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Author(s): Roponen, Hannele; Fonsén, Elina; Ukkonen-Mikkola, Tuulikki; Ahtiainen, Raisa

Title: Leading early childhood education centers as professional bureaucracies : social organizational structures in Finnish early childhood education

Year: 2024

Version: Published version

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Please cite the original version:

Roponen, H., Fonsén, E., Ukkonen-Mikkola, T., & Ahtiainen, R. (2024). Leading early childhood education centers as professional bureaucracies: social organizational structures in Finnish early childhood education. International Journal of Educational Management, 38(1), 286-301. https://doi.org/10.1108/ijem-06-2023-0287

Leading early childhood education centers as professional bureaucracies – social organizational structures in Finnish early childhood education

Social organizational

Received 15 June 2023 Revised 1 September 2023 Accepted 20 September 2023

Hannele Roponen

Department of Educational Sciences, University of Jyväskylä, Jyväskylä, Finland Elina Fonsén

Institute of Educational Leadership, University of Jyväskylä, Jyväskylä, Finland Tuulikki Ukkonen-Wikkola

Department of Education, University of Jyväskylä, Jyväskylä, Finland, and Raisa Ahtiainen

Faculty of Educational Sciences, University of Helsinki, Helsinki, Finland

Abstract

Purpose – This study examines the social organizational structure of one early childhood education (ECE) center in Finland and the relationship between this structure and the roles and the responsibilities of the members of the organization.

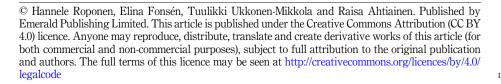
Design/methodology/approach – The research is a qualitative case study with ethnographic features. Its variables for content analysis are based on Henry Mintzberg's theory of organizational design.

Findings – The study's results show that the organizational structure of the ECE center follows the organizational configuration of a Professional bureaucracy and that the multiprofessional teams follow the configuration of a Simple structure. The structures for centralization and decentralization are suitable for a professional bureaucracy, but the roles of the members of the organization and the processes for shared decision-making lack clarification. The shortage of qualified ECE teachers disrupts the function of the organization and the work of ECE leaders.

Research limitations/implications – The educational background of subjects may have affected the findings.

Originality/value — The study uses Henry Mintzberg's organizational structure theory to evaluate how and why power is distributed and activities are coordinated at the ECE center. The results also show what parts of the organization pose challenges that most commonly disrupt the organization's operations. With these findings, it is possible to expand the understanding of roles and responsibilities in the currently reforming ECE environment and what ECE centers need to function effectively. The study is part of a larger research project and will be continued to examine the leadership culture of the ECE center.

Keywords Organizational structure, Early childhood education, Distributed leadership **Paper type** Research paper





International Journal of Educational Management Emerald Publishing Limited 0951-354X DOI 10.1108/IJEM-06-2023-0287

Introduction

One of the key factors determining the success of organizations is an accurately selected, properly implemented and effectively managed organizational structure (Galbraith, 2014). Early childhood education (ECE) in the past years has undergone reforms globally and nationally, which has led to challenges to the functioning of ECE organizations (Kristiansen *et al.*, 2021; Siippainen *et al.*, 2021; Eskelinen and Hjelt, 2017; Ho *et al.*, 2016). In addition, distributed leadership structures have risen to a position alongside that of traditional management structures (Keski-Rauska *et al.*, 2016; Harris, 2012; Kocolowski, 2010). Thus, the organizational structures in ECE need clarification (Fonsén *et al.*, 2022).

The growing shortage of staff is currently creating challenges in ECE. Kristiansen *et al.* (2021) found that staff shortages are one of the major stressors for ECE leaders. In Finland, there is a significant shortage of especially ECE teachers (Ministry of Economic Affairs and Employment, 2022). The reasons for the change of the career plans of ECE teachers in Finland are specifically the ambiguity of the roles and job descriptions in the multiprofessional teams (Kangas *et al.*, 2022). As a result, as Lunenburg and Ornstein (2012) pointed out, the structure of the organization affects the roles and work tasks of the members of the organization. In fact, organizational structure has been found to have a direct positive effect on teacher performance when the division of tasks from top management is clear and structured (Fitria *et al.*, 2017).

ECE in Finland refers to a systematic and goal-oriented entity consisting of upbringing, education and care, with a special emphasis on pedagogy. The qualification requirements for ECE leaders and teachers were updated in 2018. By 2030, after a transition period, every ECE leader must have a master's degree and ECE teachers a bachelor's degree from an ECE teacher program (Act 540/2018, 2018). Although the Act on Early Childhood Education and Care (540/2018) does not require leadership training for ECE leaders, there seems to be a need for it (Fonsén *et al.*, 2022; Fonsén and Vlasov, 2017). The aim of this study is to describe the organizational structure of the ECE center to properly implement it.

This study examines the organizational structures of an ECE center based on the following research question: What is the social organizational structure of the ECE center and the relationship between this structure and the roles and the responsibilities of the members of the organization?

Leadership in ECE

Leadership in the field of ECE is a multifaceted task, and it has been defined in a number of ways. Hjertager Lund (2021) has described it in relation to democratic values and emphasized distributed leadership and participatory work, yet at the same time, this view includes hierarchical leadership structures. Kivunja (2015) noted how leaders must have a vision and create and lead pedagogy. That resonates with Fonsen *et al.*'s (2019) view extending leadership to cover ECE teachers and the leader's task to support their pedagogical leadership (Fonsén *et al.*, 2019).

ECE teachers in Finland work in multiprofessional teams that include ECE nurses and sometimes ECE assistants and special education teachers. Although the changes made to personnel structure in 2018 require a bachelor's degree from an ECE teacher program (Act 540/2018, 2018), currently other degrees that are not all based on education are also accepted, for example, a university degree in applied science. A university degree in applied sciences, has 24.1% pedagogical studies in ECE, while a degree from an ECE teacher program has 72.2% (Hujala *et al.*, 2003; see also Karila *et al.*, 2013).

ECE teachers are responsible for leading the team to achieve the pedagogical goals. The leadership of ECE teachers can be viewed as having four dimensions:

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(1) the promotion of collaboration among 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 (Halttunen *et al.*, 2019). Consequently, the ECE teachers' job description covers both pedagogical and leadership skills (Heikka *et al.*, 2021; Fonsén *et al.*, 2019). Teacher leadership is a multidimensional and contextual phenomenon based on collaboration and distributed leadership (Kahila *et al.*, 2020). ECE leaders and teachers share pedagogical responsibilities, and it requires distributed leadership processes in the organization, although, teachers do not seem to identify their own leadership (Heikka *et al.*, 2021).

The structural changes in Finnish ECE include not only changes related to the personnel structure, but also changes related to management structures (Fonsén and Keski-Rauska, 2018). ECE leaders are leading units formed of two or more centers, and the number of employees has increased (Eskelinen and Hielt, 2017). Similar changes have been noticed elsewhere, and the growing number of staff has been seen to increase challenges (Ho et al., 2016). Consequently, ECE teachers' ability to participate in decisionmaking and receive support from the ECE leader seem to have decreased (Ho et al., 2016). According to Keski-Rauska et al.'s (2016) research concerning distributed leadership model in Finnish ECE, the teachers felt that the number of staff for the two leaders in a decentralized unit reduced the time available to interact with ECE teachers. Although ECE teachers were not completely satisfied with distributed leadership, the ECE leaders were (see also Kocolowski, 2010). Thus, there should be discussions within the organization about the content, tasks and expectations of leadership. Teachers' expectations about leadership can be rather traditional, which is not a functional starting point when leadership is, for example, distributed between two leaders (Keski-Rauska et al., 2016). Also, it is essential that leadership structures and roles are discussed at all levels of the organization to achieve a mutual understanding (Fonsén and Keski-Rauska, 2018). Decentralized organizations generate the need for reviewing management structures in general and distributed leadership with ECE teachers in particular (Halttunen, 2016). Sufficient enactment of distributed leadership was found to be connected to higher ECE teacher commitment to pedagogical leadership (Heikka et al., 2021) and shared decision-making to be one of the main functions of teacher leadership (Kahila et al., 2020). Leadership and the functionality of the management structures have a significant connection to the quality of ECE (Sippainen et al., 2021), and the way leadership is enacted and shared in an organization will influence its outcomes (Harris, 2012).

Both leaders and teachers in ECE seem to be burdened by the high workload (Kangas et al., 2022; Siippainen et al., 2021; Kristiansen et al., 2021). One in four ECE leaders in Finland has said that their workload is too high and that they desire more in-service training, such as learning how to create functional management structures (Siippainen et al., 2021). Kangas et al. (2022) studied reasons for ECE teachers changing careers in the workplace. The lack of clarity in areas of expertise, diverse roles of the personnel, and the related inaccuracies were strongly highlighted as a challenge to well-being at work. Ukkonen-Mikkola and Fonsén (2018) have also identified the ambiguity of job descriptions in multiprofessional teams. It seems that the emphasis on collaboration overrides the discussion of the value of difference and using individual skills effectively in teams (Hard and Jónsdóttir, 2013).

Organizational structure

Organization theorists are interested in two types of structure: physical and social. Physical structure refers to buildings in which an organization is geographically located,

whereas social structure focuses on the relationships between the roles and responsibilities of the members of the organization (Hatch, 2018). Oliveira (2012) stated that today organizations need to adopt flexible structures to survive, and Harisalo (2021) stated that Mintzberg continues to be one of the most current and important structural theorists. Mintzberg's structural theory has previously been applied in the ECE context (e.g. Van der Werf *et al.*, 2021). While Van der Werf *et al.* focused on differences between 117 ECE organizations in the Netherlands, the strength of our study lies in its ethnographic approach and deeper understanding of the organizational structure of one ECE center.

According to Mintzberg, organizations can be differentiated into three dimensions: the key part of the organization, the prime coordinating mechanism and the type of centralization used (Lunenburg and Ornstein, 2012). The key part of the organizations is the part that plays the major role in determining success or failure. The type of centralization indicates to what extent the decision-making processes are shared with the leaders' subordinates. The organization's activities can be coordinated, for example, through skills or direct supervision (Mintzberg, 1983; Lunenburg, 2012). The three dimensions define the basic parts of a structural configuration of the organization, as shown in Figure 1.

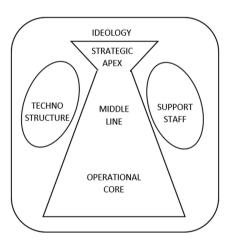


Figure 1.
Basic parts of organization based on Mintzberg (1983)

At the strategic apex are the people who have the overall responsibility of the organization, and at the other end are the members of the operating core, consisting of the operators who conduct the basic work. The middle line consists of both middle- and lower-level managers (Lunenburg and Ornstein, 2012). People working in technostructure may plan the work or train the people in the organization, but they do not do it themselves (Mintzberg, 1983). Support staff focuses on serving the operating core (Lunenburg, 2012). Ideology is a system of norms and values of the organization, and it enhances the organization's performance through staff engagement (Mintzberg, 2009). What Mintzberg described as ideology can be seen as the culture of the organization. An organizational culture (e.g. leadership culture) consists of learned symbols, norms, values and basic assumptions of a particular group of people (Northouse, 2007; Sergiovanni et al., 1984).

Organizational configurations

Mintzberg determined seven different configurations: Simple structure, Machine bureaucracy, Professional bureaucracy, Missionary, Divisionalized form, Adhocracy and Political (Lemieux, 1998).

A Simple structure organization, later named as Entrepreneurial organization, has little or no technostructure, few if any support staffers and almost no hierarchy. Everyone works side by side to get the work done (Hatch, 2018). Coordination is affected by direct supervision (Harisalo, 2021). The strategic apex is the key part of the structure (Mintzberg, 1983). Usually only one person makes strategic decisions. According to Mintzberg (1983), simple structure organizations employ centralization, but Lunenburg and Ornstein (2012) added vertical and horizontal centralization in some cases. Simple structure organizations are characteristic of newly formed small organizations, but they also occur in subunits of larger organizations (Hatch, 2018).

The operating core's tasks are simple and repetitive in *Machine bureaucracies*, requiring a minimum number of skills and little training (Mintzberg, 1983). Work processes are highly standardized (Juuti, 2006), and the analysts of the technostructure who do the standardization are the key part of the organization (Lunenburg and Ornstein, 2012). Oliveira (2012) noted that the informal power the technostructure holds is in practice but not in hierarchy. Therefore, machine bureaucracy is centralized in the vertical dimension (Mintzberg, 1983).

Professional bureaucracies exist in complex environments, and they rely on the skills and knowledge of the operating professionals to function (Mintzberg, 1983). Thus, the key part of the organization is the operating core. The professionals go through an extended period of training which can last several years (Juuti, 2006). Therefore, the coordination mechanism is the skill that comes from the training (Oliveira, 2012). There is little need for technostructure or the middle line because the professionals handle the planning of the work (Mintzberg, 1983). Decision-making processes are shared between the middle line and the professionals, so professional bureaucracies are horizontally and vertically decentralized (Lunenburg and Ornstein, 2012). The support staff maintains a significant role in the organization by serving the operating core (Oliveira, 2012).

In *Missionary organizations* every member of the organization can be trusted to pursue its main goals and strategies leading to an extensive decentralization to the level of the single individual (Mintzberg, 1983). Key part of the organization is ideology, which is shared between the members of the organization, thus making standardization of norms the main coordinating mechanism (Lemieux, 1998).

The *Divisionalized form* relies on the middle line. The top managers delegate their power to division managers, but some level of power remains at the strategic apex (Mintzberg, 1983). Each division has its own structure, and the top managers allow the divisions to have almost full autonomy to make their own decisions and to monitor the results of these decisions (Harisalo, 2021). That is why the prime coordinating mechanism is the standardization of outputs that are measured with a performance control system (Lunenburg, 2012). The divisionalized form has a need for direct supervision; thus, the divisions work best with machine bureaucracy structures (Mintzberg, 1983). Top managers who control the technostructure design the performance control system, and the support staff is slightly larger than the technostructure staff (Lunenburg and Ornstein, 2012).

The *Adhocracy* or the *Innovative organization* avoids the bureaucratic structure (Harisalo, 2021). They are built to complete project work not repetitive tasks (Juuti, 2006). The structure needs highly trained professionals to function, but they cannot use standardization of skills as their prime coordination mechanism because that would prevent innovation (Oliveira, 2012). Mutual adjustment is needed for professionals to work spontaneously to achieve the

goals of the project. The technostructure is small because technical specialists are involved in the operative core, but the support staff is large because they support the complex structure (Mintzberg, 1983).

Compared to other configurations, Mintzberg did not present a complete characterization of *Political organization*, except that they do not have preferred method of coordination, no single dominant part of the organization, and no clear centralization or decentralization (Oliveira, 2012). Mintzberg described four types of political organizations depending on the locus of power: *confrontation*, *shaky alliance*, *politized organization* and *complete political arena* (Lemieux, 1998) (See Table 1).

Configuration	Coordination	Key part	Centralization/Decentralization	
Simple/ Entrepreneurial	Direct supervision	Strategic apex	Centralization	
Machine	Standardization of work processes	Technostructure	Vertical centralization	
Professional	Standardization of skills	Operating core	Horizontal and vertical decentralization	
Missionary	Standardization of norms	Ideology	Decentralization	
Divisional	Standardization of outputs	Middle line	Limited vertical decentralization	
Adhocracy/ Innovative	Mutual adjustment	Support staff	Selective decentralization	
Political	None	None	Varies	

Table 1.Organizational configurations based on Mintzberg (1983) and Oliveira (2012)

Methods

Data

Ethnographic research in organizations is possible only by closely observing the members of the organization for a prolonged period of time (Hammersley, 2006; O'Reilly, 2005). Observations can be complemented with discussions and interviews (Hammersley, 2006). The observation period and the interviews used in this study took place from September 2022 through April 2023. The observations were made almost weekly.

For the study, an e-mail was sent in August 2022 to ECE centers in Southern Finland asking about their willingness to participate in the study. Over the course of three weeks, five ECE centers expressed their willingness, and one was selected for the study. The selected center was part of a unit composed of four ECE centers. The collected data (Table 2) consisted of interviews, observation notes, recorded meetings and written material (e.g. e-mails).

Interviews (N = 9) took place with ECE leaders (N = 2) and ECE teachers (N = 6) in September 2022. The thematic interviews focused on the ECE center's management system, meeting structures and leadership activities. The leaders had different areas of responsibility (pedagogy, administration). An additional interview was held with the pedagogical leader in March 2023 where it was possible to ask questions about the collected observation data. The other data types were collected from September 2022 through April 2023. The observations consisted of team meetings (N = 5), leadership team meetings (N = 6), pedagogical meetings (N = 3) and staff meetings (N = 2). In addition, the observation included daily activities at the ECE center. Written material consisted of meeting agendas (N = 8), e-mails (N = 8), a pedagogical vision (N = 1) and a personnel survey (N = 1) (See Table 2).

Data type	Data details	Data collection rounds	Total duration	Participants	Social organizational
Observation	Videotaped, recorded team meetings	5 meetings	5 h	teachers nurses	structures
Observation	Videotaped leadership team meetings	6 meetings	8 h 40 min	leaders teachers	
Observation	Videotaped pedagogical meetings, written notes on pedagogical meetings	3 meetings	4 h	leaders teachers	
Observation	Videotaped staff meetings	2 meetings	2 h 40 min	nurses leaders teachers	
Observation	Written notes on daily activities	8 observations	20 h 30 min	nurses leaders teachers nurses	
Interview	Videotaped, recorded interviews	9 interviews	9 h	leaders teachers	
Written	E-mails	8	_	_	
Written	Meeting agendas	8	_	_	
Written	Pedagogical vision	1	_	_	
Written	Personnel survey	1	_	ECE teachers	
Source(s): Author's own creation					Table 2. Research data

Participants

Both leaders were qualified to work as teachers in ECE. One leader had a university of applied sciences degree (social sciences). One ECE teacher had a teacher education degree (MA), three were qualified to work as a teacher (university degree in applied science) and two were practical nurses. Teachers were not considered separately in the study, but as a distinct group. One of the seven ECE teachers was not interviewed due to time challenges on the part of the teacher. However, she participated in the study.

Data analysis

Areas of organization studies (e.g. management research) involve specific structures of organizations that create the need for specific methodological discourses (Flick, 2007). This study uses Mintzberg's theory on organizational structure to visualize the structure of an ECE center. The precise definition of the background theory of analysis and the variables of the organizational structure increases the transparency of this study (Krippendorff, 2019). The variables used in analyzing data are the centralization, key part and coordinating mechanism of the ECE center. The point of view is the social structure of the organization. The inclusion of participant quotations supporting the data increase the reliability and validity of the research (Krippendorff, 2019).

The interviews and observation material were analyzed with a directed content analysis (Hsieh and Shannon, 2005) in which the process is based on a theory and relevant research findings guiding the classification. Our work with research material began by identifying key concepts and variables that formed coding categories (Hsieh and Shannon, 2005), for example, centralization guided us to pay attention to decision-making: who is involved and how and where it takes place. All interviews were transliterated word by word and the recorded material was transliterated for centralization, coordination mechanism and key part. We acknowledge that this rather deductive approach has its risks as the use of a theoretical frame may limit the presentation of results only to the level of categories or variables and having too strong of a reliance on the theoretical frame

"can blind the researchers to contextual aspects of the phenomenon" (Hsieh and Shannon, 2005, p. 1284). In this study, the results are discussed in a manner that goes beyond the analysis categories and is connected to the research contexts and their organizational structures.

Ethical considerations

A research permit was obtained from the city where the ECE center was located. Written consent was requested from every participant before data collection started the content of the study and the usage of data was explained to the participants in written form. The participants were free to suspend or stop their participation in the study at any time. The city, participants, or the ECE center are not named in the article to avoid creating possible consequences for the participants. When presenting our findings, the leaders are named with pseudonyms, Anna and Laura. Since the observations took place at an ECE center, no video or audio material was collected if children were present.

Findings

Centralization

The ECEC center under study has two leaders having different responsibilities. Laura is a pedagogical leader who is in contact with families, decides what matters are put on the agenda of leadership team and pedagogical meetings. Anna is the administrative leader responsible for personnel matters and finance. Anna decides on matters related to food and meal services and the budget, but usually decisions are discussed with Laura:

When I hold a meeting with cleaning services, I make decisions about them myself and inform others. Personnel-related matters are always considered together (with Laura). . . . I don't think much about deciding alone anymore because many things are thought of together. (Anna)

The leaders act as substitutes for each other. Decisions regarding the leaders' responsibilities are not delegated to anyone, so the ECE center is centralized. Both leaders are satisfied with the division of responsibilities and the distributed leadership model. A personnel survey conducted in 2022 showed that the support that employees received from leaders had risen from 57.5% to 81.3% after the distributed leadership model started.

Regarding the multiprofessional teams, all the ECE teachers emphasized equality and collaboration among team members. There is centralization in the teams because the ECE teachers are responsible for children's learning plans and setting pedagogical goals, but the work is mostly teamwork done side by side. In daily activities, decision-making is flexible enabling the participation of ECE nurses:

The work is mainly teamwork. Together we make decisions. (Teacher 1)

Since the teachers are in the leadership team of the organization, they also hold power in the organization by their involvement in shared decision-making processes through leadership team meetings. However, none of the ECE teachers mentioned that they participate in making decisions in leadership team meetings. Based on observations and an interview with Laura, pedagogical decision-making is shared in leadership team meetings and those decisions affect the planning of pedagogical activities in teams.

Vertical decentralization

The ECE center is also vertically decentralized (see Mintzberg, 1998). The distributed leadership model involves a key teacher who is working in one of the groups. The leaders and all teachers described her as the person who transfers information between the leaders and the staff. She also makes any needed arrangements when the ECE center is lacking employees.

Anna describes her as the person in charge when leaders are not present. The leaders feel that the ECE unit and the number of employees is too large. They would like to share more power with the key teacher, but it is not possible because she is not a deputy director:

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... she isn't a deputy director. and that's why the role of the key teacher must be small enough so that she isn't overburdened by it. (Laura)

Horizontal decentralization

Laura explained that there is no need for direct supervision at the ECE center because of the professionals in multiprofessional teams. Both leaders noted the democratic decision-making. The pedagogical decision-making processes at the center are shared with the leadership team, so the center is also horizontally decentralized (see Mintzberg, 1983). Shared decision-making is written in the pedagogical vision of the ECE unit:

Well, there (leadership team meetings) we discuss matters related to ECE teachers' tasks, but the goal is that we can make decisions about matters concerning our center that are also related to pedagogy. (Laura)

The content of teacher leadership or the roles of diverse professions are not discussed in the meetings at the ECE center. Leaders hold three types of meetings: leadership team, pedagogical and staff. Leadership team meetings are sometimes hybridized as they are occasionally held with another center in the unit via Microsoft Teams. Based on our observations, the shared decision-making takes place mostly in leadership team meetings. Laura asked several questions throughout the meeting to make sure the teachers took part in the decision-making:

Laura: "Are these papers too far away? Can you see them? Would you like to stand up a little? I can put these a bit closer, so in the middle here are the ones that are currently in action. This is our own goal, if we decide to have it. These are the other goals." None of the teachers say anything. Laura: "Maybe we should discuss these one at a time, and then you can tell your thoughts on them and whether we should choose it?" When the leader starts to go through the goals, the teachers start to take part in the conversation. They tell their thoughts on the goals and needs in skills related to the goals. After reading one goal, Laura asks again for the teachers' thoughts on them, and the teachers continue to participate in conversation. (Leadership team meeting 10/2022)

The pedagogical meetings have also been hybridized and are held together with the whole unit. Both teachers and nurses can attend these meetings. The pedagogical decision-making processes in them are ambiguous, or they do not exist. The pedagogical meeting held by a professional using digital work methods supplied by the city administration focused on developing the skills of the ECE staff. When Laura held a pedagogical meeting, there were fewer overlapping discussions if any, and the meeting agenda was followed. The pedagogical meeting on sustainable matters was disrupted by overlapping discussions, and the participants in the meeting changed almost completely during the meeting as the staff came to the meeting after it had started and left before it ended, thus making it challenging to achieve a group consensus:

The members of the meeting talk a lot about issues unrelated to the topic. Several separate discussions are taking place at the same time, the topics are not all related to the theme which is not delimited by Anna. However, it is not entirely clear how many people in the coffee room are on a break and how many are attending the meeting. (Pedagogical meeting on sustainable matters 11/2022)

Staff meeting agendas are made together with the staff. Anna holds staff meetings. Staff meetings are only for the center in question and open to everyone in it. The meetings observed were like a joint conversation. The topics of discussion varied rapidly and overlapping conversations existed throughout the meeting.

HEM

Coordination mechanism

The center uses standardization of skills as the prime coordination mechanism (Mintzberg, 1998). The pedagogical expertise of the ECE teachers is used to make pedagogical decisions in the leadership team meetings and setting goals for the whole center. In addition, the evaluation of pedagogical activities takes place in a leadership team meeting, where on one occasion the special education teacher's expertise was also noted when Laura asked her to comment on the discussion:

Thank you! Okay, would you [the name of the special education teacher] like to say your evaluation? It isn't mandatory, but what do you think? In your opinion, what should be focused on in the future? What successes do you see from the point of view of your profession? (Laura)

The ECE teachers explained that they have the freedom to decide about the matters related to the pedagogical activities in their groups. The leaders and teachers mentioned that self-organization is needed in ECE teams because the leaders are not present all the time, so direct supervision is not an option. Laura added that autonomy is given to the teaching and education professionals regarding the planning and implementing of pedagogical activities. Five out of seven ECE teachers have a higher degree that qualifies them to work as an ECE teacher. Two of the seven ECE teachers are practical nurses because of the shortage of qualified ECE teachers. The teachers plan activities together with their teams, usually in weekly team meetings where the ECE teachers act as chairperson. In team meetings they discuss the children's needs and how adults change their behavior to meet individual children and their guardians' needs. However, the team meeting do not take place regularly for all teams.

The multiprofessional team uses direct supervision as a coordinating mechanism (see Harisalo, 2021). The teachers noted that they have the greatest responsibility for the effective functioning of the team. There is direct supervision of the team by ECE teachers guiding the team members:

If the focus has not been on pedagogy, I try to guide team members in team meetings by sharing tasks and responsibilities. (Teacher 4).

In teams where there are two teachers, the teachers describe that they share the pedagogical responsibility in the team with the other teacher in, for example, holding meetings with guardians and writing individual learning plans for children in which pedagogical goals are documented. The ECE teachers described pedagogical leadership in the multiprofessional teams as sharing responsibilities and tasks and instructing team members to act in a suitable way:

I'll try to somehow say that, haven't we agreed that we will do this. (Teacher 2)

Key part

When the ECE center is lacking teaching and educational staff, the center is not able to carry out all its pedagogical activities (e.g. meetings). Thus, this makes the operating core, to which the teaching and educational staff is central, the key part of the organization (see Mintzberg, 1998). Human resources are allocated as evenly as possible in the center so as not to disrupt the pedagogical activities in the child groups. However, this is not always possible, and the groups have had to make changes in the ways they had planned to carry out the work. There are five groups of children at the center and in every group, there are three adults. Two of the seven teachers are not qualified to work as teachers. Laura emphasized that the shortage of skilled teachers leads to direct supervision:

The shortage of skills is large. I am not able to give as much of my time to the staff as they would need because the number of employees in the unit is also large. (Laura)

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The ECE team does not have its own technostructure or support staff but uses those of the organization. If the teacher is away, none of the team attends the leadership team meeting, and team meetings are not held. ECE nurses are not excluded from leadership team meetings, but Laura said it may be difficult for someone without teacher training to understand the conversation. Based on the observation, no nurses attended the leadership team meetings in place of a teacher. If an ECE nurse is away, the ECE teacher decides whether team meeting is held. Teachers also lead the conversation in team meetings and present matters to be decided upon together (e.g. matters related to activities). In addition, teachers plan pedagogical activities individually. In the observed team meetings, matters related to children and planning activities were mainly discussed separately and when planning activities, the pedagogical goals were not mentioned:

ECE teacher (T) is on the computer, and an ECE nurse (N) is sitting opposite the teacher. One team member is talking on the phone outside the room.

T: Have the activities of next week already been checked? What are we going to do?

N: What do you mean? What activities?

T: I mean that what are we going to do next week?

N: Sledding.

T: Yes, and some warm juice with it. On Tuesday.

N: Yes, some juice, and one child is absent on Tuesday.

T: Okay, so one adult is absent on Tuesday and Wednesday... We could... What did we have on Monday? Meeting with parents?

N: Originally, but we can discuss it. But originally there has been gym on Mondays, yes. I'll write gym on Monday.

T: Yes. (Team meeting 2/2023)

At the center, teacher leadership in team meetings enacted as collaborative teacher leadership where the teachers "invite" team members to discuss ideas on activities without initiating any reflections on how the activity could support the children's development and learning (see Halttunen *et al.*, 2019). Pedagogical planning or strategy in the team is considered the ECE teacher's responsibility since the goals are not discussed in team meetings but in leadership team meetings and written in the children's learning plans by ECE teachers. The teacher is the key part of the structure because the absence of the teacher disrupts the pedagogical function of the team more than the absence of the nurse.

Organizational configuration

The ECE center follows the organizational configuration of a professional bureaucracy. The center has two leaders at the strategic apex. The middle line management includes the key teacher and the leadership team. The support staff is large. In the center, there are food and meal services present daily. Maintenance services and ICT services are contacted when needed. The ICT and maintenance services provide support for all the ECE centers in the city. The technostructure staff includes an areal special education teacher, a language and culture teacher and two digital professionals. The ECE unit also has a special education teacher who works side by side with the operating core. She works in three ECE centers and consults approximately 45 employees, one of which is Laura. The areal special education teacher does not work in groups of children. Digital professionals hold

pedagogical meetings for the entire ECE unit to support the operating core in digital skills. The language and culture teacher consults in matters related to her expertise at several ECE centers in the city. The technostructure and support staff are outsourced in such a way that the ECE leaders are not their supervisors. The operating core, consisting of teaching and educational staff, has 16 employees, including the unit's special education teacher, and in the entire unit, there are a little over 60 employees and approximately 350 children. The structural configuration of the ECE center and the number of members in it is shown in Figure 2.

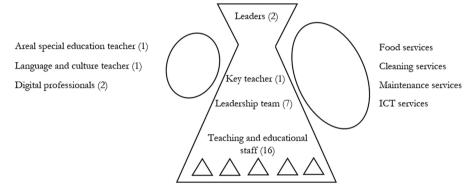


Figure 2. An ECE center as a Professional bureaucracy

Source(s): Author's own creation

Each team of the ECE center is a subunit and follows a simple structure. There are three members assigned to each team at the center. Two of the teams have two ECE teachers and one ECE nurse, and three of the teams have one teacher and two nurses. The teacher is at the strategic apex, but the other members of the team are very close as the work is mainly done side by side. Each teacher is also a member of the operating core, which enables direct supervision. The structural configuration of the ECE team is shown in Figure 3.

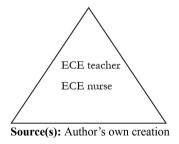


Figure 3. An ECE team as a Simple structure

Discussion

The aim of this study was to examine the social organizational structure of one ECE center. According to our findings, the ECE center is a professional bureaucracy, but current challenges, (e.g. the shortage of ECE teachers), have disrupted the function of the whole

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organization. Also, as Mintzberg (1983) stated, professional bureaucracies cannot easily deal with incompetent workers. The shortage of skills and the limited opportunities to increase ECE teachers' autonomy has affected the ECE leaders' work. The current environment of Finnish ECE, with its staff shortages, has had a major impact on the strategy of the leaders who participated in this study. Direct supervision is needed although professional bureaucracies are not supposed to operate that way (see Mintzberg, 1983), and as the leaders pointed out, the number of employees is too large. The leaders are however content with the distributed leadership model (see also Kocolowski, 2010; Keski-Rauska *et al.*, 2016) but they hope that a more significant role can be played by the key teacher in the middle management.

The studied ECE teams are simple structured. Power is distributed to ECE teachers by making them responsible for the pedagogical activities of the team and the shared decisionmaking structures in leadership team meetings (see Heikka et al., 2021), but they do not seem to recognize it. One reason may be because the decision-making processes in the ECE center's meetings are not coherent. The roles and responsibilities of professions at the ECE center are not discussed in meetings, as Fonsén and Keski-Rauska (2018) noted they should be. The equality and collaboration of different professions are strongly emphasized in discourse, which appears to present a challenge when conversing about the different levels of expertise of professional groups (see also Hard and Jónsdóttir, 2013). Mintzberg (1998) noted that power is placed where the knowledge is. Therefore, it is understandable that power is distributed to ECE teachers in the teams since they are the ones with the pedagogical training, although, in this study, only one of the ECE teachers had a degree from a teacher training program which may have affected the findings regarding the lack of goal-oriented planning. In interviews, the ECE teachers described direct supervision as guiding and instructing the team members to act accordingly and to focus on pedagogy in team meetings. However, based on our observations, the goals of the activities were not discussed in team meetings, although the ECE teachers write children's learning plans in which pedagogical goals for the activities to be planned are documented. In team meetings, children's issues and the planning of the activities were discussed separately. However, based on the needs of the children or discussions with the parents, there were conversations about changing the adults' behavior regarding individual children.

Conclusion

This study dealing with one ECE center suggests that to function, the ECE center needs qualified ECE teachers with competence in pedagogy and leadership. Competence is especially needed in the planning of pedagogical activities in a goal-oriented manner. In team meetings, planning pedagogical activities and matters related to children should be discussed as a group to strengthen direct pedagogical supervision and support the professionalism of ECE nurses as in supportive teacher leadership (see Halttunen et al., 2019). The roles and responsibilities of diverse professions need to be discussed systematically and on a more concrete level to clarify the responsibilities. It might be useful to create meeting formats tailored to the professions included in the organizational structures where the discussion about leadership structures and roles would be possible (see Fonsén and Keski-Rauska, 2018). The decision-making processes in meetings also need clarification to enable the distribution of leadership to ECE teachers (Halttunen, 2016). The structures for horizontal decentralization are already existent. However, shared decision-making requires coherent procedures from multiple leaders and irrelevant discussion should be excluded (Hackman et al., 1996). The processes of shared decision-making should be clarified for ECE teachers, which is why it would be effective to include leadership studies in ECE teacher training (Heikka et al., 2021). In addition to develop ECE teacher trainings, the audience for this paper can be at the national and municipal government level, as well as ECE leaders and teachers can utilize the results to structure their work.

The idea of an ECE center leader's need for direct supervision requires further reflection. When staff numbers increase and ECE units are decentralized, leaders are less present, which increases the importance of middle management. Although the leaders in this study pointed out that the number of employees is too large, we suggest that in a situation where all the components of a professional bureaucracy are in place, the number of employees may not be a problem. However, in the current situation of Finnish ECE, this is not possible. Now, it might be a good idea to strengthen the vertical decentralization by developing the key teacher structure into a deputy director structure with sufficient relief from the obligation to teach and with the emphasis on pedagogy and leadership to ease the workload of ECE leaders created by the current staff shortages. Technostructure is already used to increase in-service training, but it is still not enough because the implementation that follows the training requires more guidance. Currently, the implementation relies heavily on ECE leaders' direct supervision which in practise is impossible due to the large number of employees.

The study is a part of a larger research project and opened us future avenues of study. This study covered five of the six components of Mintzberg's organizational structure excluding organizational culture. The research continues to the examination of the leadership culture of the ECE center from a symbolic-cultural perspective.

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Corresponding author

Hannele Roponen can be contacted at: hannele.m.roponen@jyu.fi