RESEARCH Open Access

Check for updates

Multi-professional teamwork in Finnish early childhood education and care



*Correspondence: kirsti.karila@tuni.fi

Abstract

This article analyses the theoretical, practical, and political interpretations of multi-professional teamwork in Finnish early childhood education and care during the last two decades. A semi-systematic approach was used to provide an overview of teams, teamwork, team composition, and multi-professionalism. The data were drawn from two main sources: key Finnish policy documents that regulate or guide multi-professional teamwork and a systematic literature review of multi-professional teamwork in Finnish research studies over the past 20 years. The data were examined through the lens of thematic analysis. In the final phase of the analysis, we constructed a narrative timeline. The timeline indicates two main themes: one is an emphasis on multi-professional teamwork as a resource combined with the challenges in implementing it, the other is an emphasis on pedagogy and the clarification of professional profiles. The timeline illustrates changes in the ways multi-professional teamwork has been interpreted, quided, and studied.

Keywords: Early childhood education and care, Teamwork, Multi-professionalism, Document analysis, Finland, Professionalism, Relational expertise, Systematic literature review

Introduction

The importance of teams as the basic structure of early childhood education and care (ECEC) work is widely recognised. However, these teams are conceptualised and implemented differently depending on the overall history of ECEC institutions in each country (e.g. Oberhuemer and Schreyer, 2018; OECD, 2019).

This study investigates the interpretations of multi-professional teamwork in Finnish ECEC during the last two decades. By multi-professional we refer to a professional activity in which professionals having various initial training backgrounds work together to implement the tasks their work demands. In the context of ECEC, multi-professional work takes place in two main forms. Either professionals from different institutions work together on a shared task. An example of such multi-professional work is collaboration between pedagogical ECEC staff and healthcare and social welfare staff. Or, at the ECEC centre level, multi-professional work refers to the daily collaboration between differently qualified ECEC professionals working in the same child group or class. Typically, multi-professional work takes place in a team format. By team we mean a stable structure of



© The Author(s) 2023. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

¹ Tampere University, Tampere, Finland

collaborative practice in which the professionals work together in a way that each contributes to the whole. In teamwork, team members' diverse competencies and expertise are valued (see Peleman et al., 2018; Salas et al., 2003.)

Finland represents a universal ECEC system. ECEC services are mainly publicly provided, although the proportion of private provision has increased in recent years (Ruutiainen, 2022). Multi-professional teamwork is considered one of the key elements of contemporary ECEC professionalism. However, the understanding and implementation of multi-professional teamwork in Finnish ECEC has been a long-standing challenge. Confusion regarding profession-based expertise as well as the responsibilities of each professional group working in the teams has emerged in daily ECEC centre practices and also in the professional debate (Karila & Kupila, 2010; Onnismaa et al., 2017). Due to the challenges and struggles related to the implementation of teamwork, many national working groups commissioned by Finnish governments and Ministries have tried to clarify the roles and responsibilities of the various professional groups. The continuing ambiguities and professional struggles inspired us to investigate multi-professional teamwork in ECEC settings from a historical perspective.

Finnish ECEC legislation regulates the qualification requirements of professionals in ECEC centres. All ECEC staff must be qualified, and all service providers must follow these requirements. The regulation has multiple practical consequences, including the team's composition. Furthermore, the Finnish pre-service training system in ECEC covers a broad and diverse spectrum of education and training provision. Qualifications and degree programmes are provided at secondary vocational education institutions, universities of applied sciences, and universities. Each of these institutions has its own forms of guidance and different procedures and practices (Ministry of Education & Culture, 2021).

The article is divided into four sections. After the introduction, we describe our methodological procedures. Next follows the results section, where we draw the narrative timeline that illustrates the main premises regarding the dominant Finnish ideas of multi-professional teamwork. The timeline was based on the analyses of the selected policy documents and research literature. This design enabled us to answer our research question: How was multi-professional teamwork interpreted, guided, and studied in Finnish ECEC between 2002 and 2022? The fourth, final section contains the discussion and conclusion.

Methods

The two periods studied (2002–2012 and 2013–2022) were selected for socio-historical reasons. In 2002, a national steering document entitled "Decision in Principle concerning the National Policy Definition on Early Childhood Education and Care" was published. It generated new steering period in Finnish ECEC. As our research method, we used document analysis (see Bowen, 2009) with two data sources. Since ECEC teamwork is not isolated from the ECEC institution's changing interpretations regarding its main functions, we analysed Finnish policy documents as the first data source. These documents regulate, guide, or give recommendations for multi-professional teamwork. This data source includes legislative documents, national curriculum guidelines, and reports commissioned by the Finnish Governments or Ministries. In Finland, the policy

Table 1 Criteria for the selection of articles

Criteria		
Focus of research	Team, teamwork, team composition, multi-professionalism,	Early childhood education and care
Context of the study	Early childhood education and care in Finland	
Type of document	Empirical studies – peer-reviewed scientific articles available in the databases	
EBSCO, Education Collection, ERIC, FINNA, Proquest, and SCOPUS		
	Doctoral dissertations	
Publication period	2002–2022	
Language	Finnish or English	

and steering documents are prepared by working groups representing different stakeholders. Most often, their aim is to build consensus. (Karila, 2012). The analysis focused on the definitions and the practical guidance provided on multi-professional teamwork at the given time. Specifically, the policy documents were analysed by searching for textual material that referred to multi-professionalism, teamwork, competences, roles, and responsibilities of various professional groups. The policy documents analysed are listed in **Appendix 1**.

Second, we used a semi-systematic approach (see Snyder, 2019; Wong et al., 2013) to produce a literature review presenting a contemporary review of multi-professional teamwork in Finnish research studies. The purpose was to consider a variety of perspectives on teamwork. The literature review includes both quantitative and qualitative research articles published between 2002 and 2022 in peer-reviewed journals available in databases (EBSCO, Education collection, ERIC, FINNA, Proquest, SCOPUS). In addition, we explored Finnish doctoral dissertations on the subject. The semi-systematic review was used to produce an overview of the concepts *team*, *teamwork*, *team composition*, and *multi-professionalism* in Finnish ECEC research. The articles had to focus on ECEC and be based on an empirical study where either team(work) or multi-professionalism was a central part of the argument. The criteria for the selection of articles are presented in Table 1. The articles and dissertations analysed are listed in **Appendix 2**.

We followed the thematic analysis approach by Braun & Clarke (2006) to address questions about the topics of this research. The articles were checked for the aim of the study, the participants, the Finnish context, and the results. The selected articles were categorised according to the main topics mentioned above. Both authors were involved in developing the thematic analysis by defining a thematic timeline.

A total of 35 articles and eight doctoral dissertations were retrieved. The studies in the articles covered a variety of perspectives on teamwork. The main themes addressed professional identity, teachers' expertise and pedagogical leadership, distributed leadership, shared practices, the culture of participation, and relational expertise. Other themes considered feedback between team members, work-related well-being, and emotions in a team context. Recent studies also raised topical issues such as sustainability in teambased pedagogical work and the influence of the COVID-19 pandemic on professionals' practices.

In the final phase of the analysis, we constructed a narrative timeline, a temporal storyline that began to appear when searching through the key episodes and emerging themes from the data. In this phase of the analysis, the two data sources were examined side by side, which enabled us to understand their mutual relation. To increase reliability, we have described the documents carefully. Therefore, when presenting results, the reliability of the documentary analysis is enhanced by the accuracy of the research, including, for example, the inclusion of precise names, references, and details of events (Murray & Sixsmith, 2002). In addition, the reliability of the articles is enhanced by peer review. Reliability is also increased by the fact that the phenomenon under study is not affected by the presence of the researcher (Bowen, 2009). We are aware that documentary evidence is compromised during the analysis process if the researcher only selects data that support the researcher's own ideas. The data are therefore open to the researcher's bias. We tried to take this into account by involving both authors in the analysis process and interpretation.

Limitations

The study has some limitations. First, the analysis of ready-made policy documents does not allow access to the multiple interests and conflicts that are included in the preparation process of the documents. The analysed documents describe only the compromises that have been reached. Second, we did not explore how the national policy ideals were translated and transformed into the municipal level instructions (for example into the official job descriptions of each professional group) or into daily practices (for example the practices regarding the division of labour) in the ECEC centres. Such an approach would reveal different aspects of multi-professional teamwork than the national policy documents presenting the ideals and aims of it. In addition, the research data focuses on a limited body of research literature. The sources used are not interpreted as if they would give a complete view of Finnish interpretations regarding multi-professional teamwork. Rather, the aim was to clarify multi-professional teamwork as a complex phenomenon in ECEC and to consider a variety of perspectives on it.

Results

This section presents a two decade-long narrative timeline, which illustrates the main interpretations of multi-professional teamwork during the period studied. In the data analysis, two distinctive periods were found to illustrate the changes in the investigated issues. The first covers the period 2002–2012 and the second the period 2013–2022. We shed light on the timeline first through policy documents and then look at the perspectives that research related to the theme has contributed to the development of multi-professional teamwork.

Policy perspectives 2002–2012: Emphasis on multi-professional teamwork and implementation challenges

During the first period, day care services were administered by the Ministry of Social Welfare and Health. The Act on Children's Day Care (36/1973), 1973, obligated municipalities to provide children's day care services to all who needed them. The legislation was revised multiple times. The principle of universalism was strengthened in the 1990s,

and children received a subjective entitlement to day care (Sipilä, 1997). However, a need to revise the national ECEC policy framework was identified at the turn of the century. The policy document "Decision in Principle concerning the National Policy Definition on Early Childhood Education and Care" (Ministry of Social Affairs and Health, 2002) outlined the main principles for developing ECEC services, among them also multiprofessional work. It was considered to be a combination of varying profession-based expertise, and consequently as a resource. In addition, various contexts for teamwork were outlined.

Seamless cooperation between several professional groups is required in early child-hood education and care. This cooperation occurs both in early childhood education and care work units, where workers with different training and education backgrounds work together, and in cooperation with the rest of the child and family service system. Each staff member brings a contribution consistent with his or her discipline, education and expertise to early childhood education work.

The above-mentioned document also guided the drafting of the first Finnish ECEC curricular framework in 2003. Multi-professional work was mentioned rather broadly in this curriculum document (National Research and Development Centre for Welfare and Health, 2003), 2003, leaving it open for various interpretations.

The early childhood education and care staff forms a multi-professional working community whose activity is based on the shared values and principles expressed in the documents of Finnish society.

The Finnish history of staffing structure regulation appears to be significant for later interpretations and policy changes. After the enactment of the Act on Children's Day Care 1973, two qualified teachers and 1 day care assistant were usually employed in the child groups. In the 1980s, day care nurses began working alongside teachers in child groups. This change emphasised the necessity of initial training for all professional groups. However, the next change made it possible for service providers to lower the staff qualifications. Namely, after the 1992 decree amendment, only one third of those in nursing and education positions had to have qualification for the kindergarten teachers (Decree on Children's Day Care, 1973/239 6§, 21.8.1992/806). At the municipal level, this regulation was often implemented in a way that vacant teacher posts were replaced by day care nurse posts. As a result, the overall level of staff qualifications gradually began to decline (see Onnismaa & Kalliala, 2010).

During the first period investigated in this study, the team composition in the ECEC centres was based on two legislative elements. First, it was partly defined by regulating the child–staff ratios. Second, the ratio of various professional groups was regulated as follows: one third of the staff members had to have a kindergarten teacher qualification and the rest a day care nurse qualification¹ (Decree on Children's Day Care 239/1973; Act on Qualification Requirements for Social Welfare Professionals 272/2005, 2005; Decree on Qualification Requirements for Social Welfare Professionals 608/2005).

 $^{^{\}bar{1}}$ We use the professional titles used at the investigated time.

Consequently, the most typical team composition in a group was a combination of three staff members (one kindergarten teacher and 2 day care nurses).

In the second half of the first decade of the twenty-first century, there began to be growing criticism of the level of training and professional structure of the staff. A working group (Ministry of Social Welfare & Health, 2007) suggested that the proportion of professionals with higher education should be increased. In addition, the core competences of each professional group were defined in order to clarify the competence profiles.

Policy perspectives 2013–2022: emphasis on pedagogy and clarification of the professional profiles

The second period investigated is full of policy changes. Compared with the multiple changes during the first period (2002–2012), the changes initiated during the second (2013–2022) were more fundamental and related to the major redefinition of the function of ECEC, its administration, and the required qualifications for working in ECEC institutions. In 2013, oversight of ECEC was switched from the Ministry of Social Affairs and Health to the Ministry of Education and Culture. Since then, ECEC services have been part of the Finnish education system and an important stage in the child's path of growing and learning. Since 2015, attendance of pre-primary education for 6-year-olds has been mandatory (Act on Basic Education Act 628/1998). Current ECEC legislation places an emphasis on the significance of pedagogy (Act on Early Childhood Education and Care 540/2018). Thus, the transition was not only related to the national ECEC administration but also to the understanding about the function of the services, the professional qualification requirements, and the steering of curricula.

Furthermore, the changes were reflected in teamwork. Efforts to clarify the roles and responsibilities of each professional group continued. In addition, the increase in professional competence requirements was identified and noted in national reports (e.g. Karila et al., 2013). In 2017, a roadmap on the development of early childhood education for 2017–2030 (Karila et al., 2017) proposed amendments to the personnel structure of ECEC centres justified by changes in professional competence requirements originating from the ECEC legislation and curriculum steering, as well as from recent research. A new professional title, social pedagogue, was also recommended alongside the teacher title to clarify the roles and responsibilities of those staff members having a higher education qualification. The separation of ECEC teachers and social pedagogues was also based on the understanding that multi-professional knowledge is required in ECEC work. Such knowledge could be best provided in the initial training for each profession if the professional roles were clearly defined.

Reformed legislation (Act on Early Childhood Education and Care 580/2015), 2015 was enacted in 2015 and it contained a provision on the child's right to ECEC and the aims of ECEC. Multi-professional work with other service sectors was defined similarly as in the previous definitions. However, the ECEC stakeholders were expressed more precisely than earlier as the following extract indicates.

When organising early childhood education and care, the municipality shall cooperate with those responsible for education, physical education and culture, child pro-

tection as well as other necessary social welfare, counselling and health care bodies. (Act on Early Childhood Education and Care 580/2015, 2015 section 11e)

The text allocated the responsibility of organising multi-sectoral work to the municipalities but left its specific implementation to be adapted to local needs.

At the ECEC centre level, multi-professional teamwork was framed more in detail and somewhat differently compared with the first period investigated. Namely, the 2015 legislation aimed to raise the staff's level of training. It required two out of three staff members to have a higher education (bachelor) degree. This legislation redefined the titles and qualification requirements of each professional group. The previous regulations (Decree on Children's Day Care 239/1973, 1973; Act on Qualifications Requirement for Social Welfare Professionals 272/2005; Decree on Qualification Requirement for Social Welfare Professionals 608/2005), 2005 had defined the staffing ratio per group as one kindergarten teacher to 2 day care nurses. This ratio was criticised because it did not follow the transformation process of the whole Finnish (ECEC) system: the idea of ECEC—previously referred to as "day care"—as primarily a social service for families with children (Sipilä, 1997) had given way to the idea of ECEC settings being a pedagogical institution and the start of lifelong learning (Lundkvist et al., 2017). The 2015 legislation (Act on Early Childhood Education and Care 2015/580) considered ECEC as a right of the child and emphasised the pedagogical function of the services.

Later, the revised ECEC legislation (Act 540/2018) defines the concept of multi-professional staff as consisting of teachers, child carers, social pedagogues, special education teachers, and directors in ECEC centres. The biggest change compared to previous legislation relates to the titles and qualification requirements of the staff members. The new legislation redefined the qualification requirements. ECEC teachers must have a bachelor's degree from a university. Connected to this change, a new professional title—social pedagogue—was defined. Social pedagogues must have a bachelor's degree from a university of applied sciences. However, all (social pedagogues) who graduated before 2022 from a university of applied sciences retain eligibility for the position of ECEC teacher. This change was an attempt to solve the long-standing situation in which it was possible to acquire qualified teacher status from two different pre-service training institutions. It is noted (Karila et al., 2013, 2017) that the pre-service education at universities and universities of applied sciences differ considerably. In the universities, initial professional education is connected to educational sciences and teacher education, whereas the curriculum at the universities of applied sciences is based on the social sciences and health. The revised legislation aimed to value the educational background of both professionals and clarify the roles.

The Finnish National Agency for Education (2018, 2022) decides on the National Core Curriculum for ECEC (updated 2022), which is based on the Act on Early Childhood Education and Care (540/2018). The recently revised curriculum document also stressed the multi-professional staff composition as a resource. As seen in the following extract, professionals' different competencies gained in initial training are interpreted as being a resource. In addition, the clarity of professional roles and responsibilities is emphasised.

ECEC staff multi professionalism is a resource for quality early childhood education when the initial training contributions and competencies of all staff members are

used, as well as when the responsibilities, tasks and professional roles are suitable for use in an appropriate way. (Finnish National Agency for Education, 2022).

Furthermore, multi-professional teamwork is considered related to each child's individual ECEC plan. The process of planning the child's early childhood education and care includes different phases. The process involves the persons responsible for teaching, upbringing and caring for the child together with the guardian and the child. In this context, responsibilities were defined as follows.

In the ECEC centres, a child's early childhood education and care plan is prepared and evaluated by a person eligible to be an early childhood education teacher. The expertise of a social pedagogue in early childhood education can be utilised, especially with regard to knowledge of the service system for children and families. The special education teacher in early childhood education is involved in assessing the child's need for support, support measures or their implementation as needed. (Finnish National Agency for Education, 2022, 10–11).

The document only referred to the tasks of the responsible professionals and in this context the child carers were excluded. However, the document defined that ECEC teachers, social pedagogues, special education teachers, ECEC child carers and other staff plan and implement the plans together (Finnish National Agency for Education, 2022, 18).

In all, the National Core Curriculum for Early Childhood Education and Care highlighted the multi-professional teamwork but also aimed to concretise the revised legislation regarding the new professional profiles by considering the roles and responsibilities of each professional group.

Efforts have been made to elaborate the special competencies of each professional group in many national level working groups commissioned by the Finnish Ministry of Education and Culture. The latest attempt took place in the context of the Forum for Developing Education and Training Provision and Programmes in Early Childhood Education and Care. It drafted a proposal for a development programme for all levels and forms of education and training in ECEC for the years 2021-2030. It consists of the premises and recommendations for developing all levels and forms of education and training in ECEC. This programme includes a chapter describing both common competencies and differentiated competence profiles broken down into professional groups (Ministry of Education & Culture, 2021). The working group managed to build a shared understanding regarding the common competencies but defining the profession-based special expertise proved to be more difficult. The conflicts were mainly related to the understanding of pedagogy and the very meaning of responsibility and participation in ECEC work. The position and expertise of the new professional title, social pedagogue, appeared to be unclear. The concerns about the increasing inequality in society and the need to tackle it in ECEC services were shared, but the group did not manage to formulate how this could be considered in the professional profiles and the responsibilities based on them.

Even though the team composition was based on the regulation that specifies the child–staff ratio of various professional groups, in daily practice, it was implemented in various ways. Previously, the most typical team composition was a combination of three

staff members (one ECEC teacher and two nurses) who worked in one group of children. In recent years, variations within and between individual municipalities and centres have increased. Recently, a team composition with only two staff members seems to be on the increase. It is also common to organise activities in small groups that consist of one adult and the corresponding number of children based on the ratio determined by the legislation. This means that children's groups are divided into 2–4 sub-groups, depending on the number of adults allocated to the larger group. One sub-group would then, for example, comprise one adult and seven children aged 3–5 years or one adult and four children aged 1–2 years. Children might do indoor and outdoor activities such as sports, role-play, or arts and crafts in these sub-groups, but they share the learning environment and have lunch and nap time together with the other small groups (see Paananen, 2020).

Moreover, a strong intensification trend can be seen in Finnish municipalities. This refers to a process in which services are organised as economically and efficiently as possible. For the ECEC teamwork, this trend has had serious consequences. Namely, the teams are not as stable as before, and staff may be allocated to work for a while in another child group. This system can be understood in the context of a new governance idea in which the child–staff ratio is seen as a technology to govern the responsible use of resources (Paananen, 2020, Paananen and Grieshaber, 2022).

Recent policy initiatives have produced new challenges for multi-professional teamwork. The aim of increasing the participation rate in Finnish ECEC was one of the key ideas of the current and earlier Finnish governments. In 2018, the government launched an experiment on providing free-of-charge ECEC for 5-year-olds for the 2018-2021 period (Government decision 31.8.2017). The purpose was to increase the participation of 5-year-olds and their siblings in ECEC and to promote their guardians' employment. It also aimed to develop the pedagogy and service counselling of ECEC. The long-term goal was to strengthen educational equality. A further initiative—a pilot phase of twoyear pre-primary education for 5- and 6-year-old children—is ongoing (Act on two-year pre-primary education trial 1046/2020, 2020). Both experiments and the Finnish government's decision to lower ECEC fees have increased children's participation in ECEC (0- to 5-year-olds) and pre-primary (6-year-olds) services. Children's increasing participation combined with the long-standing insufficient intake of pedagogically qualified and university educated ECEC teachers (Onnismaa, 2018), increasing staff retirements, and the recent increases in staff exiting the field have caused staff shortages, which are problematic nationwide, but especially so in the capital region.

Research perspectives: multi-professional teamwork as a research focus during the two periods analysed

During the first period (2002–2012) there was little research on multi-professional teamwork. As a general research interest in the 2000s, research began to focus on professional expertise in ECEC (e.g. Kupila, 2007). Professionalism in ECEC was viewed from a perspective that sees it as a cultural, communal, organisational, and individual phenomenon (Karila, 2008). Professionalism was examined as it plays out in the employees' working environment, the day care centre, and its working culture, and from the perspective of the professionals themselves.

The discussion of ECEC teachers' professional expertise continued in the 2010s. Happo et al. (2012) stressed that the work had become more collegial, and that it was necessary to expand a notion of individual expertise into the realm of collaborative and socially shared expertise. In this framework, feedback was seen as one way of breaking down tensions within teams. Team size, atmosphere, and the commitment of the team members were seen as key elements in the practice of giving feedback to team members (Venninen, 2007).

Finnish research began to reflect the challenges faced in the field; for example, Karila and Kupila (2010) noted that during the previous decade, teams in Finland had experienced a shift from clearly defined tasks for different professional roles to an "everyone does everything" work division. In such a situation, the responsibilities of different occupations are not clearly defined, and they vary between ECEC centres. Multiple barriers and power struggles to overcome in working together were identified, as each profession had its own identity, language, and working approach. Onnismaa and Kalliala (2010) underlined that such competition between professionals has had a major impact on shaping Finnish ECEC.

The second period, starting in 2013, was much more active in terms of research. This was partly due to the consolidation and expansion of academic research on ECEC in Finnish universities. During that period, the contextual changes were reflected in studies on teamwork. The studies began to focus on the pedagogical leadership of the ECEC teacher in the team context. ECEC centre leaders were seen to be responsible for pedagogical leadership at the centre level and teachers for the pedagogical leadership among the professionals working in a specific group (Fonsén & Ukkonen-Mikkola, 2019; Heikka, 2014). However, little was known about how ECEC teachers' pedagogical leadership evolves in teams (Halttunen et al., 2019). Despite a growing interest in teachers' pedagogical leadership, the role of ECEC teachers was still unclear (e.g. Heikka et al., 2021). The studies highlighted that the roles of the ECEC teachers and leaders need more clarification as do the organisational structures of leadership in ECEC (e.g. Fonsén et al., 2021). Moreover, looking at power in organisational structures, Fonsén et al. (2021) stressed that it is important to know whose understanding of the ECEC's core function has the right to give meaning to the practices and whose understanding is limited to those outside the scope of action. Power and responsibility need to be in balance.

In the late 2010s, research focused on the main acts of administration, management and leadership as performed by ECEC teachers (e.g. Heikka et al., 2016). Studies showed that teachers act as coordinators, leaders of curriculum work and pedagogical documentation, supporters of professional development of their colleagues, and facilitators in creating pedagogical improvement impacting the whole centre (Heikka et al., 2016, 2022). The findings also highlighted teachers' pedagogical leadership based on agreements about the common vision and values related to the whole centre (Heikka & Suhonen, 2019). The role of the teacher was seen as strong both in the team meetings and during daily activities organising the everyday functions and in guiding the pedagogical functions of the nurses. It was also evident that the teachers' leadership acts take place mainly at the team and individual room level and only in some cases at the centre level. ECEC teachers' pedagogical leadership emerged through leading team members as well as in direct pedagogical interaction with children (Heikka et al., 2022). However,

expertise in team leadership was found to be underdeveloped in the promotion of participative discussions and the professional opportunities available for teachers and child-care nurses during team meetings (Halttunen et al., 2019). In addition, Halttunen et al. (2019) indicated that during weekly team meetings ECEC teacher leadership manifests itself in (1) the promotion of collaboration between team members; (2) the provision of support for team members; (3) the use of expertise in pedagogical planning; and (4) the legitimation of professional practice. Further, the study identified situations where the voices of childcare nurses were neglected when the team planned forthcoming activities.

In the late 2010s, shared or distributed leadership became new concepts defining teacher pedagogical leadership (e.g. Heikka & Suhonen, 2019; Heikka et al., 2018). The focus was on understanding the interdependence of leadership enactments by the ECEC centre leaders and teachers. The implementation of distributed forms of leadership was seen to relate positively to the ECEC teacher's ability to lead reflection and learning in their teams (Heikka et al., 2021). Joint leadership was seen as distributed leadership (Fonsén & Keski-Rauska, 2018), and dialogue and a common understanding about the reality of the organisation were central. The positive joint leadership was found to be built on trust, which empowers the staff. A more critical discourse was connected to the theme of instability and uncertainty. The numerous organisational and staff changes emerged as reasons for dissatisfaction. Teacher leadership was perceived as the responsibility of ECEC pedagogy in a study on the ECEC professionals' (childcare nurses', teachers', and centre leaders') perceptions of teacher leadership (Heikka et al., 2018). Leaders were considered remote from daily practice and leadership for pedagogy within the centres was shared with teachers. Teacher leadership was enacted through assessment, planning, and ensuring that pedagogy related to each centre's goals. The challenges in the teachers' pedagogical work were caused by differing professional values, a lack of discussion, and inoperative organisational structures and practices (Ukkonen-Mikkola & Fonsén, 2018).

Tensions in the structure of multi-professional staff were further examined in a study (Onnismaa et al., 2017) of employees who work as ECE teachers and who had completed a higher education degree (either from a university or a university of applied sciences). The study revealed that both ECE teachers (university degree or applied university degree) identified ambiguities in job descriptions and the division of labour. Both professional groups found it difficult to find time for planning and preparation, but social pedagogues (applied university degree) found it even more problematic. Social pedagogues also rated their work stress as heavier than that of those trained as ECE teachers. According to the researchers, the ratings give a holistic picture of the differences between staff with different educational backgrounds working as ECE teachers. The evolution of the staff structure has also been called the education policy paradox, meaning that many ECEC workers have a social and health education, even though ECEC is part of the education system (Onnismaa et al., 2017).

Still, the studies have indicated ECEC expertise and its change and expanding multidisciplinary dimension as an opportunity to respond to work-related challenges (Ukkonen-Mikkola et al., 2020). The expertise of different professional groups in teams in the new staff structure was identified. The results revealed that ECEC teachers position themselves as overseeing the team's pedagogical activities and holding responsibility

for promoting the children's learning. The position of those with a bachelor's degree in social services was constructed through the shared responsibility of the team's activities and their expertise focused on the overall well-being and interests of the children. Childcarers in ECEC positioned themselves mainly through their participation as team members in the team, with childcare and the support of children being their expertise.

Further, research has emphasised novice teachers' need for support in the induction phase (Kupila & Karila, 2018). Therefore, mentoring opportunities have started to be built into organisational structures. A recent area of examination is the role of the leader as a supporter of teamwork (e.g. Heikka & Suhonen, 2019). Leaders should also enable teachers' training to guide team processes. In addition, the link between teamwork and employees' well-being has been examined by Nislin (2016; Nislin et al., 2015a, 2015b), who highlighted the importance of teamwork also in supporting the well-being of professionals. A study by Melasalmi and Husu (2017) found that in teamwork the shared professional identities of teachers are developed and negotiated through commitment, feedback, educational tasks, and professional agency.

New topics have appeared in recent years. Furu and Valkonen (2021) have investigated how common development work enhances collegial learning and collaborative practices among teams. The culture of participation in ECEC centres requires a shared understanding of the image of the child, professional development, leadership, and a shared "we narrative" that enables the comprehensive promotion and maintenance of a culture of participation (Weckström et al., 2021).

Articles in the late 2010s and beginning of the 2020s emphasised the complex and constantly evolving challenges of working life requiring individuals, groups, and work communities to cooperate inter-professionally across sectors and institutional boundaries (see Edwards, 2017). One of the topics is the pre-primary to primary school transition, which is seen as a context in which culturally and historically constructed institutional boundaries form an arena for professional learning (Rantavuori et al., 2017). In that context, relational expertise has been highlighted (Rantavuori, 2019) in inter-professional work to achieve a common understanding of each professional's roles, responsibilities, and knowledge as well as their contribution to the.

the transition processes.

Discussion and conclusions

This article focuses on Finnish interpretations of multi-professional teamwork. During the last two decades, multi-professional teamwork has been a significant marker of Finnish ECEC professionalism. Typically, the Finnish policy documents have emphasised multi-professionalism and interpreted the multi-professional team from a perspective that considers team heterogeneity as a resource to guarantee high quality ECEC provision. However, continuing conflicts are visible. While the policy documents present multi-professionalism as a resource, there is a struggle on the ground for the importance of various profession-based competencies and their mutual precedence. This professional struggle has been accelerated in recent years.

An aspiration to solve the recognised challenges emerging from research regarding multi-professional teamwork can be traced in the contents of policy documents. During the first period (2002–2012) investigated in this study, the policy documents referred to

multi-professional teamwork somewhat superficially. Later (2013–2022), more explicit definitions of responsibilities and obligations of professional groups appeared in the policy documents. These definitions focused mainly on the role of the ECEC teachers as pedagogical leaders of ECEC teams. A similar level of attention has not yet been paid to the roles and responsibilities of the new professional category, social pedagogues, and the ECEC nurses. However, the aim to appreciate the educational background and competencies of all professionals is clearly expressed in the latest policy documents (Act on Early Childhood Education and Care 540/2018, National Core Curriculum for ECEC 2022).

Teamwork is always implemented in a certain context. National-level legislation gives a frame for teamwork by regulating the function of ECEC services, qualification requirements, staff—child ratios, and the relative proportion of different professional groups in the total ECEC staff. In addition, the national curriculum guides teamwork by instructing the principles of the ECEC activities and the responsibilities of the professionals in implementing the curriculum. However, the daily implementation of teamwork takes place at the municipal level, in the public and private ECEC units which are framed by the local ECEC policies. For example, Finnish ECEC team composition has varied following both the prevailing ECEC policies regarding the professionals' qualification requirements and the trends related to the child group formation.

Finnish ECEC and the pre-primary systems have been undergoing a huge transformation process. The policy reforms have involved significant human resources at both the national and the local level. In addition, the challenges of intensification in the work of teams have been noted (Paananen, 2020; Paananen & Grieshaber, 2022). These notions are relevant to the actions and opportunities available to multidisciplinary teams. Efforts to enhance early childhood education work are essential to how teams work. Along with the shortage of qualified personnel, they produce situations where teams do not have sufficient material and mental capital to develop teamwork in the evolving circumstances. Consequently, efforts to intensify ECEC work can be disastrous in the long run.

Our findings based on the literature review indicate that the interests and research questions of the analysed studies have changed following the actual challenges at the policy and practice levels. In addition, academic research has provided new perspectives to look at the challenges. Multi-professional teamwork has been studied from the perspective of shared and profession-related core competencies, the way these competencies are led, and the manner in which they are brought into the teamwork. Research has also focused on issues such as professional struggles, professional spaces, and relational expertise. During the first period (2002–2012) investigated, the studies focused on the challenges faced in teamwork implementation. Later (2013–2022), they began to concentrate on team leadership as presented in the results section. Most of the studies investigated the roles and responsibilities of the ECEC teachers and only a few focused on social pedagogues and ECEC nurses.

On the one hand, Finnish interpretations of multi-professional teamwork emphasise it as a key principle and aim of ECEC work. On the other hand, teamwork discussion is recognised to include conflicts that need to be solved, mainly by clarifying the roles and responsibilities of each professional group. The emerging findings reflected a strong belief in the significance of initial professional education to build the required

competencies. This is evident in the constant aim to define competencies based on a specific educational background. During the 2021–2023, a national evaluation of the entire ECEC pre-service training and education system is under way (https://karvi.fi/en/vocational-education/thematic-system-evaluations/evaluation-of-education-in-the-ecec-sector/). This evaluation will give updated information about the current situation in each training sector and the study programmes for various ECEC professionals.

Unfortunately, the narrative timeline indicates that the same conflicts and challenges arise time and time again. This creates confusion regarding the possibilities of meeting the current and future challenges in ECEC work. It also raises questions on how well the multi-professional teams can meet the needs of the children and their families. Obviously, the discussion should move forward in building a shared understanding about the responsibilities and the division of labour of different professional groups. In this issue, all professional groups were considered side by side, though more attention should be directed to clarifying the role and responsibilities of social pedagogues and ECEC nurses. Additionally, more development projects and studies are required to construct multi-professional team practices that allow all team members to use their competencies and qualifications for the best possible benefit of the children attending ECEC. For now, little attention has been paid to the role of continuing professional learning although its significance has been identified (see Peleman et al., 2018). Maybe increasing such attention could assist in reducing professional conflict. Finally, much more attention needs to be directed to municipal-level practices that build the working conditions for the ECEC teams.

Appendix 1Analysed policy documents and working group papers

Publication year	Commissioned by	Title of the document
2002	Ministry of Social Affairs and Health	Decision in Principle of the Council of State Concerning the National Policy Definition on Early Childhood Education and Care Publications 2002: 29
2003	National Research and Development Centre for Welfare and Health	National Curriculum Guidelines on Early Childhood Education and Care in Finland
2005	Finnish Parliament	Act on Qualification Requirement for Social Welfare Professionals 272/2005, 2005
2005	Finnish Parliament	Decree on Qualification Requirement for Social Welfare Professionals 608/2005
2007	Ministry of Social Welfare and Health	Education and skills of early childhood education and care staff—the present state and development needs. Report of the sub-committee of the Advisory Board for Early Childhood Education and Care, 2007:7
2013	The Finnish Higher Education Evaluation Council FINHEEC	Education and Training in Early Childhood Education in Finland—Evaluation of the Current Situation and Developmental Needs
2017	Ministry of Education and Culture	Roadmap on the development of early childhood education for 2017–2030. Guidelines for increasing the degree of participation in early childhood education, and for the development of the skills of daycare centre staff, personnel structure, and training
2017	Finnish Government	Government Decision on providing free-of-charge ECEC for 5-year-olds for the 2018–2021 period

Publication year	Commissioned by	Title of the document
2018	Finnish Parliament	Act on Early Childhood Education and Care (540/2018)
2018	Finnish National Agency for Education	National Core Curriculum for Early Childhood Education and Care
2019	Finnish Government	Programme of Prime Minister Sanna Marin's Government: Inclusive and competent Finland – a socially, economically and ecologically sustainable society
2021	Ministry of Education and Culture	Programme for Developing Education and Training Provision and Programmes in Early Childhood Educa- tion and Care 2021–2030
2022	Finnish National Agency for Education	National Core Curriculum for Early Childhood Education and Care
2022	Finnish Parliament	Act on two-year pre-primary trial

Appendix 2

Analysed research articles and dissertations

Articles		
Publication year	Authors	Title
2008	Karila, K	A Finnish viewpoint on professionalism in early childhood education
2010	Onnismaa, EL. & Kalliala, M	Finnish ECEC policy: interpretations, implementations and implications
2012	Happo, I., Määttä, K. & Uusiautti, S	Experts or good educators—or both? The development of early childhood educators' expertise in Finland
2013	Heikka J., Waniganayake M.& Hujala E	Contextualizing Distributed Leadership Within Early Childhood Education: Current Understandings, Research Evidence and Future Challenges
2013	Happo, I., Määttä, K. & Uusiautti, S	How do early childhood education teachers perceive their expertise? A qualitative study of child care providers in Lapland, Finland
2013	Heikka, J. & Hujala, E	Early childhood leadership through the lens of distributed leadership
2014	Kuusisto, A., Kallioniemi, A. & Matilainen, M	Monikulttuurinen työyhteisö suomalaisen varhaiskasvatuksen kentällä. [Multicultural work community in Finnish early childhood education and care.]
2015	Nislin, M., Sajaniemi, N., Suhonen, E., Sims, M., Hotulainen, R., Hyttinen, S. Hirvonen, A	Work Demands and Resources, Stress Regulation and Quality of Pedagogical Work Among Professionals in Finnish Early Child- hood Education Settings
2015	Nislin, M., Sajaniemi, N., Sims, M., Suhonen, E., Maldonado Montero, E., Hirvonen, A. & Hyttinen, S	Pedagogical work, stress regulation and work-related well-being among early child- hood professionals in integrated special day-care groups
2016	Heikka, J., Halttunen, L., & Waniganayake, M	Investigating teacher leadership in ECE centres in Finland
2016	Jokikokko, K. & Karikoski, H	Exploring the narrative of a Finnish early childhood education teacher on her professional intercultural learning
2017	Melasalmi, A. & Husu, J	A narrative examination of early childhood teachers' shared identities in teamwork

Articles			
Publication year	Authors	Title	
2017	Onnismaa, EL., Kalliala, M. & Tahkokallio, L	Koulutuspoliittisen paradoksin jäljillä— Miten varhaiskasvatus muotoutui sosiaali- alan koulutuksia suosivaksi. [On the trail of an education policy paradox—How early childhood education and care took shape in favour of social work education.]	
2017	Onnismaa, EL., Tahkokallio, L., Reunamo, J. & Lipponen, L	Ammatin induktiovaiheessa olevien lastentarhanopettajan tehtävissä toimivien arvioita työnkuvastaan, osaamisestaan ja työn kuormittavuudesta. [Assessments by early career kindergarten teachers of their job description, skills and workload.]	
2017	Rantavuori, L., Kupila, P. & Karila, K	Relational expertise in preschool-school transition	
2018	Fonsén, E. & Keski-Rauska, ML	Varhaiskasvatuksen yhteinen johtajuus vastakohtaisten diskurssien valossa. [The joint leadership of early childhood education in the light of contrasting discourses]	
2018	Heikka, J., Halttunen, L., & Waniganayake, M	Perceptions of early childhood education professionals on teacher leadership in Finland	
2018	Kupila, P. & Karila, K	Peer mentoring as a support for beginning preschool teachers	
2018	Ukkonen-Mikkola, T. & Fonsén, E	Researching Finnish early childhood teachers' pedagogical work using Layder's research map	
2019	Fonsén, E., & Ukkonen-Mikkola, T	Early childhood education teachers' professional development towards pedagogical leadership	
2019	Halttunen, L., Waniganayake, M. & Heikka, L	Teacher leadership repertoires in the context of early childhood education team meetings in Finland	
2019	Heikka, J. & Suhonen, K	Distributed pedagogical leadership functions in Early Childhood Education settings in Finland	
2019	Melasalmi, A. & Husu, J	Shared professional agency in Early Childhood Education: An in-depth study of three teams	
2019	Rantavuori, L., Karila, K. & Kupila, P	Transition practices as an arena for the development of relational expertise	
2020	Fonsén, E., & Soukainen, U	Sustainable pedagogical leadership in Finnish early childhood education (ECE): An evaluation by ECE professionals	
2020	Ukkonen-Mikkola, T., Yliniemi, R. & Wallin, O	Varhaiskasvatuksen työ muuttuu—muuttuuko asiantuntijuus? [The work of early childhood education is changing—is expertise changing?]	
2021	Fonsén, E., Varpanen, J., Kupila, P. & Liinamaa, T	Johtajuuden diskurssit varhaiskasvatuk- sessa—valta ja vastuu johtajuuden jäsentäjinä. [Leadership discourses in early childhood education as constituents of leadership]	
2021	Furu, AC. & Valkonen, S	Gearing up for sustainability education in Finnish early childhood education and care (ECEC): Exploring practices and pedago- gies by means of collegial reflection and discussion	
2021	Heikka, J., Pitkäniemi, H., Kettukangas, T. & Hyttinen, T	Distributed pedagogical leadership and teacher leadership in early childhood education contexts	

Articles			
Publication year	Authors	Title	
2021	Kuutti, T., Kahila, S. & Sajaniemi, T	Pedagogiikkaa poikkeus aikana—päiväkotien varhaiskasvatushenkilöstön kokemuksia pedagogiikan toteuttamisesta COVID-19-pandemian aikana. [Pedagogy in times of exception—the experiences of early childhood education staff in kindergartens in implementing pedagogy during the COVID-19 pandemic.]	
2021	Weckström, E., Karlsson, L., Pöllänen, S., & Lastikka, AL	Creating a culture of participation: Early childhood education and care educators in the face of change	
2022	Fonsén, E., Szecsi, T., Kupila, P., Liinamaa, T., Halpern, C. & Repo, M	Teachers' pedagogical leadership in early childhood education	
2022	Heikka, J., Kahila, S. & Suhonen, K	Shadowing teachers as pedagogical leaders in early childhood education settings in Finland	
2022	Ranta, S. & Uusiautti, S	Toimiva tiimityö onnistuneen varhaiskas- vatuksen perustana. [Effective teamwork for successful early childhood education and care.]	
2022	Ranta, S., Harju-Luukkainen, H., Kahila, S., & Korkeaniemi, E	"At worst it leads to madness." A phenom- enographic approach on how early child- hood education professionals experience emotions in teamwork	
Doctoral dissertations			
2006	Happo, I	Varhaiskasvatuksen asiantuntijuus. [Expertise in early childhood education and care.]	
2007	Kupila, P	"Minäkö asiantuntija?" Varhaiskasvatuksen asiantuntijan merkitysperspektiivin ja identiteetin rakentuminen. [" Me, an expert? Constructing the meaning perspective and identity of an expert in the field of early childhood education]	
2007	Venninen, T	"Olen enemmän alkanut pohtimaan ja sanomaan ääneen mitä ajattelen": ammatillinen kehittyminen ja yhteisöllinen palaute päiväkodin työtiimeissä. ["I have more often thought over what I am thinking and also I have often told it to others": professional development and collegial feedback on kindergarten teams.]	
2009	Halttunen, L	Päivähoitotyö ja johtajuus hajautetussa organisaatiossa [Day Care work and leader- ship in a distributed organization]	
2014	Heikka, J	Distributed Pedagogical Leadership in Early Childhood Education	
2016	Nislin, Mari	Nerve-wracking or rewarding?: A multidisci- plinary approach to investigating work- related well-being, stress regulation and quality of pedagogical work among early childhood professionals	
2018	Melasalmi, A	Early childhood educators' professional learning through shared practices	
2019	Rantavuori L	Kohti relationaalista asiantuntijuutta joustavassa esi- ja alkuopetuksessa. [Towards relational expertise in flexible pre-primary and primary education.]	

AcknowledgementsMatthew James (Tampere University) has language edited the manuscript.

Author contributions

PK prepared the literature review analysis and KK the policy document analysis. The final analysis and the manuscript writing was done by both authors together.

Funding

No funding has been received.

Availability of data and materials

All data generated or analysed during this study are included in this published article.

Declarations

Competing interests

The authors declare that they have no competing interests.

Received: 5 December 2022 Accepted: 30 October 2023

Published online: 08 December 2023

References

Act on children's day care 36/1973. https://www.finlex.fi/fi/laki/alkup/1973/19730036. Accessed 14 June 2023. Act on basic education 628/1998. https://www.finlex.fi/fi/laki/ajantasa/1998/19980628. Accessed 14 June 2023.

Act on qualification requirement for social welfare professionals 272/2005. https://www.finlex.fi/fi/laki/alkup/2005/20050 272. Accessed 14 June 2023.

Act on early childhood education and care 580/2015. https://www.finlex.fi/fi/laki/alkup/2015/20150580. Accessed 14 June 2023.

Act on early childhood education and care 540/2018. https://www.finlex.fi/fi/laki/alkup/2018/20180540. Accessed 14 June 2023.

Act on two-year pre-primary education trial 1046/2020 (2020). https://www.finlex.fi/fi/laki/alkup/2020/20201046

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. https://doi.org/10.3316/ORI0902027

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Decree on children's day care 239/1973. https://www.finlex.fi/fi/laki/alkup/1973/19730239. Accessed 14 June 2023. Decree on qualification requirement for social welfare professionals 608/2005. https://www.finlex.fi/fi/laki/alkup/2005/20050608.

Edwards, A. (2017). Working relationally in and across practices: cultural-historical approaches to collaboration. Cambridge University Press.

Finnish National Agency for Education (2018). National Core Curriculum for Early Childhood Education and Care
Finnish National Agency for Education (2022). National Core Curriculum for Early Childhood Education and Care. https://www.oph.fi/sites/default/files/documents/Varhaiskasvatussuunnitelman_perusteet_2022_1.pdf. (in Finnish)
Accessed 14 June 2023.

Fonsén, E., & Keski-Rauska, M.-L. (2018). Varhaiskasvatuksen yhteinen johtajuus vastakohtaisten diskurssien valossa. The joint leadership of early childhood education in the light of contrasting discourses. *Työelämän Tutkimus, 16*(3), 185–200

Fonsén, E., & Ukkonen-Mikkola, T. (2019). Early childhood education teachers' professional development towards pedagogical leadership. *Educational Researcher*, *61*(2), 181–196. https://doi.org/10.1080/00131881.2019.1600377

Fonsén, E., Varpanen, J., Kupila, P., & Liinamaa, T. (2021). Johtajuuden diskurssit varhaiskasvatuksessa—valta ja vastuu johtajuuden jäsentäjinä Leadership discourses in early childhood education as constituents of leadership. Sosiologia, 58(1), 54–69.

Furu, A.-C., & Valkonen, S. (2021). Gearing up for sustainability education in Finnish early childhood education and care (ECEC): exploring practices and pedagogies by means of collegial reflection and discussion. *International Journal Early Childhood Environmental Education*, 8(2), 30–42.

Halttunen, L., Waniganayake, M., & Heikka, L. (2019). Teacher leadership repertoires in the context of early childhood education team meetings in Finland. *Journal of Early Childhood Education Research*, 8(1), 143–161.

Happo, I., Määttä, K., & Uusiautti, S. (2012). How do early childhood education teachers perceive their expertise? A qualitative study of child care providers in Lapland, Finland. Early Childhood Education Journal, 41, 273–281. https://doi.org/10.1007/s10643-012-0551-8

Heikka, J. (2014). Distributed Pedagogical Leadership in Early Childhood Education. Doctoral dissertation. University of Tampere

Heikka, J., Halttunen, L., & Waniganayake, M. (2016). Investigating teacher leadership in ECE centres in Finland. *Journal of Early Childhood Education Research*, *5*(2), 289–309.

Heikka, J., Halttunen, L., & Waniganayake, M. (2018). Perceptions of early childhood education professionals on teacher leadership in Finland. *Early Child Development and Care, 188*(2), 143–156. https://doi.org/10.1080/03004430.2016. 1207066

Heikka, J., Kahila, S., & Suhonen, K. (2022). Shadowing teachers as pedagogical leaders in early childhood education settings in Finland. *Journal of Early Childhood Education Research*, 11(2), 151–173.

- Heikka, J., Pitkäniemi, H., Kettukangas, T., & Hyttinen, T. (2021). Distributed pedagogical leadership and teacher leadership in early childhood education contexts. *International Journal of Leadership in Education*, 24(3), 333–348. https://doi.org/10.1080/13603124.2019.1623923
- Heikka, J., & Suhonen, K. (2019). Distributed pedagogical leadership functions in early childhood education settings in Finland. Southeast Asia Early Childhood Journal. https://doi.org/10.37134/saej.vol8.no2.4.2019
- Karila, K., & Kupila, P. (2010). Varhaiskasvatuksen työidentiteettien muotoutuminen eri ammattilaissukupolvien ja ammattiryhmien kohtaamisissa. [Professional identities and professional generations in early childhood education]. Tampereen yliopisto. University of Tampere. Opettajankoulutuslaitos. Varhaiskasvatuksen yksikkö
- Karila, K., Harju-Luukkainen, H., Juntunen, A., Kainulainen, S., Kaulio-Kuikka, K., Mattila, V., Rantala, K., Ropponen, M., Rouhiainen-Valo, T., Sirén-Aura, M., Goman, J., Mustonen, K. and Smeds-Nylund, A.-S. (2013). *Varhaiskasvatuksen koulutus Suomessa—arviointi koulutuksen tilasta ja kehittämistarpeista [Education and Training in Early Childhood Education in Finland—Evaluation of the Current Situation and Developmental Needs.*] The Finnish Higher Education Evaluation Council FINHEEC. Accessed 14 June 2023.
- Karila, K. Kosonen, T. & Järvenkallas, S. (2017). Roadmap on the development of early childhood education for 2017–2030. Guidelines for increasing the degree of participation in early childhood education, and for the development of the skills of day care centre staff, personnel structure, and training. Publications of the Ministry of Education and Culture, Finland 2017. p. 30. https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/80221/okm30.pdf. Accessed 14 June 2023
- Karila, K. (2008). A Finnish viewpoint on professionalism in early childhood education. *European Early Childhood Education Research Journal*. https://doi.org/10.1080/13502930802141634
- Karila, K. (2012). A nordic perspective on early childhood education and care policy. *European Journal of Education*, 47(4), 584–595. https://doi.org/10.2307/23357036
- Kupila, P. (2007). "Minäkö asiantuntija?" Varhaiskasvatuksen asiantuntijan merkitysperspektiivin ja identiteetin rakentuminen. ["Me, an expert?" Constructing the meaning perspective and identity of an expert in the field of early childhood education]. Doctoral dissertation. University of Jyväskylä
- Kupila, P., & Karila, K. (2018). Peer mentoring as a support for beginning preschool teachers. *Professional Development in Education*, 45(2), 205–216. https://doi.org/10.1080/19415257.2018.1427130
- Lundkvist, M., Nyby, J., Autto, J., & Nygård, M. (2017). From universalism to selectivity? The background, discourses and ideas of recent early childhood education and care reforms in Finland. *Early Child Development and Care, 187*(10), 1543–1556. https://doi.org/10.1080/03004430.2017.1295041
- Melasalmi, A., & Husu, J. (2017). A narrative examination of early childhood teachers' shared identities in teamwork. *Journal of Early Childhood Teacher Education*, 39(2), 90–113. https://doi.org/10.1080/10901027.2017.1389786
- Ministry of Social Affairs and Health (2002). Decision in Principle of the Council of State Concerning the National Policy Definition on Early Childhood Education and Care. Publications 2002. p. 29 (Helsinki, Ministry of Social Affairs and Health). http://urn.fi/URN:NBN:fi-fe201309236237. Accessed 14 June 2023.
- Ministry of Education and Culture (2021) Programme for Developing Education and Training Provision and Programmes in Early Childhood Education and Care 2021–2030. Publications of the Ministry of Education and Culture, Finland 2021. p. 3. https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162662/OKM_2021_3.pdf?sequence=1&isAll owed=y. Accessed 14 June 2023.
- Ministry of Social Welfare and Health (2007). Education and skills of early childhood education and care staff—the present state and development needs. Report of the sub-committee of the Advisory Board for Early Childhood Education and Care, 2007. p. 7. (Helsinki: Ministry of Social Welfare and Health.)
- Murray, C. D., & Sixsmith, J. (2002). Qualitative health research via the internet: practical and methodological issues. *Health Informatics Journal*, 8, 47–52. https://doi.org/10.1177/146045820200800109
- National Research and Development Centre for Welfare and Health (2003). National Curriculum Guidelines on Early Childhood Education and Care in Finland. STAKES: Oppaita 56
- Nislin, M. (2016). Nerve-wracking or rewarding? A multidisciplinary approach to investigating work-related well-being, stress regulation and quality of pedagogical work among early childhood professionals. Doctoral dissertation. University of Helsinki
- Nislin, M., Sajaniemi, N., Sims, M., Suhonen, E., Maldonado Montero, E., Hirvonen, A., & Hyttinen, S. (2015b). Pedagogical work, stress regulation and work related well-being among early childhood professionals in integrated special day-care groups. *European Journal of Special Needs Education*, 31(1), 27–43. https://doi.org/10.1080/08856257.2015.
- Nislin, M., Sajaniemi, N., Suhonen, E., Sims, M., Hotulainen, R., Hyttinen, S., & Hirvonen, A. (2015a). Work demands and resources, stress regulation and quality of pedagogical work among professionals in Finnish Early childhood education settings. *Journal of Early Childhood Education Research*, 4(1), 42–66.
- Oberhuemer, P. & I. Schreyer (2018). Early Childhood Workforce Profiles in 30 Countries with Key Contextual Data. Munich: Staatsinstitut für Frühpädagogik. http://www.seepro.eu/ISBN-publication.pdf.
- OECD. (2019). Providing quality early childhood education and care. Results from the starting strong survey 2018. OECD Publishing.
- Onnismaa, E.-L. (2018). "Finland—ECEC Workforce Profile." In: P. Oberhuemer & I. Schreyer (Eds.), Early Childhood Workforce Profiles in 30 Countries with Key Contextual Data, pp. 332–356. Munich. http://www.seepro.eu/ISBN-publication.pdf.
- Onnismaa, E.-L., & Kalliala, M. (2010). Finnish ECEC policy: interpretations, implementations and implications. *Early Years*, 30(3), 267–277. https://doi.org/10.1080/09575146.2010.511604
- Onnismaa, E.-L., Tahkokallio, L., Reunamo, J., & Lipponen, L. (2017). Ammatin induktiovaiheessa olevien lastentarhanopettajan tehtävissä toimivien arvioita työnkuvastaan, osaamisestaan ja työn kuormittavuudesta. *Journal of Early Childhood Education Research*, 6(2), 188–206.
- Paananen, M. (2020). Fluctuating child-staff ratio: governing by numbers in Finnish early childhood education. *International Studies in Sociology Education*, 29(1–2), 158–176. https://doi.org/10.1080/09620214.2019.1692688
- Paananen, M., & Grieshaber, S. (2022). Policies of interlude and interruption: stories of governance as an assemblage. Journal of Educational Policy. https://doi.org/10.1080/02680939.2021.2021296

- Peleman, B., Lazzari, A., Budginaite, I., Siarova, H., Hauari, H., Peeters, J., & Cameron, C. (2018). Countinuous professional development and ECEC quality: findings from a European systematic literature review. *European Journal of Education*, 53(1), 9–22. https://doi.org/10.1111/ejed.12257
- Rantavuori, L., Kupila, P., & Karila, K. (2017). Relational expertise in preschool- school transition. *Journal of Early Childhood Education Research*, 6(2), 230–248.
- Rantavuori, L., Karila, K., & Kupila, P. (2019). Transition practices as an arena for the development of relational expertise. *Teacher Development*, 23(2), 249–263. https://doi.org/10.1080/13664530.2018.1558106
- Ruutiainen, V. (2022). Marketization and privatization of early childhood education and care in Finland: Shifts within and from Universalism. Jyväskylä: University of Jyväskylä. https://jyx.jyu.fi/handle/123456789/82426
- Salas, E., Burke, C. S., & Cannon-Bowers, J. A. (2003). Teamwork: emerging principles. *International Journal of Management Reviews*, 2(4), 339–356. https://doi.org/10.1111/1468-2370.00046
- Sipilä, J. (1997). Introduction. In J. Sipilä (Ed.), Social care services: the key to the Scandinavian welfare model. London: Routledge. https://doi.org/10.4324/9780429437519
- Snyder, H. (2019). Literature review as a research methodology: an overview and guidelines. *Journal of Business Research*, 104, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039
- Ukkonen-Mikkola, T., & Fonsén, E. (2018). Researching Finnish early childhood teachers' pedagogical work using Layder's research map. *Australas Journal of Early Childhood, 43*(4), 48–56. https://doi.org/10.23965/AJEC.43.4.06
- Ukkonen-Mikkola, T., Yliniemi, R., & Wallin, Ö. (2020). Varhaiskasvatuksen työ muuttuu—muuttuuko asiantuntijuus? Tvöelämän Tutkimus 18(4) 323–339
- Venninen, T. (2007). "Olen enemmän alkanut pohtimaan ja sanomaan ääneen mitä ajattelen": ammatillinen kehittyminen ja yhteisöllinen palaute päiväkodin työtiimeissä. "I have more often thought over what I am thinking and also I have often told it to others": professional development and collegial feedback on kindergarten teams. Doctoral dissertation. University of Helsinki. http://urn.fi/URN:ISBN:978-952-10-3848-8
- Weckström, E., Karlsson, L., Pöllänen, S., & Lastikka, A.-L. (2021). Creating a culture of participation: early childhood education and care educators in the face of change. *Children and Society, 35*(4), 503–518. https://doi.org/10.1111/chso.
- Wong, C.A., Cummings, G.G., & Ducharme, L. (2013) The relationship between nursing leadership and patient outcomes: a systematic review update. *Journal of Nursing Management*. 21(5), 709–724. https://doi.org/10.1111/jonm.12116. PMID:23865924

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Submit your manuscript to a SpringerOpen journal and benefit from:

- ► Convenient online submission
- ► Rigorous peer review
- ▶ Open access: articles freely available online
- ► High visibility within the field
- ► Retaining the copyright to your article

Submit your next manuscript at ▶ springeropen.com