the story or explain what has happened before the described situation (Wallin et al. 2018). In this research, our interest was to explore how digitalization might support or hinder professional development in the future. Thus, we used two frame stories (i.e., a positive frame story and a negative frame story) in which we asked participants to describe why digitalization had either supported or hindered the professional development of an imaginary person named Charlie:

- Positive frame story:  
Imagine that the year is 2025. Charlie is thinking about his/her career and notices that digitalization has supported his/her professional development. Imagine yourself in his/her situation and describe why s/he believes that digitalization has had a positive effect on his/her professional development.
- Negative frame story:  
Imagine that the year is 2025. Charlie is thinking about his/her career and notices that digitalization has hindered his/her professional development. Imagine yourself in his/her situation and describe why s/he believes that digitalization has had a negative effect on his/her professional development.

The two frame stories were first tested in a pilot study of ten individuals who provided hand-written responses to version A (positive) or B (negative) of the frame story during a face-to-face situation at their workplace. An analysis of the pilot study showed that all the stories were written according to the assignment, were appropriate, and answered the research questions. Thus, the pilot data were included in the final data set. After the pilot phase, data collection was carried out in one organization face-to-face (18 participants) and through an e-form that was distributed to Finnish government workers via email (53 participants). The participants could write their stories according to version A, version B, or both, and they were also asked to report their year of birth, gender, and work position. During the data collection (both face-to-face and electronic), the participants had an unlimited amount of time to write their stories, and they also had the option to continue writing later if needed. The final data used in this study (81 participants) consists of 28 participants who wrote their stories in a face-to-face situation and 53 participants who submitted their stories through e-forms. Overall, the 101 stories used in this study were collected either face-to-face or electronically through an e-form from 81 voluntary participants who were working in government organizations in Finland.

MEBS produces textual data that are suitable for examining participants' perceptions regarding a specific phenomenon. In comparison to interviews or other narrative methods, MEBS does not focus on researching personal experiences or life histories and thus, the stories portray plausible and potential connections and insights which might be based on the participants' own experiences, but they may also be the result of their imagination (Wallin et al. 2018). Hence, MEBS was well-suited for our purposes because we were interested in applying a future-orientation to explore the participants' underlying assumptions, expectations, and perceptions regarding digitalization and professional development. Additionally, as MEBS aims to spark the participants' imagination, MEBS data provide the researcher with an opportunity to determine

**Table 1** Positive ( $n = 68$ ) and negative ( $n = 33$ ) frame stories by gender, age and work role

Participants	Frame story	
	Positive <i>N</i> (%)	Negative <i>N</i> (%)
Gender ( $N = 80$ ) <sup>1</sup>		
Female ( $n = 48$ )	41 (75.0)	17 (25.0)
Male ( $n = 32$ )	26 (67.2)	15 (32.9)
Age ( $N = 78$ ) <sup>2</sup>		
28–39 years ( $n = 14$ )	12 (82.2)	3 (17.9)
40–49 years ( $n = 15$ )	11 (59.4)	8 (40.1)
50–59 years ( $n = 33$ )	27 (68.2)	15 (31.9)
60–67 years ( $n = 16$ )	15 (78.2)	6 (22.0)
Work role ( $N = 78$ ) <sup>2</sup>		
Administrative personnel ( $n = 9$ )	6 (66.7)	3 (33.3)
Expert ( $n = 30$ )	26 (73.3)	12 (26.7)
Senior expert ( $n = 17$ )	15 (73.5)	7 (26.5)
Manager ( $n = 22$ )	18 (68.1)	10 (31.9)

<sup>1</sup> One missing value

<sup>2</sup> Three missing values

new perspectives, verbalize tacit knowledge and amass unexpected viewpoints that might have been lost with other methods (Wallin et al. 2018). MEBS also made it possible for us to collect qualitative data from a wider sample than with interviews because empathy-based stories can be written anytime and anywhere, and the stories can be written in a relatively short time.

## Data Analysis

The participants ( $N = 81$ ) wrote 101 stories in total (20 participants chose to answer both frame stories). These stories ranged from a few sentences to essays consisting of up to 870 words, with a total word count of 15,393 words. The data comprised 68 (67.3%) positive stories and 33 (32.7%) negative stories. Most of the participants ( $n = 48$ , 59.3%) wrote a positive story, 13 (16.0%) wrote a negative story, and 20 (24.7%) wrote both stories. Table 1 shows how positive and negative stories were distributed by participants' age, gender and work title. Participants' titles were categorized into four work roles: Administrative personnel (e.g., “Secretary”, “Translator”), Experts (e.g., “Customs Inspector”, “Application Specialist”), Senior experts (e.g., “Leading District Attorney”, “Chief Medical Officer”) and Managers (e.g., “Head of Unit”, “Development Director”). The statistical relationship between the nature of stories (positive, negative, both positive and negative) and background variables (gender, age, work title) was investigated with Bayesian nominal indicator classification modeling (Myllymäki, Silander, Tiri, and Uronen 2002). Analysis based on machine learning approach showed that government workers' age, gender or work title did not predict their preferences of writing positive, negative or both types of stories related to professional development and digitalization.



The transcribed stories were analyzed inductively using qualitative thematic analysis in order to identify common themes. NVivo software (version 11) was used to isolate, sort, and code text segments and identify emerging themes within the participants' stories. First, the stories were read several times to obtain an overall sense of the data, with attention paid to how the participants described the ways digitalization might support or hinder Charlie's professional development. Second, text segments comprising one or more sentences were coded into sub-themes according to the research questions and versions of the frame story. Hence, during this first phase of analysis, the positive and negative stories were analyzed separately. In the second phase, we compared the sub-themes, and as a result, three interrelated themes (work tasks, work practices and knowledge development and management) were formed from the similarities and differences in these themes. Finally, in order to synthesize the data and illustrate the findings, we constructed two typical scenarios (positive and negative) by selecting data extracts, which describes the themes formed earlier. Thus, the content of the scenarios is derived from several stories (the researchers added or deleted a few words to improve readability) and the formation of the scenarios was guided by Polkinghorne's (1995) description of narrative analysis.

## Results

In the frame stories, we asked the participants to imagine why digitalization had either supported or hindered the professional development of Charlie in the future. In both the positive and negative stories, the participants connected digitalization with similar changes in their working lives, yet the stories differed regarding how Charlie responded to these changes and how the changes affected workplace learning potential as a result. In other words, in most stories, the participants described similar changes as both hindering and supporting professional development. In this section, we first introduce two scenarios, one positive and one negative, which summarize the findings presented in detail thereafter. We used data extracts to illustrate the findings, and in order to identify the story extracts, the stories were numbered and named according to the frame story version (for example P1 stands for the first positive story).

**Positive Scenario** How might digitalization support professional development in the future?

Charlie's work tasks have become more versatile and Charlie has been able to develop a great deal of her/his professional skills. The advancement of digitalization has created both new opportunities for professional development and more demanding tasks that motivate Charlie to move forward. Charlie feels that as simpler tasks have shifted to robots, s/he has more time to focus on the development of her/his core competencies. Administrative applications also interact with each other automatically, eliminating the need for spending time on reporting working hours. With fewer pending routines, Charlie has more time to focus on planning and analysis.

Applications and systems also allow Charlie to work anywhere and any-time. Attending a meeting is possible even if you are on a bike, which frees up time for professional development. Work in most cases is now done in interactive electronic workspaces that have been developed to serve work processes. Increased interactivity has fostered the exchange of ideas between workers. At the same time, quite unnoticed, networks have become to exist everywhere. Charlie has also been involved in digitalization projects and professional development through this work. Developing one's skills and learning new things has become easier with the advent of e-learning and access to information, as well as management. Learning new things and studying is no longer dependent on time and place. The amount of study material is much more extensive and easier to find online in electronic format. In addition, networking and interaction with other learners is easier and promotes learning in a whole new way.

**Negative Scenario** How might digitalization hinder professional development in the future?

Digitalization has made even simpler tasks more complicated and time-consuming. Much of Charlie's previous work has been automated, and her/his own job is not well controlled when it comes to doing things differently from before. In addition, in order to complete core work tasks, there is a constant pressure to adopt to new information systems and participate in their development and testing. A huge amount of working time is allocated to tasks other than those that are related to Charlie's areas of expertise. Charlie wonders why s/he feels that s/he is a member of the IT department, although her/his own areas of expertise are somewhere else. Digitalization has also made the work more hectic; everything should be ready right away and there will never be enough time to concentrate and reflect on long-term high-quality work processes. Charlie receives a constant flow of email, instant messaging (Lync), and phone queries on trivial topics. In addition, technology is not up to the task: the picture disappears and, in a moment, the sound also disappears. Systems are also changing all the time and knowledge databases are so vast that it is difficult to find relevant information at any given time. Face-to-face contact with clients, co-workers and colleagues is rare and no one is physically present in the workplace - everyone is doing distance work, or they are out in the field. The work is lonely and virtual, and Charlie misses person-to-person contact to deepen different aspects of the work. In the past, Charlie's co-workers were right next door and s/he felt somehow more important as he/she was able to share knowledge with others. The training provided by the employer mainly focuses on new electronic systems and their introduction. Instead, the content of the work that Charlie would like to develop has been pushed back as a side issue.

### Changes in Work Tasks

Both in the positive and negative stories, the participants connected digitalization with changes in Charlie's work tasks and routines. As robots and automation became more

common, Charlie's old work tasks, which were often mechanical, manual, and routinized, were replaced with more challenging work tasks that required more thinking and expertise. In the positive stories, digitalization was described as being desirable, as the automation of routine work tasks allowed Charlie to deepen his/her core competencies and freed time for developmental activities as well as more interesting, versatile, and challenging tasks. The change in work routine was described as highly motivating and empowering, and it was connected to efficiency, new competencies, and a more pleasant work role:

My work tasks have changed, so I only focus on genuinely challenging jobs that require human reflection. [...] 90% of my administrative decisions and solutions are made automatically using artificial intelligence, robotics, and solution databases. For me, it means that I only do interesting jobs. Routine jobs have been left to the machines. The change has also made it possible for me to develop professionally, unlike in the past, since nowadays, I have time to study and develop myself (P48).

Similarly, in the negative stories, the participants connected digitalization with automation and efficiency, but in contrast to the positive stories, the negative stories described the changes as undesirable and resulting in an increased workload and time management problems. In the negative stories, digitalization was viewed as contributing to a hectic pace of work, multitasking, and interruptions. These elements presented challenges to the daily execution of work tasks and reduced available time for the work that required deeper focus and more long-term commitment. In addition, technological shortcomings, such as poor usability of software, inadequate information systems, and malfunctioning network connections, were frequently described as hindering and slowing down the execution of work tasks, thus leading to anxiety and inefficiency.

Consequently, in these stories, the changing work tasks and adoption of new digital tools were considered burdens that hindered Charlie's professional development. Charlie felt like s/he was spending more time working on the adoption, development, and testing of new information systems and software than on "actual" work, which s/he felt competent in and had been educated for. Furthermore, in some negative stories, digitalization was also connected with unemployment, as the original work tasks were performed by robots, and replacement work tasks were either not offered to Charlie, or Charlie was not able or willing to adapt to the new work role. Thus, in the negative stories, the changing work tasks led to feelings of incompetence and redundancy. The stories described how especially administrative workers were laid off, and their work tasks, such as billing for travel costs, were allocated to the remaining personnel. The new work did not match Charlie's current competencies or professional identity, and s/he felt that his/her opportunities for development were restricted by the employer, or s/he was not motivated to develop his/her competencies to meet new demands:

Charlie has never been very interested in technology or ICT skills. Learning new tools and systems has always been a must for him/her. Employers have also noticed this. Charlie would like to do his/her "basic job" well, but it hasn't been

possible for a long time without first having to learn all the nerdy stuff. The work has become burdensome and repulsive (N8).

### Changes in Work Practices

In addition to changing work tasks, digitalization was also connected to changes in work practices in both the positive and negative stories. The stories described an increase in remote, virtual and global work and the utilization of new kinds of workspaces. When changing work practices were described as supporting professional development, the participants emphasized how the online communication channels supported interaction and networking:

Online discussions with colleagues around the world are particularly rewarding. Occasionally, even several times a week, we discuss work-related topics with a group of people and share tips on how to work in different situations. [...] Digitalization has, in a way, expanded collegial cooperation and the learning network beyond its own organization and made it a global community (P80).

According to the participants' views, ICT may facilitate social networking and communication across physical distances, thereby enabling increased interaction and communication within Charlie's organization and in other professional networks. According to the participants, this increased interaction can result in fruitful and productive discussions with coworkers all over the world, thus helping to build a virtual and global learning network that is not limited to organizational boundaries. In the positive stories, remote work was also considered to be a positive aspect in terms of the flexibility and independence it offers, as it makes working possible, anytime and anywhere. This flexibility supported Charlie's management of his/her work–life balance and enabled more free time for developmental activities.

On the other hand, the new work practices, especially remote work, were also connected with a loss of communality and feelings of loneliness. In contrast to the positive stories, in the negative stories, online communication and remote work decreased interaction in the work community and hindered the sharing and transfer of knowledge as a result. In these stories, online interaction was connected with superficiality, and Charlie expressed a need to have discussions with other experts and colleagues in a face-to-face manner in order to deliberate on work issues:

According to Charlie, it would be important to get face-to-face with other experts in the same field, because only then can you really deepen your thoughts and exchange ideas. In Charlie's opinion, s/he is often left alone with the computer, and the employer also requires the work to be done in an open-plan office and, when necessary, with headphones and remotely. The work is lonely and virtual, and Charlie longs for human contact through which s/he could deepen different aspects of the work (N45).

## Changes in Knowledge Development and Management

Knowledge development and management were frequently connected to professional development, especially in the positive stories. In these stories, the participants perceived that digitalization might improve the availability and management of work-related information and knowledge by providing efficient access to different repositories. Intranets, social media, and the Internet were described as important resources for finding and locating work-related information in a fast, easy, and independent manner:

Digitalization has made it possible to update professional knowledge proficiently: Both scientific knowledge and publications as well as more experiential blog and picture stories can be found on the web. Also, different online courses, streams, etc. help, in that you do not always have to be present at a particular time—you can develop and update your skills whenever it suits you (P80).

The participants also emphasized e-learning and online courses as important resources for professional development and learning. Online courses and lectures provided Charlie with a flexible and self-directed way of updating his/her knowledge and competencies, regardless of time and place. The participants also emphasized how the opportunity to engage in online courses expanded learning options, and how up-to-date course materials supported learning. In addition to formal online courses, the participants also acknowledged the importance of using other online sources, such as videos and podcasts, for knowledge development.

In addition to the independent and self-directed ways of knowledge development described above, some stories also described how participating in different digital projects and workshops supported Charlie's professional development and learning. According to the stories, being part of developmental processes and solving problems with other workers might inspire and encourage workers to learn and feel useful in terms of their contribution to the organization and other workers.

The negative stories also described the increased use of alternative sources of digital knowledge, although to a lesser extent than in the positive stories. In these stories, the participants emphasized how the digitization of information might lead to decreased trustworthiness in terms of information, and information management was considered a challenging task because of the constant information overload and change.

## Discussion

In this article, we explored Finnish government workers' stories about how digitalization could influence work and support or hinder professional development in the future. According to the findings, both the supporting and hindering factors stem from similar and interrelated changes in the work—namely, changes in work tasks, work practices, and knowledge development and management. The stories illustrated how digitalization may affect the learning potential of a workplace (e.g., Ellstrom 2011; Eraut 2007) in various ways, and thus create different affordances and constraints for professional development. For instance, in line with previous analyses regarding the future of

digitalization and work (Autor et al. 2003; Balsmeier and Woerter 2019; Frey and Osborne 2013; Muro et al. 2017), the findings showed how digitalization might in the future change the task characteristics and competence requirements of work by replacing routine work tasks with more challenging work tasks. In the positive stories, changes in work tasks enabled Charlie to develop his/her competences and skills as it resulted in a decrease of workload and more time for interesting work tasks. This finding supports earlier research, where digitalization and automation of menial activities has also been associated with a reduced workload and more interesting work tasks (Fisher et al. 2018).

However, the negative stories framed a different picture, as in these stories changes in work tasks restricted professional development by leading to an increase of workload and feelings of incompetence and redundancy. Thus, the findings indicate that digitalization may also lead to work intensification (Kubicek et al. 2014), i.e., multitasking and increased demands related to for example knowledge, skills and career development. For instance, in the negative stories Charlie felt like the new work tasks did not match with his/her competencies and he/she was unwilling or unable to meet the new demands because of lack of confidence, time or professional training and support. In some negative stories, digitalization led also to the disappearance of old work tasks, while at the same time, new work tasks were not offered, or professional training regarding new work tasks was insufficient. Over time, this led to marginalization and unemployment. These findings indicate that digitalization may potentially offer workers with challenges and demanding work activities by affecting task variety and complexity (see, e.g., Ellstrom 2011; Eraut 2007; Fisher et al. 2018), but how this impact professional development remains ambivalent due to various individual and contextual factors.

Additionally, the stories illustrated how changes in work practices, and in particular the increase in distant work and digital communication may act as a “double-edged sword” in regard of professional development. For instance, the positive stories described how digitalization might result in increased opportunities for networking and participation in developmental activities, whereas in the negative stories distant work and the increase of online communication were considered to decrease interaction and communality, and thus hinder knowledge sharing and social support. Hence, these findings highlight the role of social support and relationships in professional development and learning (e.g., Ellstrom 2011; Eraut 2007), but also addresses that the role of digitalization in supporting interactivity is perceived as twofold.

In line with previous studies (e.g., Fisher et al. 2018), digitalization was also connected to a higher degree of job control by providing flexibility in terms of, for example, when and where to work. Hence, although distant work was considered to decrease interaction and communication in the negative stories, it was also valued because of its potential to provide opportunities for job control. Previous studies have found that the asynchrony and increased flexibility offered by digitalization blurs the boundary between work and leisure time and causes difficulties to disconnect from work (e.g., Bordi et al. 2018; Vuori et al. 2018). Interestingly, participants of our study viewed the opportunity to flexibly combine work and non-work domains as mostly something positive and supporting professional development (e.g., participation in professional online networks and courses regardless of time and place). Only one negative story described how the increased accessibility and availability caused by

digitalization might result in a negative spillover of work to leisure time. Yet, this positive overall tone may be partly affected by Finnish high level of digitalization (DESI 2018) and legislative promotion of flexible work (Finnish Ministry of Employment and the Economy 2011). Furthermore, the disparity between the negative and positive stories, as well as the earlier research, may also be due to the fact that in the frame stories the participants were instructed to describe how digitalization has influenced Charlies' professional development. Consequently, negative effects may have been left out from the stories because the participants' do not necessarily connect them with Charlies' professional development but rather to issues related to for example his/her wellbeing.

In addition to changes in work tasks and practices, the stories described how digitalization brings new ways to knowledge development and management. The stories mentioned e-learning, online courses, and videos as important resources for professional development and learning. The participants' valued especially diverse forms of up-to-date learning materials and the opportunity for information acquisition and sharing in a networked environment, but also expressed a fear that the diversity of information and constant change might lead to information overload. However, these negative aspects stood out to a much lesser extent than the positive. Thus, these results indicate that the participants consider digitalization as mostly supporting knowledge development and management in the future, but at the same time acknowledges the need for new knowledge management skills in order to avoid the negative consequences of digitalization, such as information overload.

### **Limitations and Recommendations**

A number of potential limitations need to be considered when interpreting the findings. First, although the study was based on a multi-organizational sample, all the participants worked for the Finnish government, and the sample size was relatively small. Thus, the findings might not be transferable to broader contexts (e.g., other professional fields or government workers in other countries). Thus, further research should be conducted in different work contexts in order to verify and extend the findings. Second, the participants represented different generations and thus, their different histories of technological use and different career stages need to be taken into account when interpreting the findings. Third, an interesting finding in this study was that most participants chose to write in response to the positive version of the frame story. This may be reflective of the fact that government workers possess in general more positive than negative perceptions of the future (see also Fisher et al. 2018), but one could also speculate that this may reflect a self-selection bias (i.e., the participants who possessed a positive stance were more willing to take part in the study than those with a negative stance). However, these limitations do not limit the value of this study, as the aim was not to generate generalizable findings, but to develop insights into the topic. Hence, in the future both qualitative studies and quantitative studies are needed to complement and validate these findings. A particularly interesting aspect would be to analyze what kind of agentic actions or strategies workers adopt when engaging with digitalization at work.

MEBS was used in this study to examine the participants' perceptions of the future. Hence, it is important to note that empathy-based stories are plausible imaginary stories

that portray possible and potential connections and insights rather than focusing on presenting personal lived experiences. Yet, in MEBS “the ability of the stories to reflect and express personal meaning is considered more relevant than the factual occurrence of the events described in the stories” (Wallin et al. 2018, p. 7). For the purposes of this study, several reasons justify the choice of the method. Firstly, MEBS offered the participants an opportunity to use their imagination and to freely choose what to include in their stories. Thus, the study adds knowledge about the expectations, hopes and fears government workers associate with digitalization and professional development. Secondly, the fact that the stories are not necessarily fictional, and that in this study many participants chose to write their stories in the first-person and not as Charlie, as well as the similarity of the stories, support the notion that the stories illustrate shared socio-cultural beliefs. Thirdly, in contrary to earlier studies exploring the lived experiences of the participants with for example interviews (e.g., Fisher et al. 2018) that often concentrate on retrospective experiences, MEBS provided the researchers a useful tool for exploring the participants’ perceptions of the future.

## Conclusions

This research has illustrated government workers’ perceptions regarding digitalization of work and professional development. In common with the positive and negative stories is that they both describe how professional learning and development happens in everyday (work) activities, includes both formal and informal ways of learning, and requires proactivity and self-directedness. This finding is in line with the current view that the professional development of workers’ is not only the responsibility of the training department but workers’ must manage their own professional development and learning in order to stay effective in the working force (e.g., Billett 2015; Billett and Noble 2017; Littlejohn et al. 2016; Poell et al. 2018). However, the findings also reflected different understandings of what is seen as professional development. In the positive stories the adoption of different digital tools and attaining for example digital workshops were described as a part of Charlies’ professional development, whereas in the negative stories learning new digital ways of working was considered as a burden and not as a part of his/her professional development. As such, these diverse understandings not only reflected different conceptualizations of professional development, but they also reflected how individuals may position themselves differently regarding digitalization. Narrative inquiry and textual decisions communicate authorial understandings of participants, their subjectivities, and their experiences, but also a writer’s understandings of power and position (Holley and Colyar 2009). For instance, in a recent interview study, administrative workers possessed rather optimistic views of the effects of digitalization on workplace learning and associated it generally with something positive (Fisher et al. 2018). This study complements these findings by illustrating also the negative views workers possess regarding digitalization and professional development. The recognition of technology-related demands and the resources needed to buffer these demands is important in order to manage and avoid the negative consequences of digitalization.

This article provides scholars and practitioners of human resources with insights as to how digitalization might support or hinder worker’s professional development in the



future. In sum, the findings illustrate the double-edged nature of digitalization, as it may both support and hinder professional development and learning by changing work tasks, work practices and knowledge development and management. The stories revealed that digitalization may support professional development especially by providing opportunities for job control in terms of flexibility, and new ways for knowledge development and management. Additionally, in order to support professional development and learning in the work force of the future, the findings illustrated the importance of 1) tailoring the changing work tasks and activities in ways that support worker's experience of competence, 2) providing functioning software and systems, 3) providing individually targeted training, guidance and social support when implementing new technologies, and 4) involving workers in the design and development of digital changes. Overall, when digitalizing work, organizations need to be aware of differences in professionals' subjectivities (i.e., valuations, beliefs, and expectations) in order to efficiently support professional development. The findings highlight the need for trainers and managers to invest in the enhancement of overall technological self-efficacy and ways to cope individually with the range of demands related to digitalization, such as interruptions, information overload and work intensification.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

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# PUBLICATION IV

**From thriving developers to stagnant self-doubter: An identity-centered approach to exploring the relationship between digitalization and professional development**

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# From Thriving Developers to Stagnant Self-Doubters: An Identity-Centered Approach to Exploring the Relationship Between Digitalization and Professional Development

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## Abstract

This article reports a study illustrating the relationship between digitalization and professional development from an identity-centered perspective. Drawing on a unique data set of 101 empathy-based stories from 81 Finnish government workers, the findings show how workers might experience and respond to work-identity alignments and misalignments in a digitalized working life and how this might influence their professional development. We identify four typifications—the thriving developer, the loyal transformer, the stagnant self-doubter, and the career crafter—and illustrate how digitalization can either support or hinder professional development by inducing work-identity (mis)alignments and how workers may respond to these in different ways by engaging in identity work and job crafting. In particular, our findings emphasize the role professional identity and agency play in professional development and highlight the importance of recognizing how digitalization of work can threaten or support workers' professional identities to build a supportive working environment where the workers feel like they are valued and able to develop in a meaningful way.

**Keywords** Professional identity · Professional development · Identity work · Job crafting · Digitalization · The method of empathy-based stories

## Introduction

In today's working life, workers are increasingly challenged to continuously develop and learn as digitalization transforms their work tasks, practices, and methods of communication in various ways (e.g., Parker & Grote, 2020). Digitalization is a

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broad concept, referring to how digital technologies (such as information and communication technology (ICT), artificial intelligence (AI) and robotics) can lead to fundamental changes, altering for instance existing business processes such as communication (e.g., Verhoef et al., 2021). In this article, we approach digitalization from the perspective of knowledge workers, for whom digitalization of work is especially visible in the growing use of ICTs, resulting in changes in information and knowledge sharing, management, and communication (e.g., Vuori et al., 2019). With the use of ICTs, accessing, sharing, gathering, and analyzing information becomes easier, and employees will find new ways to collaborate and work regardless of time and place (e.g., Fischer et al., 2018). Indeed, in knowledge work, digitalization is often linked to flexible work designs, referred to as smart work (e.g., Raguseo et al., 2016) and new ways of working (de Leede, 2016), which can be defined as “practices in which employees are able to work independent of time, place and organization, supported by a flexible work environment which is facilitated by information technologies” (de Leede, 2016, p. xiii).

In addition to changes in work practices, digitalization of work has prompted much discussion regarding how automation in the form of AI and robotics potentially alters job skill demands and the labour market as machines substitute humans (e.g., Autor, 2015; Brynjolfsson et al., 2018; Frey & Osborne, 2017). Estimations have ranged from more extreme views demonstrating how automation may lead to massive unemployment and job destruction (e.g., Frey & Osborne, 2017) to more cautious ones, arguing that despite that most jobs have some tasks that can be automatable, few jobs are fully automatable (Brynjolfsson et al., 2018). Especially jobs involving routine work tasks and a lower level of complexity has been suggested to be more likely automated compared to tasks requiring highly cognitive skills (Autor, 2015; Frey & Osborne, 2017; Goller & Harteis, 2017). However, with the combination of big data and AI, higher-skill domains are not completely safe from automation, meaning that more complex knowledge work and management could potentially be replaced by AI (e.g., Parker & Grote, 2020). Despite the controversies between these views, they all share the view that digitalization of work fundamentally alters how we think about work and requires the workers to deal with new work tasks and practices where people and digital technologies work together (e.g., Parker & Grote, 2020). Thus, for knowledge workers, digitalization of work may contribute to a change in their work tasks and to a major shift of view on how, where, and when work is performed, requiring workers to work in new, distributed and continuously changing work environments that are technologically mediated.

At the same time as digitalization of work changes the ways of working (what workers do), it also challenges the views that workers hold of themselves as workers (who they are). In other words, digitalization challenges their professional identities (see, e.g., Nach, 2015; Walsham, 1998). When workers are experiencing transformations in their work (such as described above), workers are required to constantly assess whether their professional identities match their transformed work context (Kira & Balkin, 2014). These experienced work-identity (mis)alignments and their possible relation to workers’ professional development is in the main focus of this article.



Although previous studies exploring the relationship between digitalization and professional learning and development have provided valuable insights into how digitalization shapes workers' competence requirements and workplaces as learning environments (e.g., Fischer et al., 2018; Harteis, 2018; Vallo Hult & Byström, 2021; Wallin et al., 2020), the role of workers' identities in the interplay between digitalization and professional development is still poorly understood. Given that the current view of professional development holds that a shift is needed from a "training model" toward a view that emphasizes workers' self-directedness, identities, and agency in learning and development (Boud & Hager, 2012; Eteläpelto, 2017; Goller & Harteis, 2017; Vähäsantanen & Hämäläinen, 2019; Webster-Wright, 2009), exploring the relationship between digitalization and professional identity becomes important in building an understanding of how digitalization may influence workers' professional development.

Therefore, in this article professional development is understood from a broad, life-long learning perspective, emphasizing the continuous and practice-based nature of professional development, i.e., how workers continuously learn across the various stages of their career. The roles that professional agency and identity play in professional development become highlighted, as the focus expands from professional development programs and a 'transfer' training metaphor toward a view emphasizing a constant process of learning and 'becoming' in professional development (Boud & Hager, 2012; Havnes & Smeby, 2014; Webster-Wright, 2009). We adopt an identity-centered approach, in which professional development does not only comprise of acquiring knowledge, developing competencies, or updating skills but also involves questions related to how workers define themselves as professionals, such as "Who am I," "What do I do," and "Who do I want to become?" (Akkerman & Meijer, 2011; Eteläpelto et al., 2014; Vähäsantanen & Billett, 2008; Vähäsantanen & Hämäläinen, 2019). Workers strive to maintain a positive identity and a situation where their identity aligns with their work context and, to achieve this, they continuously craft their jobs to better fit their needs and interests, and they engage in identity work to explore the meaning of their professional identity (Kira & Balkin, 2014). In line with the subject-centered socio-cultural approach (e.g., Eteläpelto et al., 2014), we understand workers as active agents, who exert their professional agency by influencing, making choices, and taking stances in ways that affect their work and their professional identities (p. 659), i.e., by engaging in identity work and job crafting. Thus, in this article professional development is understood as a continuous process in which workers maintain and develop their identities and ways of working by engaging in identity work and job crafting under the socio-cultural and material conditions of the workplace.

The aim of this study is to explore workers' various possible experiences and responses to work-identity alignments and misalignments in a digitalized working life and how these experiences and responses might support or hinder their professional development. To empirically investigate the topic, we collected qualitative data with a novel data-gathering method called the method of empathy-based stories (MEBS; e.g., Wallin et al., 2019). In accordance with narrative research (e.g., Bruner, 2004), the MEBS builds on the idea that storytelling can enhance people's

capabilities to express and share perceptions, meanings, and tacit understandings. Thus, by exploring empathy-based stories ( $N=101$ ) written by Finnish government workers, we aim to provide insights into individual sensemaking and to explore shared perceptions and beliefs that the participants associate with the phenomenon. Rather than constructing a detailed and comprehensive model or testing hypotheses, the objective of this research is to illustrate possible and compelling scenarios and connections and thus widen the understanding of and guide future research on this emerging topic.

## Theoretical Perspectives

### Work-Identity (mis)alignments Amid Digitalization of Work

In a broad sense, identity refers to “the meanings that individuals attach reflexively to themselves” (Brown, 2015, p. 23) and implies “what is appropriate, natural and valued for a specific subject” (Kärreman & Alvesson, 2001, p. 64). Thus, professional identity relates to how individuals define themselves as professionals, and comprise professionals’ subjective goals, experiences, interests, values, knowledge, competencies, commitments, and future career prospects (e.g., Eteläpelto et al., 2014; Fitzgerald, 2020; Vähäsantanen & Hämäläinen, 2019). Professional identities are often studied in the context of specific professions (e.g., teachers, lawyers, and doctors). As such, the definition of professional identity often includes the characteristics of a specific profession. In this article, we use the term professional identity at a general level and in a broad sense (not tied to a specific profession and adopting a loose definition of the term “professional”; e.g., Havnes & Smeby, 2014), referring to a “professional employee’s identities in relation to their work, as opposed to hobby-like activities” (Eteläpelto et al., 2014, p. 649). As such, our understanding of professional identity in this article is closely related to the definition of work identity, which refers to “a work-based self-concept, constituted of a combination of organizational, occupational, and other identities, that shapes the roles individuals adopt and the corresponding ways they behave when performing their work in the context of their jobs and/or careers” (Walsh & Gordon, 2008, pp. 47–48).

While professional identity is based on individual subjectivities, a dialogical relationship exists between identity and work environment. Workers constantly confront different contradictions, frustrations, and (role) expectations in their work environment, and identity construction can be seen as a “struggle” (Alvesson, 2010; Arvaja, 2016) occurring through a continuous dialogical process of positioning oneself between the self and the social context (Akkerman & Meijer, 2011; Arvaja, 2016). Thus, professional identities are agentially and socially reconstructed as both personal and contextual factors shape how professionals negotiate their identities and how they view themselves as professionals (e.g., Kira & Balkin, 2014; Vähäsantanen & Billett, 2008).

Acknowledging the dialogical relationship between professional identity and the work environment, we draw on research on work-identity interactions. In particular, we adapt the model by Kira and Balkin (2014), which outlines how

encounters between work and identity can induce different experiences, reactions, and outcomes. This model builds on the idea that workers tacitly and explicitly assess whether their work aligns or misaligns with their (professional) identity and may consequently experience a match or mismatch between their professional identity and work context (Kira & Balkin, 2014). In an ideal situation, a person's work is aligned with the person's professional identity. A harmonious relationship between work and professional identity is established as the person can manifest their professional interests and feels competent in their work (Vähäsantanen & Hämäläinen, 2019). Thus, when changes at work enable a worker to experience a harmonious work-identity alignment, for instance, by providing the worker with opportunities to realize their professional interests, the worker is positively disposed to changes and adopts an approving position toward changes (e.g., Vähäsantanen & Eteläpelto, 2011). Consequently, the person experiences thriving, meaningfulness, and satisfaction, and a feeling of being "in the right job" (Arvaja, 2016; Kira & Balkin, 2014; Pratt et al., 2006).

Regarding digitalization, earlier studies have found that the use of information communication technologies (ICTs) may be identity enhancing because they can provide opportunities for reskilling, knowledge development, and professional growth (Alvarez, 2008; Lamb & Davidson, 2005; Mishra et al., 2012). In these situations, technologies are seen as aligning with workers' professional identities; workers see them as a means to fulfill their professional interests and as valuable to their professional identities (Nach, 2015; Stein et al., 2013). For instance, workers may view themselves as helpful mediators, adventurous and empowered creators, active agents, gatekeepers, or wise teachers in relation to information technologies (ITs), shaping their IT use and professional identities (Stein et al., 2013). Likewise, in a situation where the management demands the use of new technologies, workers may engage with technologies because they see themselves as "dedicated social conscious professionals, motivated by an intense work ethic and commitment to their job" (Leclercq-Vandelannoitte, 2014, p. 60). Thus, technologies can reinforce workers' (professional) identities in multiple ways; by providing workers opportunities to, for instance, be a better worker by cutting down errors (e.g., Mishra et al., 2012), or by giving them a sense of importance and recognition (e.g., Leclercq-Vandelannoitte, 2014). Consequently, according to Stein et al. (2013),

IT becomes important for professional identity performance when particular *signs and functions* presented by the IT *align* with the professional's *personal preferences* (what kind of work do they *want* to do, how they *want* to be known) and the *normative expectations* of the professional. (p. 179, emphasis in original)

Studies exploring work-identity encounters have focused more on the misalignments between work and identities than on their alignments (e.g., Kira & Balkin, 2014; Pratt et al., 2006; Sveningsson & Alvesson, 2003). Here, contextual changes in work may result in a work-identity mismatch as the workers' view of "who they are" as professionals no longer matches the work that they do (Arvaja, 2016; Pratt et al., 2006). Workers may, for instance, lack the necessary competencies for their current job or experience a lack of opportunities to use their full potential (Arvaja,

2016; Kira & Balkin, 2014; Pratt et al., 2006; Vähäsantanen & Hämäläinen, 2019). For example, ICTs may threaten and challenge workers' professional identities by deskilling professionals and making some areas of expertise obsolete (Alvarez, 2008; Lamb & Davidson, 2005; Nach, 2015), threatening their status positions and professional autonomy (Mishra et al., 2012). When workers experience a misalignment, a strained relationship between work and professional identity is established (Vähäsantanen & Hämäläinen, 2019). Consequently, workers may feel useless, inadequate, devalued, anxious, and frustrated (Kira & Balkin, 2014; Pratt et al., 2006; Vähäsantanen & Hämäläinen, 2019).

### Responses to Work-Identity (mis)Alignments

*Maintaining and transforming identity work.* In general, individuals strive for self-continuity and self-coherence (e.g., Burke & Stets, 2009) by engaging in identity work, which refers to “being engaged in forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence and distinctiveness” (Sveningsson & Alvesson, 2003, p. 1165). Several studies have demonstrated how identity work is an integral part of professional development (e.g., Eteläpelto et al., 2014; Pratt et al., 2006; Vähäsantanen et al., 2017), for instance, when workers engage in identity work, they learn more about themselves as professionals, how to use their strengths at work, how take new career directions and how to find meaning in their work (e.g., Kira & Balkin, 2014; Vähäsantanen, 2015; Vähäsantanen et al., 2017).

When workers experience their work and identities as aligning, they are likely to engage in maintaining identity work, which ensures self-continuity and aims at strengthening their present and future possibilities for meaningful work (Kira & Balkin, 2014). Maintaining or retaining an identity is generally about “general upkeep – sustaining, bolstering, or continuing to validate an identity” (Lepisto et al., 2015). For instance, a recent research illustrated how severely disabled soldiers strived to maintain their soldier identity through the continuity of their goals, values, and jobs when facing involuntary career transitions (Kulkarni, 2020). In a misalignment situation, workers may engage in transformative identity work to shape their identities to correspond with social cues (Kira & Balkin, 2014; Pratt et al., 2006). For instance, Nach (2015) found that workers engage in transformative identity work when their identity is challenged by the use of ITs. When workers feel like they have some control over the possibilities to adjust to this identity-threatening situation, they may end up reframing their identities successfully with respect to the IT capabilities and requirements. However, such a redefined identity is not always achieved although workers feel they have some control over the situation and engage in identity-adjusting mechanisms (e.g., efforts to learn new digital skills). In such a situation, workers form ambivalent identities, which are characterized by conflicting thoughts, feelings, and actions.

*Job crafting.* Transformative identity work is both cognitively and emotionally taxing as it requires workers to critically question their self-definitions (Kira & Balkin, 2014). Therefore, when experiencing a misalignment, workers often avoid

transforming their identities and instead strive first to influence the conditions of their work (Kira & Balkin, 2014; Vähäsantanen & Billett, 2008). Thus, workers engage in job crafting—transforming their work context to align it better with their identities. Likewise, in a situation where workers experience work-identity alignments, they may engage in job crafting by, for instance, strengthening the aspects of the work situation that they experience as meaningful (Kira & Balkin, 2014). In several studies, job crafting has been connected to professional learning and development (e.g., Fuller & Unwin, 2017; Goller, 2017; Goller & Billett, 2014; Lazazzara et al., 2020). When engaging in job crafting, workers exert their professional agency, for instance, in negotiating the contents and conditions of their work and thus, learn more about their work and also about themselves (e.g., Kira & Balkin, 2014), thereby facilitating their professional learning and development.

Job crafting can take three forms: task, relational, and cognitive crafting (Wrzesniewski & Dutton, 2001). Task crafting refers to job-related changes that result in a different number, scope, or type of job tasks. Relational crafting involves changes in the quality and/or quantity of interactions with others at work, and cognitive crafting<sup>1</sup> refers to reframing how one sees the job. Later, other job crafting conceptualizations have also been presented (e.g., Bruning & Campion, 2018; Tims & Bakker, 2010). Most recently, Lazazzara et al. (2020) integrated these by forming a process model that connects the motives, context, personal factors, and consequences of job crafting based on a distinction between approach and avoidance behaviors. They stated that “*approach crafting* is directed toward solving problems, improving the work situation, and accepting and interpreting stressors in a positive way, whereas *avoidance crafting* seeks to reduce or eliminate aspects of the job” (Lazazzara et al., 2020, p. 4). Approach task crafting includes strategies such as taking on extra tasks and responsibilities, whereas avoidance task crafting refers to reducing the number of tasks and responsibilities. Similarly, approach relational crafting can refer to creating additional relationships, whereas avoidance relational crafting can refer to reducing relationships and interaction. Moreover, approach cognitive crafting can refer to, for instance, emphasizing the positive qualities of work, whereas avoidance cognitive crafting can refer to acceptance of negative things or withdrawal crafting.

According to Lazazzara et al. (2020), workers engage in approach or avoidance crafting depending on whether their work context elicits proactive or reactive motives. Proactive motives refer to “employees wanting to initiate job crafting to reach desirable goals, while reactive motives are related to the need to cope with adversity” (Lazazzara et al., 2020, p. 10). Examples of desirable goals include improving one’s self-image, developing knowledge, and realizing career aspirations. Adversities, on the other hand, consist of hindrances to the experience of

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<sup>1</sup> Cognitive crafting and (transformative) identity work can be conceptually distinguished as cognitive crafting refers to how workers make changes to their perceptions about their job (e.g., thinking about the positive qualities of work), whereas identity work refers more broadly to identity negotiations related to how workers define themselves (as professionals). However, job crafting and identity work are closely related to each other as when workers engage in job crafting, the identities of the workers can also change accordingly (e.g., Kira & Balkin, 2014).

authenticity and various negative job characteristics, such as a lack of autonomy and high workload. Thus, whether workers engage in approach or avoidance crafting depends not only on their motives but also on the work context. Nevertheless, certain supportive factors in the work context (e.g., high social support and supportive job design) can encourage workers to engage in approach crafting even in situations where adversarial work-identity misalignments exist. However, when workers face a constraining context (e.g., low social support and high pressure to behave in a prescribed manner), they are more likely to engage in avoidance crafting or even stop any crafting attempts (Lazazzara et al., 2020).

Thus, a situation where workers experience both work-identity misalignments and a constraining context raises cynicism as workers cannot resolve the misalignments and “only recognize how they are expected to be something that they are not and do not want to be or cannot be as employees” (Kira & Balkin, 2014, p. 139). This might lead workers to adapt to the situation, distance themselves from their work, or withdraw themselves from their current organization or even their profession (Vähäsantanen & Billett, 2008; Vähäsantanen & Eteläpelto, 2011; Ylijoki & Ursin, 2013). In other words, workers engage in a form of avoidance cognitive crafting called withdrawal crafting, which means distancing oneself either mentally or physically from a person, situation, event, or environment (Bruning & Campion, 2018; Lazazzara et al., 2020). When ITs threaten workers’ professional identities, they may form “anti-identities” by completely disassociating themselves “from the meanings brought by IT” (Nach, 2015, p. 715). Thus, anti-identities are a result of resistance and allow workers to experience some control over the situation. Workers may also feel like they have no control over the situation and lack resources to cope with the identity-threatening situation. In this case, workers are overwhelmed by negative emotions, such as frustration and unworthiness, and feel that there is nothing they can do to change the situation (Nach, 2015).

## Research Questions

This study aims to contribute to research on professional development and work-identity interactions in the context of digitalized work by illustrating how digitalization might shape interactions between work and professional identity and consequently influence workers’ professional development. As discussed earlier, in this article professional development is understood as a continuous process in which professional development happens throughout workers’ careers as encounters between (digitalized) work and professional identity induce different experiences of work-identity (mis)alignments and responses in form of job crafting and identity work (see Fig. 1).

More specifically, this article builds on the analysis of government workers’ ( $N=81$ ) stories to answer the following research questions:

- (1) How can digitalization support professional development by inducing different experiences of and responses to work-identity (mis)alignments?

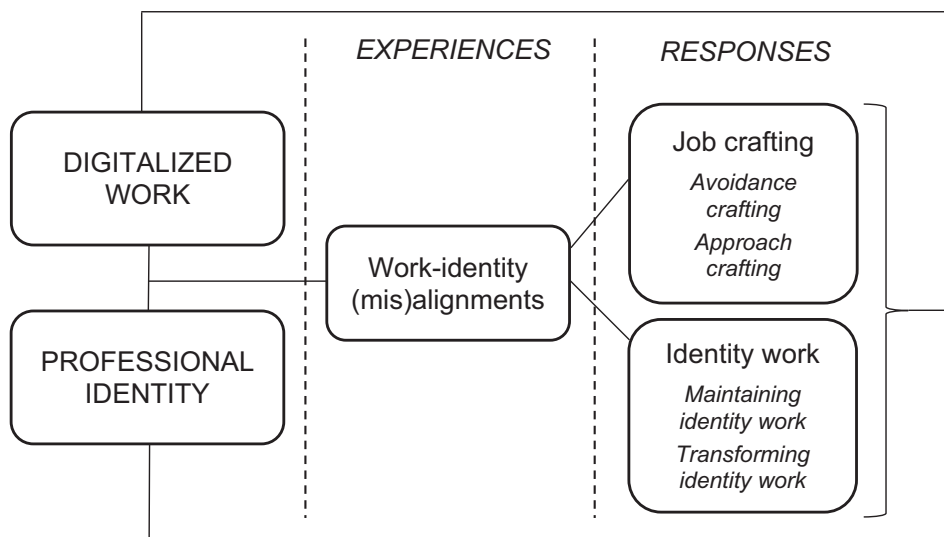


Fig. 1 Professional development process

- (2) How can digitalization hinder professional development by inducing different experiences of and responses to work-identity (mis)alignments?

## Methods

### The Method of Empathy-Based Stories

The qualitative data in this study were collected by using the method of empathy-based stories (MEBS) (e.g., Särkelä & Suoranta, 2020; Wallin et al., 2019). In the MEBS, the participants write short imaginary texts based on an introductory script (i.e., a frame story) designed by the researcher. There are always at least two different versions of a frame story, which differ with respect to one element (e.g., time frame, how the described situation proceeds, or from whose perspective the story is written). Because of this variation, the researcher can examine how the stories change when one element is altered. Thus, like other similar story-completion methods (e.g., Clarke et al., 2019), the MEBS differs from traditional qualitative self-report methods, such as interviews, because the participants are instructed to write about hypothetical scenarios instead of writing about their own experiences.

Although the MEBS can be characterized as a novel data collection method (especially in international contexts), it has a long interdisciplinary history which traces back to the 1970s and the discussion concerning the use of deception in experimental studies. This discussion prompted researchers to develop alternative methods, which preserves the 'logic' of experimental study design while mitigating some ethical issues (e.g., Eskola, 1998; Ginsburg, 1978; Mixon, 1972). Specifically, the experimental 'logic' is preserved by using one varying element between different frame

story versions, allowing the researcher to study how the variation influences the produced stories, while at the same time giving the participants the freedom to use their thinking to consider different options and decide how to respond to the researchers' prompts. Since the 1980's the MEBS has been used and developed especially in Finland, where it has established its place among qualitative research methods (e.g., Eskola & Wallin, 2015; Särkelä & Suoranta, 2020; Wallin et al., 2015, 2019).

As the participants in MEBS research are instructed to imagine themselves in some prescribed, imaginary situation and/or role, empathy-based stories do not necessarily describe the participants personal, "real" (lived) experiences (for instance, their own emotions and actions), but instead seek to illustrate how the participants make sense, understand, or conceptualize a phenomenon. The imaginary nature of the stories entails that the narrative approach adopted in this study differs from more traditional narrative research (and especially from narrative inquiry), where the focus is on studying participants' lived experiences or life histories, which can also be labeled as 'Big Stories' (e.g., Bamberg, 2006; Clandinin & Rosiek, 2012). Furthermore, although empathy-based stories usually are rich in their meanings and have a plot with a story sequence (see e.g., Elliott, 2012), they are also often relatively short, less descriptive, and more straight-forward compared to longer narratives produced for instance during narrative interviews. Thereby, adopting a narrative approach in MEBS research makes it necessary to take a broad view regarding what accounts as a story, sharing many similarities with the notion of "small stories" (e.g., Bamberg & Georgakopoulou, 2008), i.e., that a story can be hypothetical, future-oriented, and short.

Nevertheless, MEBS research shares the view with narrative research that stories, long or short and "real" or "not-real", have the ability to produce meaning, illustrate individual sense-making and even influence how we understand ourselves and others (e.g., Bruner, 2004; Lieblich et al., 2011). The stories are not seen as merely fictional – they are seen as based on culturally and socially shared genres and meanings. In other words, the context sets the scene for what is possible to imagine (e.g., Bruner, 2004; Spector-Mersel, 2010).

Moreover, imagination and storytelling in MEBS research is deeply related to "possibility thinking" (Given, 2012), enabling individuals to imagine possible selves, futures, and connections—or, as Särkelä and Suoranta (2020, 410) stated, empathy-based stories "can be seen as "an array of "real utopias" which are not-yet realized alternatives of the state of events, but which are nevertheless achievable". Therefore, empathy-based stories should not be taken as descriptions of "how something is" but rather as constructions of "how something might be" or "how something might have been", thereby advancing our sense of possibilities (e.g., Meretoja, 2017) and portraying the participants' preconceived notions and shared cultural beliefs (Wallin et al., 2019).

Building on these ideas, the MEBS was well suited for our purposes because it allowed the participants to use storytelling and their imagination when sharing their perceptions, enabling us to recognize novel perspectives, illustrate variations in the participants' understandings, and explore possibilities and future visions that might not surface with other methods (e.g., Wallin et al., 2019). Moreover, using the MEBS also gave the participants an opportunity to distance themselves from the subject and express themselves with less external pressure than personal interviews, which can be



seen as assets in our study as topics concerning digitalization, professional development, and identity are value-laden and possibly sensitive and emotive. Adopting a self-distanced perspective has been shown to, for instance, help people to reframe negative experiences, reconstrue their experiences in ways that reduce distress and reduce emotional reactivity when reflecting future negative events (e.g., Kross & Ayduk, 2011; White et al., 2019). In addition to self-distancing, in MEBS research there is usually minimal interaction between the researcher and the participants, which may help inhibit the participants from producing only socially desirable answers.

## Participants

The data were collected from 81 Finnish government workers in the spring of 2017. Participants were recruited by emailing the attendees ( $N=790$ ) of a national conference organized for government workers. The researchers also directly contacted some randomly selected government organizations. The participants' ages ranged from 18 to 67 years ( $M=50.1$ ,  $SD=9.48$ ), with 65% born in the 1950s and 1960s. Thus, considering the age of the participants, our sample is close to the mean age (46,3 years) of all government workers in Finland (in year 2017). Of the 81 participants, 59.3% were female and 39.5% were male; one participant did not disclose their gender. Considering the gender of the participants, our sample includes more female compared to all government workers in Finland (female 49%, male 51%). The participants' work positions ranged from assistants to managers, with executives and managers as the most common positions, followed by specialists and inspectors. Of the participants, 11.1% carried out administrative tasks, 37.0% were experts, 21.0% were senior experts, and 27.2% held managerial positions. Three participants (3.7%) did not report their work title. Similar to our sample, senior experts (34,9%) and experts (34,2%) represent the most common work positions of all Finnish government workers in 2017, however our sample over-emphasizes managerial positions, which represent only 2,45% of all government workers.

We focused on government workers because administrative work is highly influenced by digitalization (Frey & Osborne, 2017). Government workers are constantly dealing with the trend of digital modernization in the public sector, referred to as electronic government or e-government (e.g., Reece, 2008), both in Finland (e.g., Ministry of Finance, 2020) and worldwide. According to the Digital Economy and Society Index (European Commission, 2020), Finland is a digital leader in the European Union and is among the top ten countries in Europe in the digital delivery of public services (eGovernment Benchmark, 2020). Thus, Finnish government workers represent a suitable employee group for this study.

## Data Collection

We used two frame stories where we asked participants to imagine themselves in the future and in a situation in which digitalization had either supported or hindered the professional development of an imaginary person named Charlie:

Positive frame story:

Imagine that the year is 2025. Charlie is thinking about his/her career and notices that digitalization has supported his/her professional development. Imagine yourself in his/her situation and describe why s/he believes that digitalization has had a positive influence on his/her professional development.

Negative frame story:

Imagine that the year is 2025. Charlie is thinking about his/her career and notices that digitalization has hindered his/her professional development. Imagine yourself in his/her situation and describe why s/he believes that digitalization has had a negative influence on his/her professional development.

The topic of the frame story is likely to be familiar to participants: Finnish government workers encounter information on digitalization and professional development both at work and in public conversations. Thus, the design of the frame stories was guided by the idea that the frame stories would be as simple and short as possible to facilitate participants' imagination. Moreover, given that our purpose was to explore the participants' underlying perceptions and assumptions, too much detail and direction could have limited the variation and richness of the data (see e.g., Braun et al., 2019). Thereby, the participants could freely use their own interpretations when writing the stories and write the stories from any perspective (e.g., profession, career phase). Charlie ("Kaino" in the original Finnish versions) was chosen as the protagonist's name because it is a gender-neutral name. Moreover, the Finnish language does not have gender-specific personal pronouns; the same personal pronoun (*hän*) is used to refer to all genders. Therefore, the participants could leave Charlie's gender unspecified in the stories. Gender neutrality was chosen because it was not within our interest to explore gender-related meanings. However, in this article, we use the generic "he" when referring to Charlie to facilitate the clarity and readability of the text. Interestingly, even though most stories ( $n=70$  out of 101 stories, 50 positive and 20 negative stories) were written from Charlie's perspective or from a passive stance ( $n=11$ , 8 positive and 3 negative stories), some stories ( $n=20$ , 10 positive stories and 10 negative stories) were written from the participants' own perspectives, thereby reflecting the stories' subjectiveness.

The data collection started with a pilot study that tested the two frame stories. In this pilot study, ten government workers provided handwritten stories for either the positive or negative version of the frame story during a face-to-face meeting at their workplace. We decided to include the pilot data in the final data set because the analysis of these pilot stories showed that the frame stories worked well; the stories answered the research questions and were written according to the assignment. After the pilot phase, the data were collected face to face in one organization (18 participants) and with an e-form that was distributed to the participants via email (53 participants). Thus, overall, the final data (81 voluntary participants) consisted of stories written during a face-to-face situation (28 participants, including ten stories from the pilot study) and stories submitted through e-forms (53 participants). The participants could choose to write their stories according to the positive or negative

frame story or both (excluding the pilot study, in which the participants were randomly given one frame story version). They were also requested to report their year of birth, gender, and work position. They were given an unlimited amount of time to write their stories and could continue writing later if needed.

## Data Analysis

The participants ( $N=81$ ) wrote a total of 101 stories. The majority of participants (59.3%) wrote a positive story, 16.0% wrote a negative story, and 24.7% wrote both types of stories. The total word count of the stories was 15,202, and the length of the stories ranged from 13 to 870 words. On average the length of the positive stories was 155 words ( $M=122.5$ ,  $SD=132.25$ ), and the negative stories 142 words ( $M=120$ ,  $SD=90.05$ ). The longest positive story was 870 words and the shortest 17 words, and the longest negative story was 361 words and the shortest 13 words.<sup>2</sup> The data were transcribed and NVivo version 11 was used in the coding of the data.

We analyzed the data through *analysis of narratives* aiming at locating “common themes or conceptual manifestations among the stories collected as data” (Polkinghorne, 1995, p. 13; see also Bruner, 1985). Data analysis had two main stages. In the first stage of analysis, we used thematic analysis (Braun & Clarke, 2006), and in the second stage of analysis, we constructed typifications based on our thematic analysis. All the six phases of thematic analysis (Braun & Clarke, 2006) were present in our thematic analysis, however, as Braun and Clarke (2006) notes, thematic analysis is not a linear but a recursive process, involving a back-and-forth movement between the different phases. This applied to our analysis, which involved several rounds of analysis and used a combination of both inductive (data-driven) and deductive (theoretical) thematic analysis.

We began the thematic analysis by reading the stories multiple times to obtain an overall sense of the data. We first sorted the participants’ stories according to the frame story version such that participants’ positive and negative stories were analyzed separately. All the stories were written according to the assignment, i.e., the positive stories only yielded ‘positive’ stories, describing how digitalization supported professional development, whereas the negative stories only yielded ‘negative’ stories, describing how digitalization hindered professional development. At this first step of thematic analysis, we used an inductive approach, i.e., we identified initial codes, sub-themes, and themes in relation to how digitalization was described as inducing work-identity (mis)alignments. Thus, we identified themes related to how digitalization was described as changing Charlie’s work (work tasks and work practices), how he positioned himself to the changes (approving, critical, inconsistent) and how Charlie was described as a professional (personality, interests, needs,

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<sup>2</sup> For simplicity, we call all the data “stories” although the shortest stories could be referred to more as “responses”. Three stories were 17 words or less and these are excluded from the data when making the typifications. However, these stories are included in the thematic analysis as they did contain information regarding, for instance, how digitalization changed Charlies’ work and thus influenced professional development.

values, competencies). Themes were formed from text segments comprising one or more sentences by sorting, collating, and reviewing codes and sub-themes.

As we proceeded with the analysis, our understanding of the phenomenon deepened in a classic ‘hermeneutic circle’ (e.g., Gadamer, 1975), and our analysis gained a more deductive nature; we connected the ways in which Charlie responded to the (mis)alignments to the constructs in the theories on job crafting and identity work. Thus, at this second step of thematic analysis, we identified how the stories illustrated different ways Charlie engaged in job crafting (approach/avoidance task, relational and cognitive crafting) and identity work (maintaining, transforming). During the whole analysis process (inductive and deductive) the identified themes were continuously checked against each other, and the original data set to ensure that they are coherent, and that the analysis and the data match each other.

To illustrate the variation found between the stories and the storied nature of our data (in line with the idea of analysis of narratives, Polkinghorne, 1995), during the second stage of analysis, we constructed typifications based on our thematic analysis. Whereas in the thematic analysis the aim is to identify relevant themes and patterns, a typification or type is a result of comparing and contrasting cases, with the aim to differentiate cases that are similar to each other (e.g., Kuckartz, 2014). As the idea of variation is important in MEBS research (i.e., how changing one central element in the frame stories influences the participants’ stories), the basis of our typification is derived from the frame story versions (positive/negative) as well as thematic analysis. In other words, the stories were typified according to similarities and differences found between the stories regarding the initial experiences of work-identity (mis)alignments, Charlies’ responses and whether he was described as developing professionally.

In this stage two of the analysis, we identified four typifications. The positive stories were divided into two typifications: the thriving developer ( $n=46$ ) and the loyal transformer ( $n=17$ ), and the negative stories were divided into two typifications: the stagnant self-doubter ( $n=25$ ) and the career crafter ( $n=4$ ) (see Table 1). Nearly all the stories could be included in these typifications, except for nine stories which were excluded as they were too short and/or did not contain necessary information. It is also noteworthy, that the typifications are constructions, and thereby all the stories ascribed to a certain typification may not relate to the typification in the same way (e.g., describe all the (mis)alignments or responses that are illustrated). Nevertheless, they all share some basic characteristics: in the thriving developer typification all the stories describe only positive experiences (work-identity alignments), whereas in the loyal transformer typification the stories also described work-identity misalignments induced by digitalization. However, both typifications describe how digitalization was seen as supporting professional development. The stagnant self-doubter and the career crafter both share the view that digitalization hindered professional development by inducing work-identity misalignments, however the career crafter typification differs from the stagnant self-doubter typification in that despite of the negative experiences Charlie eventually managed to experience work-identity alignment and develop professionally.

**Table 1** Summary of the typification's main characteristics

	POSITIVE FRAME STORY: <i>Digitalization supporting professional development</i> <b>The thriving developer</b>	POSITIVE FRAME STORY: <i>Digitalization hindering professional development</i> <b>The loyal transformer</b>	NEGATIVE FRAME STORY: <i>Digitalization hindering professional development</i> <b>The stagnant self-doubter</b>	NEGATIVE FRAME STORY: <i>Digitalization hindering professional development</i> <b>The career crafter</b>
<b>Initial experience</b>	Work-identity alignment	Work-identity misalignment	Work-identity misalignment	Work-identity misalignment
<b>Response</b>	Maintaining identity work Approach crafting	Transformative identity work Approach crafting	Maintaining identity work Avoidance crafting	Transformative identity work Career crafting
<b>Storyline</b>	PROFESSIONAL DEVELOPMENT	PROFESSIONAL DEVELOPMENT	PROFESSIONAL STAGNATION	CAREER TRANSITION & PROFESSIONAL DEVELOPMENT

## Findings

We present the findings in two sections according to the positive or negative frame story versions. In each section, two typifications demonstrate how Charlie experienced and responded to work-identity (mis)alignments by engaging in identity work and job crafting. Thus, the two first typifications (thriving developer and loyal transformer) exemplify stories written as a response to the positive frame story (digitalization supporting professional development), and the other two (stagnant self-doubter and career crafter) exemplify stories written according to the negative frame story (digitalization hindering professional development). The main characteristics of each typification are summarized below in Table 1.

### Digitalization Supporting Professional Development

*The thriving developer.* In participants' most positive stories, digitalization supported Charlie's professional development by transforming work tasks and practices to better match Charlie's career aspirations, interests, competencies, and values. As such, participants described digitalization strengthening Charlie's professional identity; it aligned with his personal preferences, offered opportunities to fulfill his interests, and fostered a sense of authenticity and self-continuity. Thus, participants described Charlie as a thriving developer who enjoyed the possibilities brought by digitalization regarding his work and professional development. As digitalization was described in these stories as inducing experiences of work-identity alignment, professional development was mainly related to how Charlie engaged in maintaining identity work and approach crafting to strengthen the aspects of work and self that he experienced as meaningful.

In particular, participants' stories emphasized how digitalization offered Charlie opportunities to use his core competencies, focus on the most important aspects of his work and realize his full potential. The stories illustrated how the automation of routine work tasks (such as reporting and information sharing) and the integration of various information systems resulted in increased work quality, better information flow, and higher efficiency. All this made it possible for Charlie to focus on relevant, interesting, and creative work tasks allowing him to use and develop his competencies: "Almost all my work tasks are demanding or very demanding. Now I really feel like my work has a purpose, and all the pencil pushing and pointless emailing is left behind" (P48).

Participants envisioned Charlie working with various applications of AI, robotics, and solution databases and connected it to changes for the better in his work. These digital technologies would take over the "dull routine work", while liberating Charlie to focus on cognitively demanding tasks, such as in making decisions and in providing solutions and analyzes: "At first software robots only did basic data verification, but by 2025 they are already capable of statistical analysis. These work tasks were replaced by other, more meaningful work tasks (which were still unautomatable)." (P38).

Charlie was framed as a proactive and self-directed worker who believed in his capabilities and was optimistic and eager to learn and develop. Although digitalization required him to constantly learn and develop, this was not perceived as a burden but a possibility and opportunity that increased his motivation: “Digitalization has also brought completely new opportunities for the development of work and brought completely new work tasks that motivate Charlie to strive forward” (P30).

Participants described how digitalization entailed adoption of technical tools and devices allowing remote work, and that Charlie enjoyed and valued the autonomy and flexibility in choosing when and where to work. He also took full advantage of digitalization to further his skills and career. For instance, he was described as actively attending courses and digital workshops, watching work-related videos, and reading blogs. Thus, in the thriving developer typification, Charlie’s engagement with digitalization was described to improve the content of work tasks, broaden his skills and competencies, and render his professional role more important and meaningful—that is, digitalization provided him with various task-crafting opportunities that supported his professional development.

In addition to increasing opportunities for task crafting, digitalization was described as creating possibilities for relational crafting. This was shown, for instance, in how Charlie was often described as a forerunner who helped his colleagues with problems they faced with digitalization. Thus, being interested in technology and among the first to apply digitalization to his work helped Charlie build relationships with his colleagues and gain confidence and appreciation. Similarly, digitalization also provided opportunities for Charlie to ask colleagues for feedback and advice, grow his professional networks, solve problems together with colleagues regardless of time and place, and find and share work-related knowledge: “Web conversations with colleagues around the world are particularly rewarding. Sometimes, even several times a week, we discuss work-related themes and share tips on how to act in different situations” (P80).

*The loyal transformer.* Although participants’ positive stories mostly emphasized how digitalization strengthened Charlie’s professional identity, some stories illustrated how Charlie also experienced misalignments between his professional identity as digitalization conflicted with his competencies, values, or interests. For instance, the stories expressed concerns about how digitalization might dehumanize work as robots replace human labor. Additionally, the stories illustrated how Charlie felt that digitalization disturbed his work as he had to deal with various challenges, such as malfunctioning software, demanding work tasks, and insufficient (digital) skills: “It would be good to be able to focus on preparation that required expertise instead of pondering how things should be done on a computer” (P28). Digitalization was described to require a new ‘technical’ way of thinking, and adopting such technical thinking was considered not to be easy. Also, Charlie could lack skills to manage information flows and the new ways of online collaboration: “Working on shared documents is still hard for Charlie and in his opinion, there should be someone who would be in charge of the document” (P45).

Despite the contradictions between digitalization and his professional identity, these stories emphasized that Charlie considered digitalization and related professional development as necessary to stay professionally current. Like in the “thriving

developer” typification, Charlie was described as a growth-minded and proactive worker, who was committed to his organization and profession. Although Charlie possessed some critical thoughts regarding digitalization at work, he considered it vital to “stay on top of development by doing whatever is needed” (P43). Thus, Charlie was described as a loyal transformer, who engaged in approach cognitive crafting and/or transformative identity work to reframe his perceptions of his work and identity: “With digitalization, he has had to reflect on his own starting points and ways of doing work, which has brought a different perspective to work” (P19). In these stories, cognitive crafting was related to how Charlie reframed his work role, envisioned the challenges positively, and emphasized the positive qualities of work to realign his professional identity with the transformed work context. He also gained positive and encouraging experiences from engaging with digitalization (which enhanced his self-confidence and self-efficacy), received social support, and eventually learned how to best exploit digitalization in his work. Thus, as it was important for Charlie to remain a skilled and competitive employee, in the end “Charlie was satisfied and relieved that he did not resist an inevitable development, which would have slowed down his professional development and weakened the possibilities to succeed in his work in the year 2025” (P36).

Thus, the positive stories demonstrated how digitalization supported Charlie’s professional development by resulting in a strengthened or redefined professional identity and offered him possibilities to engage in approach job crafting. Consequently, in these stories digitalization was related to feelings of competence, meaningfulness, satisfaction, and thriving at work.

### **Digitalization Hindering Professional Development**

*The stagnant self-doubter.* Similar to the misalignments described earlier in the “loyal transformer” typification, the negative stories shared the view that digitalization and the changes it brought contradicted the way Charlie defined himself as a professional. However, in contrast to the positive stories, where Charlie eventually managed to reach a work-identity alignment and were described to develop professionally, the majority of negative stories described Charlie as a stagnant self-doubter, unable to resolve the misalignment between his professional identity and work context and thus, develop professionally.

The negative stories emphasized how digitalization transformed Charlie’s work in a way that did not correspond with his professional interests, competencies, and values, and thus led to experiences of work-identity misalignment. For instance, digitalization was described as diminishing the aspects that he valued in his work, such as the social nature of work, replacing them with aspects that he did not value or was not competent in, such as dealing with technical problems:

Communication with the closest colleagues is no longer as close as before; we rarely meet face to face, only once or twice a week, and many things need to be handled electronically or in virtual meetings. (N32)



Charlie would like to do his “basic tasks” well, but it has not been possible for a long time without first having to learn all the “nerd stuff.” Work has become burdensome and repulsive. (N8)

Charlie felt that digitalization merely disrupted his work, decreasing the possibilities to use his full potential and fulfill his professional interests. On one hand, he was not able to focus on his core work tasks; constantly learning new, unfinished, and often malfunctioning systems took all his work hours. Such learning hindered Charlie’s professional development as it did not allow Charlie to advance in a meaningful mastery of his work or in a more enabling definition of himself as a professional. On the other hand, the stories also described how the automation of (routine) work tasks resulted in him not being able to manage his remaining, more demanding, and complex information analysis and decision-making tasks properly. He was supposed to do things differently from what he was used to and felt incompetent to tackle cognitively demanding tasks: “Routines are handled in the background by systems and software robots. Of course, it is still necessary for me to draw conclusions and evaluate the results and decisions. I am required to do very different things than before and therefore I am not able to properly handle my work tasks, which is not motivating.” (N32).

Charlie was described as old-fashioned and uninterested in technology, and the stories also often described how Charlie lacked personal resources needed to develop professionally, such as self-directedness and proactivity. He was satisfied with his old work routines and wanted to stay in his comfort zone rather than challenge himself:

“Oh, it was much better before,” Charlie thought while opening the door to his workplace. “I knew precisely in advance what my day would include in terms of work tasks, and my work was scheduled. I got to focus on reports and produce them so that they could be analyzed by others. ... We have always done things a certain way, and things have worked well. I feel I work best when I get to do things that I am familiar with, and that is why I was hired here.” (N22)

The negative stories also frequently illustrated how the participants associated digitalization with problems in organizational implementation, such as lack of sufficient organizational support and resources. Charlie felt like he received insufficient training and social support to develop professionally, and digitalization was often associated with malfunctioning and complicated technologies, continuous interruptions, and increased workload. Hence, in addition to digitalization itself, its poor implementation further impacted negatively on Charlie’s professional development: “When digitalization first began, the workload increased significantly, guidance was deficient, and systems were introduced incomplete and inoperable” (N65).

Digitalization led to feelings of incompetence, frustration, and constant worry over not succeeding in the job. The stories frequently described how Charlie felt useless, redundant, and undervalued: “With digitalization, Charlie’s previously valued solutions have become unnecessary, and Charlie’s expertise is hardly needed anymore” (N25). In five of the 33 negative stories, digitalization and automatization led also to unemployment:

One after another, the office staff received a final account. Those lucky ones who were in their 60s at the start of the changes were allowed to retire. We in our 50s, on the other hand, were left with nothing, with working life remaining well over 10 years, but age itself was a barrier to getting a job. I have already been unemployed for several years. I cannot see that the situation is going to change. (N65)

Although Charlie expressed reluctance and critical thoughts regarding digitalization, only one story described how Charlie consciously resisted the changes by engaging in avoidance task crafting. In this story, digitalization had replaced face-to-face customer service with digital forms, and because Charlie was not satisfied with the changes, he decided to drag his feet during the face-to-face meetings. Thus, he failed to meet his profit target and was laid off.

Most negative stories described the frustrating situation and adopted a deterministic view of technology: Charlie felt like digitalization was an inevitable fact of life. He felt like he had no control over the situation and could only passively adapt to it: “At some point, someone pressed delete, and everything was gone. Someone reversed the logic of the system, and digitalization controls life even though digitalization should support life” (N40).

Thus, the majority of negative stories illustrated how Charlie was reluctant or unable to realign his work and identity. Charlie felt obliged and forced to use technology in his work, and he struggled to cope with the frustrating situation by engaging in avoidance cognitive crafting by distancing or withdrawing himself from digitalization: “At home, Charlie still doesn’t want to use a computer even though his wife has bought one” (N64).

*The career crafter.* Although in most negative stories, Charlie did not manage to resolve the work-identity misalignment and was left in a liminal state, four stories framed a more optimistic outcome. In these stories, Charlie distanced himself from digitalization and his present job and, by finding a new career path, managed to realign his work and identity by engaging in non-digital and creative work in which he felt competent: “Fortunately, Charlie feels that he is an important person in the world of small children because he has time for them” (N37). Thus, even if digitalization hindered Charlie’s professional development in his original job, it encouraged Charlie to move towards a career and a professional identity that better fits his life goals and values. On this new career path, professional development might become possible again.

## Discussion

In this study, we have illustrated government workers’ perceptions regarding the relationship between digitalization and professional development. Based on empathy-based stories, we introduce four typifications to demonstrate the various ways by which the participants perceived that digitalization could support or hinder professional development by inducing different experiences of and responses to work-identity (mis)alignments. In sum, *the thriving developer* typification shows how digitalization may induce experiences of work-identity alignments, allowing the

worker to engage in maintaining identity work and approach job crafting, and thus supporting professional development. Similarly, *the loyal transformer* typification describes how digitalization can support professional development, however, in this typification the process is not as straight-forward as in the thriving developer, as the worker may also experience some work-identity misalignments and thus, is required to engage in transformative identity work and job crafting to realign his identity and transformed work context. Similarly, both *the stagnant self-doubter* and *the career crafter* typifications illustrate how digitalization may induce work-identity misalignments, however the stagnant self-doubter is a typification of professional stagnation as the worker is not able to realign his identity and work context, whereas in the career crafter the worker eventually manages to find a work-identity alignment and thus, develop professionally.

To the best of our knowledge, this is the first study to examine the relationship between digitalization and professional development using an identity-centered approach. Also, this study uses a novel data collection method, the MEBS, which takes advantage of the use of imagination in storytelling, thereby enabling us to recognize new perspectives and participants' possible ways of thinking. Thus, this study contributes to existing knowledge and theories in several ways, provides some practical implications and opens future research avenues.

### **Theoretical Contributions**

First, this study extends existing research on professional learning and development by illustrating how digitalization and workers' identities influence it. The findings show how digitalization can influence workers' experiences of work-identity (mis)alignments by affecting how they define themselves at work and their possibilities to work in a meaningful way. Thus, the findings illustrate how individuals differ in what they believe to constitute meaningful work that aligns with and validates their professional identities, and thereby highlights the importance of individual subjectivities in understanding professional learning and development (e.g., Billett, 2010). For instance, in the positive stories, Charlie viewed replacing routine work with more challenging work tasks as something desirable, whereas in the negative stories, this was perceived as a threat to his professional identity. These findings resonate with the findings of earlier studies that illustrate how digitalization can both reinforce and threaten workers' identities (e.g., Mishra et al., 2012; Nach, 2015; Stein et al., 2013). For instance, a recent study (Långstedt, 2021) illustrates how automation and the implementation of intelligent technologies (such as AI) at work may lead to a work-values misalignment, as the pre-automated, more routine, and structured work relates to different values, needs and skills than the new work environment after automation, characterized by more creative and investigative work. Thereby, our research builds an interdisciplinary bridge between studies that have explored how technologies and work interact with one's identity, and studies emphasizing the role of subjectivities and professional identity in professional development, suggesting

that it is important to understand how digitalization influences work-identity interactions to best support workers' professional development.

In addition to illustrating the importance of work-identity interactions in developing professionally, the findings illustrate how professional development is a subjective construction and can be understood in various ways. In particular, the different understandings regarding what accounts as professional development was apparent when comparing the positive and the negative stories. In both the positive and the negative stories, professional development was related to everyday work practices, however in the positive stories also engaging with digitalization (e.g., adoption of new software, learning new digital ways of working) was seen as a part of Charlies' professional development, whereas in the negative stories engaging with digitalization was considered as merely a burden and hindering his professional agency and development. Thus, these different conceptualizations highlight the importance of considering the subjective evaluations and positions of workers when striving to support their professional development.

Second, scholars have extensively studied how workers strive to maintain a coherent and positive identity and how they respond to work-identity misalignments (e.g., Alvesson, 2010; Caza et al., 2018; Fuller & Unwin, 2017; Pratt et al., 2006; Sveningsson & Alvesson, 2003). This study contributes to this body of research by illustrating, through three typifications (the loyal transformer, the stagnant self-doubter, and the career crafter), differences in how workers might respond to digitalization and the misalignments it might induce between work and identities. Moreover, as previous studies on work and identities have focused more on work-identity misalignments than alignments (e.g., Kira & Balkin, 2014), this study provides insights into how workers might experience and respond to work-identity alignments, as demonstrated by the "thriving developer" typification.

In particular, the findings contribute to previous theories on identity work and job crafting (e.g., Bruning & Campion, 2018; Kira & Balkin, 2014; Lazazzara et al., 2020) by illustrating how digitalization could provoke workers to engage in identity work and how digitalization could induce both approach and avoidance crafting. For instance, the "thriving developer" typification shows how digitalization might lead workers to engage in maintaining identity work and in approach task and relational crafting. By contrast, "the stagnant self-doubter" typification illustrates how digitalization might lead workers to merely cope with the situation and to engage in avoidance job crafting, such as distancing and withdrawal. These negative stories resembled Alvesson's (2010, p. 200) "self-doubter image," as Charlie remained "riddled by the unpleasant and pervasive experiences of insecurity and anxiety." Thus, the "stagnant self-doubter" typification illustrates how identity work and job crafting may not always culminate in positive identity states (e.g., Caza et al., 2018) but may also result in subjugated identities (Kira & Balkin, 2014), "anti-identities" (Nach, 2015), and liminal or "in between" professional selves (Beech, 2011), thus hindering professional development. However, similar to the "loyal transformer" typification, in the "career crafter" typification, transformative identity work was seen as a struggle with an element of mild heroism (Alvesson, 2010), as Charlie eventually managed to develop professionally and construct a positive professional identity despite the frustrations and contradictions caused by digitalization. These findings demonstrate how workers can resolve the work-identity misalignments created by

digitalization by engaging in career crafting, referring to “an individual’s proactive behaviors aimed at optimizing career outcomes through improving person-career fit” (De Vos et al., 2019, p. 129). Likewise, the “career crafter” typification also illustrates how workers compare their present and alternative commitments when their current commitments are no longer satisfactory, as illustrated in the “reconsideration of commitment” dimension of the identity status models (e.g., Crocetti et al., 2008; Mancini et al., 2015).

The various ways by which workers may respond to work-identity (mis)alignments induced by digitalization highlights the importance of recognizing workers’ professional agency in professional development, i.e., acknowledging how workers are active agents who evaluate changes and decide how to involve and position themselves within said changes (e.g., Vähäsantanen & Billett, 2008; Vähäsantanen & Eteläpelto, 2011; Ylijoki & Ursin, 2013). Although most earlier studies have focused on teacher profession and educational reform as their context, their findings resonate with the findings of this study, showing how workers can manifest their agency in multiple ways in changing work contexts. For instance, Vähäsantanen and Billett (2008) show how vocational teachers may adopt five different personal strategies (professional development strategy, passive accommodation strategy, active participation strategy, balancing act strategy, and withdrawal strategy) when negotiating their professional identities in a reform context. Along similar lines, Vähäsantanen and Eteläpelto (2011) demonstrate how teachers may during educational reforms exercise their professional agency by maintaining or transforming their professional identities. Thus, although reforms, such as digitalization, are often planned and organized from the top-down, the workers’ have still various ways by which they can exercise their agency amid changes.

These various ways workers can exercise their agency raises a question regarding what is needed in ‘managing’ professional development successfully amid (digital) changes. The stories of this research especially shared a view that workers’ need to proactively engage with digitalization and to actively take initiative to develop one’s skills and competencies to stay professionally current, ensure employability and to avoid falling in the wayside professionally. In this sense, the findings align with previous studies suggesting that the “ideal ‘new’ employee is a self-directed, proactive, networking entrepreneur, taking responsibility for his or her own performance and development” (van den Heuvel et al., 2010, p. 124; see also Dachner et al., 2021) and that the introduction of new technologies requires “new” skills of employees, such as adjustment to new (digital) work practices (e.g., Vallo Hult & Byström, 2021). Thus, the stories replicated the culturally shared view and the dominant intervention strategy focusing on building employees’ education and skill levels and fostering their adaptivity so that they can cope with new technologies and remain employed (Parker & Grote, 2020).

Indeed, the need to constantly engage in self-initiated or self-directed learning in today’s digital working has been recognized in several studies on workplace learning (e.g., Lemmetty & Collin, 2020), and proactivity is also suggested to be incorporated in the definition of employee development (Dachner et al., 2021). However, on the other hand, the negative stories in this study also illustrate the ‘dark side’ of proactivity and self-directed learning, i.e., what may happen if workers lack qualifications

associated with ‘the ideal new employee’, and if too much responsibility for learning is thrust on workers. The stagnant self-doubter typification illustrated how every worker may not have the capabilities or willingness to proactively develop themselves amidst changes, and how sometimes their opportunities can be restricted by the organization. Thereby the findings align with the findings of previous studies, demonstrating how self-directed learning is not always seen as something positive, but may instead be regarded as a burden and a stressful obligation (e.g., Lemmetty & Collin, 2020). More broadly, the ‘self-doubter’ image of identity in this typification illustrates how “a constant pressure on individuals to adapt and be responsive means that the social preconditions for building character and identity are not there anymore” (Alvesson, 2010, p. 200), and consequently workers may find it difficult to find meaning in their work. This implies that emphasizing workers’ proactivity and professional agency in professional development should not mean that workers are left completely on their own, trusting that “employees themselves would somehow find their way if their work changed or jobs disappeared” (Saari et al., 2019, p. 300). If workers are seen as solely accountable for their professional development, there is a risk that learning and growth opportunities are not equally distributed and a system of exclusion evolves (Dachner et al., 2021).

Therefore, the findings of this research support earlier studies on professional learning and development, emphasizing the need for a “shared partnership approach” (e.g., Billett, 2001; Dachner et al., 2021), i.e., the acknowledgement that to best support professional development a focus needs to be on both workplace affordances and on individual’s characteristics and engagement. In the context of digitalization, this entails that a “tool view of technology” (e.g., Kim et al., 2020; Orlikowski & Iacono, 2001) is too limited—that is, there are no determined outcomes of engaging with digitalization. Rather, to understand the relationship between digitalization and professional development, adopting a “proxy view” or an “ensemble view” of technology is necessary. Both views acknowledge the importance of the human agency of technology adopters; however, the ensemble view also emphasizes “the importance of social contexts within which technological artifacts are formulated, enacted, interpreted, and appropriated” (Kim et al., 2020, p. 6).

## Practical Implications

In accordance with previous discussions (e.g., Goller & Harteis, 2017; Vähäsantanen & Billett, 2008; Vallo Hult & Byström, 2021), this study emphasizes the need for greater consideration of individual needs and human agency when seeking to support the professional development of workers in certain changing contexts, such as digitalization. As technologies are usually introduced in organizations in a top-down fashion (e.g., Hornung et al., 2010), we propose that when seeking to support workers’ professional development in a digitalized working life, organizations should stimulate a work environment that enables the workers to craft their work in a way that is important and meaningful to them and should support the use of flexible and adaptive digital structures (e.g., Parker & Grote, 2020). Considering the recent COVID-19 outbreak, this is especially important as the workforce is required to adapt to and

cope with radical changes in the work and social environment, such as shifting to remote work environments (Carnevale & Hatak, 2020). Compared to before the pandemic, remote work, for instance, is no longer voluntary but mandatory. Therefore, providing a supportive environment (e.g., Wang et al., 2020) and listening to workers' needs, values, and beliefs regarding their work is especially important for the workers to identify themselves as "thriving developers" instead of "stagnant self-doubters". The interests of the organization should also be considered in job design; thus, adapting the principles of idiosyncratic deals ("i-deals"; Rousseau et al., 2016) in digitalization could benefit both the workers and their employers. In this way, the individual is given "the possibility to work in alignment with his/her work identity while striving towards organizational goals" (Kira et al., 2012, p. 49).

### **Limitations and Future Prospects**

The limitations as well as the strengths of this study relate especially to the data collection method. As the data were collected through the MEBS, the findings portray possible connections and perspectives rather than participants' personal experiences. Thus, one possible criticism of using the MEBS (concerning also other similar story completion and role playing methods; see e.g. Clarke et al., 2019; Greenberg & Eskew, 1993), has been, that the data lacks realism and the stories are artificial, i.e. the data does not reflect or predict 'real-life' behavior. Although it is important to acknowledge this fact, it is also important to recognize that there does not need to exist a correspondence between people's perceptions and actions for there to be value to data (see Greenberg & Eskew, 1993). The value of studies using the MEBS lies not in explaining or predicting the participants' actual behaviors, but in presenting possible ways of perceiving the phenomenon and in discovering what kind of shared meanings and assumptions exist. Whether these perceptions and meanings are based on personal experiences is not relevant, although in this study the similarities found between the stories, and the fact that the stories were often written from the perspective of a knowledge/government worker and also from the participants' own perspectives instead of Charlie's, shows how the participants may draw on both personally and socially available resources in telling a story that makes sense (see also Clarke et al., 2019).

Given that most of the participants of this study could write the stories in a relatively short time anytime and anywhere, the MEBS enabled us to collect qualitative data from a wider sample than, for instance, with interviews. However, the written and imaginary format of the data can also bring some limitations regarding the quality of the data, shown, for instance in very short responses. Indeed, the frame stories may not spur imagination in the same way to every participant, and the participants' writing fluency might also vary (see also Clarke et al., 2019). In this study, participants were government workers used to describe their thoughts and ideas in writing and they also took part in the study voluntarily. It was likely that participants would not struggle with writing the story. However, the short stories in the data might reflect some difficulties in imagining and/or perhaps, the workers' busy schedule. Nevertheless, despite that some stories ( $n=7$ ) were very short (less than

40 words), most participants wrote ‘full’ stories. Additionally, even the shortest stories did describe some aspects (e.g., how digitalization transformed work) relevant for our research questions.

Moreover, although the sample size ( $N=81$ ) is high compared to most studies using the MEBS as a data collection method, the sample is non-representative and relatively small to generate any statistical generalizations. Furthermore, despite that the studies are based on a multi-organizational sample, all participants are Finnish government workers. Thus, the findings are context-dependent and as such, might not be applicable to other contexts (e.g., other professional fields or cultural contexts). The findings are also time-bound, reflecting the participants’ views in 2017. However, this is not to say that the findings completely lack the capacity for generalization. Indeed, in qualitative research, the concept of transferability is seen as more helpful in understanding generalization compared to a formal, quantitative understanding of generalization (e.g., Tracy, 2010). *Transferability* (e.g., Lincoln & Guba, 1985; Tracy, 2010) is achieved “when readers feel as though the story of the research overlaps with their own situation and they intuitively transfer the research to their own action” (Tracy, 2010, p. 845). Transferability can be increased by, for instance, writing accessibly, evocatively and invitationally, and thus creating a feeling in readers as if they have experienced the same thing in another context. The different typifications and illustrations presented in this study aim to increase the evocativeness of the findings and provide the readers with possibilities to recognize familiar “patterns” or interpretations, thus increasing the resonance of the findings. Nevertheless, in the future it would be useful to situate studies in other contexts (e.g., professional field and cultural context) to complement the findings of the present study. Also, looking more closely at how workers’ work histories and demographic information (e.g., age, educational level) influences, for instance, how the workers respond to digital changes in their work and their valuations, is needed.

In this study, as in typical MEBS research (e.g., Wallin et al., 2019), the frame stories were divided into positive and negative to explore how the stories change when one element is varied. This gave us the opportunity to illustrate, for instance, how the descriptions concerning Charlie’s professional identity varied between the positive and negative stories. Although this study illustrates the findings through two opposing poles (positive/negative) and four typifications, in reality, the stories might blend and take different forms. Thus, the aim of this study is not to claim that workers identify with only these extreme cases but rather to illustrate possible scenarios. In future research, it would be useful to investigate and extend the findings using different qualitative methods, such as interviews, diary studies or observations. As empathy-based stories are relatively short and more straight-forward compared to stories collected through, for instance, interviews, exploring the phenomenon with other narrative methods might help to deepen the findings and relate the findings to participants’ lived experiences. Thus, future inquiries could identify more variations in how workers experience and respond to work-identity (mis)alignments created by digitalization. For instance, a deeper and more detailed look into how workers values, work histories, interests, and competencies influence what kind of work-identity misalignments and alignments digitalization could induce and their relationship to different contextual and individual factors would help to build a more profound understanding



on the relationship between professional development and digitalization. Furthermore, although the purpose of this study was not to explore the role of emotions in digitalization and professional development, the findings clearly indicated that these are highly relevant. The stories frequently mentioned how digitalization evoked emotions ranging from frustration to satisfaction and thereby, in the future a closer look into what kind of emotions digitalization causes and how these are related to professional development would be valuable. This is in line with the findings of a recent meta-synthesis focused on the relationship between professional agency and emotions at work, suggesting that emotions play an important role in professional learning and development, especially when bound up with professional identity negotiations (Hökkä et al., 2017).

Moreover, an interesting observation in this study was that most participants chose to answer the positive frame story version. One might wonder, does this reflect that Finnish government workers in general position themselves toward digitalization at work in a more positive way, or maybe this reflects their optimistic and hopeful positioning toward the future as they were instructed in the frame story to imagine the year 2025? In the context of this study, these questions are not answerable but in future research avenues it would be interesting to delve into these questions more deeply.

## Conclusions

This study provides a novel perspective of professional development by illustrating the possible connections between digitalization and professional identity. The findings highlight the importance of recognizing how digitalization of work can threaten or support workers' professional identities to build a supportive working environment where the workers feel like they are valued and able to develop in a meaningful way.

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**Availability of Data and Material** Not applicable.

**Code Availability** Not applicable.

## Declarations

**Ethics Approval** This study followed the ethical guidelines of the Finnish National Board on Research Integrity (TENK). Ethical review was not needed as the study did not collect sensitive and identifiable data.

**Consent to Participate** All participants were clearly informed about the research and their rights during the data collection. Participation was voluntary and the participants had the option to refuse to participate or to discontinue their participation at any time without suffering any negative consequences.

**Consent to Publication** All participants were clearly informed about the aims of the research and use of research data.

**Conflict of Interest** The authors declare that they have no relevant financial or no-financial interests to disclose.

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