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# Stress, Coping Strategies and Resources of Early Childhood Education Leaders during the COVID-19-Pandemic in Finland, Germany and Israel

*Kirsi-Marja Heikkinen, Elina Fonsén, Lauri Heikonen, Raisa Ahtiainen, Emanuel Tamir & Petra Strehmel*

## Abstract

The exceptional circumstances during the COVID-19 pandemic in 2020-2021 caused unexpected challenges for the leaders in Early Childhood Education (ECE) centres. The range of measures implemented for preventing the infection from spreading reduced opportunities for face-to-face communication and changed the form of professional cooperation. All that has affected the working conditions and work well-being of the leaders. In this article we examine the ECE centre leaders' experiences regarding stress, their coping strategies and coping resources according to the Lazarus & Folkman (1984) stress model during the COVID-19-pandemic in Finland, Germany and Israel. The aim is to understand leaders' work performance in a crisis situation in these three different societies and to provide information that support leadership in practice as well as the future training of leaders to make them more prepared to lead rapid changes. Further, the findings aim at supporting ECE centres in becoming more resilient to face the challenges of post covid time and future crises (e.g., climate change). This article examines the topic from the perspective of case studies from three countries and combines these findings with differences and similarities as lessons learned. The data are ECE centre leaders' interviews from Finland (N=23), Germany (N=35) and Israel (N=19). The data were analyzed by employing the Lazarus and Folkman's (1984) model of stress and coping. The findings indicate that communication and emotional support of colleagues and superiors are essential in supporting the well-being of ECE professionals.

**Key Words:** COVID-19, Early Childhood Education, Leadership, Stress and Coping, international comparison

## Introduction

Since 2020 the COVID-19 pandemic has affected the whole world including early childhood education. In many countries the spread of COVID-19 has led to the lockdowns of cities and affected human activities of all age groups. During the worst times of the pandemic in 2020, only essential services such as hospitals, pharmacies and grocery stores were allowed to stay open in several countries. Nevertheless, the Executive Committee, World Organization for Early Childhood Education (OMEPE) has formulated a position paper for ECE to remind the importance of continuing high quality ECE in spite of the pandemic (OMEPE, 2020). The quality requirements, classified as an essential service for the society, are new for the field of ECE. Consequently, the question of leadership and leader wellbeing are crucial for ensuring the wellbeing of employees and children with the quality of the ECE despite the crisis (Cumming and Wong, 2019).

The participants of our research are ECE leaders and their role and tasks may vary in different national contexts. Common to these three researched contexts are the main responsibility of leading pedagogy and teachers' (educators') pedagogical work in their center. Furthermore, before the pandemic, ECE leaders have reported changing requirements from authorities, a lack of resources and staff which are primary sources for stress at work (Elomaa et al., 2021; OECD, 2019). The pandemic has led to changing leadership requirements and demands for questioning taken-for-granted assumptions, adopting new vocabularies, recognizing tension and embracing emergence (Crevani et al. 2021). Further, it has affected the leadership conditions, practices and leader roles, and created stress. The need for coping strategies has been high as a global pandemic of this scale is something we have not witnessed before. Also, there is little research on ECEC leaders' work related stressors and coping strategies (Kristiansen, Tholin & Bøe, 2020) and consequently the aim of our article is to explore this matter among Finnish, German and Israeli ECEC leaders.

Logan, McFarland, Cumming and Wong (2021) have studied educator well-being in ECE during pandemic. In their results, psychological symptoms including fear of exposure to physical risk, anxiety and moral injuries when compromising professional standards because of COVID-regulations were found. Communication, support of physical safety, well-being resources and programs were essential in supporting educators' wellbeing. They also emphasized the downside of moral injuries which may have long-term effects. In all these, the roles and awareness of leaders, governments and policymakers are essential to better protect ECE in future crises. The results from the USA revealed the great impact of the pandemic on both financial and psychological well-being of leaders (Bassok et al. 2020). The shut-down of the centres caused

leaders not receiving salaries and insurances they were entitled to. This led to insecurity, poor mental health and depression with trouble sleeping and focusing on everyday chores. Despite these hardships, leaders still felt that they were well supported by their staff, by the families they served as well as by the administration that governed local ECE (Bassok et al. 2020). Saxena and Yau (2021) argued that resilience-building is a critical skill for leaders both professionally and personally. In their study, they claimed that all educational leaders must implement four key themes: construct, create, mentor, and engage in order to strengthen the resilience of the ECE centre community. One crucial factor for coping was how clear, sufficient and timely information was given from the administration to ECE leaders. Saranko et al. (2021) found out that in Finland half of the ECE leaders assessed the instructions of the state administration as adequate while one third considered the instructions to be insufficient.

## Theoretical framework

In our studies we focused on the theoretical approach of stress theory as developed by Richard Lazarus (Lazarus & Launier, 1978, Lazarus & Folkman, 1984). This model can help to explain the ECE leaders' experience during the pandemic and their coping strategies.

## Stress and coping

Stress arises when external and/or internal demands strain on or exceed the adaptability of the individual or a social system (Lazarus & Launier, 1978, Lazarus & Folkman, 1984). Stress is defined as a result of the relationship between situational demands and personal resources. It signals a disturbance between the person and the environment when a situation overwhelms the person's coping resources.

The core of the stress model is the cognitive appraisal of the experienced imbalance between demands and individual capacities. If a situation is demanding and individual strivings or goals are called into question, conscious or unconscious appraisal processes are activated. If the situation is appraised as significant for well-being, the person explores how to deal with the situation and which resources are available. Thoughts about possible coping resources can be found in the individual competencies or in the situation. Situational coping resources are e.g. environmental conditions that the individual can refer to, such as social relationships and social support, information, time or tech-

nical equipment in the workplace. Individual resources can be found in learned competencies, coping experiences or personal characteristics such as self-confidence and cognitive control (Heckhausen & Heckhausen, 2018). Another individual coping resource discussed is the sense of coherence, which is defined as the expectancy to be able to understand events and encounters in the environment, to master challenges and to be able to interpret situations as meaningful (Antonovsky, 1987). Resilience is defined as the capability to successfully cope with adversity (Werner & Smith, 2001). Temperance is associated with self-control, psychological functioning and social functioning (Pulkkinen 2017, 204). These personal characteristics are also prerequisites for successful leadership and the ability to cope with crises.

The appraisal processes result in the experience of stress with psychological, physical and social symptoms, e.g. anxiety, fury or depression, increased susceptibility to disease or feelings of isolation, social retreat or hostility against others. Depending on the subjective significance of the situation and the importance of the goals at stake, the person experiences more or less stress. To reduce the feelings of stress, the person tries to cope with the situation. Coping behaviour can be roughly broken down into two main forms. Problem focused coping refers to all activities, with which the person tries to change the situation. Emotion focused coping aims to change the negative sensations and alleviate stress symptoms – often in order to become able to act again at all. The goal of coping is that the person regains his or her ability to act and secures or expands his or her possibilities. Various coping attempts take place in parallel and are not necessarily conscious. In the process of reappraisal after initial coping attempts, the fit between person and environment is evaluated again (reappraisal).

Poijula (2020) emphasizes the resilience of an organization to cope with difficult situations. The role and act of the leader is important to provide an atmosphere where personnel may feel hope, self-confidence and resilience to cope with the hard situation. To develop an organization's resilience leaders need to concentrate on a system perspective, human needs, motivation and organizational culture. Resilient organizations need an adaptable leader who knows how to use problems as opportunities to build organizational resources.

In this study, we investigate ECE leaders' experiences of the time of pandemic crises, utilizing Lazarus and Folkman's (1984) model of stress and coping (Table 1). Adapted to the situation of ECE leaders in the Covid 19 pandemic the model can be summarized in the following categories and be explained by the following questions and contents:

Theoretical categories	Contents
Objective frame conditions	Context and frame conditions during COVID-19 pandemic
Subjective goals	Professional goals Personal goals
Primary appraisal: Demands and stressors	Challenges perceived
Secondary Appraisal: Coping resources	Resources to master the challenges. Social resources Practical resources Personnel resource
Symptoms of stress	psychological physical social
Coping strategies	Problem focused Emotion focused
Effects	Personal Social Organisational Societal

Table 1: Theoretical dimensions of Lazarus and Folkman's (1984) model of stress and coping

## Research contexts

Next, we will briefly describe each national ECE context and situation during the COVID-19 pandemic in Finland, Germany and Israel.

In *Finland*, the national-level guidelines for ECE are laid by the Ministry of Education and Culture and Finnish National Agency for Education. Municipalities (N=309) are responsible for organising the ECE locally for children who are from 9 months up to five years of age. In the beginning of the pandemic *Finnish* government declared a national state of emergency on 16th March 2020. By decision of the Government, ECE centres were kept open. However, the recommendation was to keep children at home if the guardians had the possibility to do that (Ministry of Social Affairs and Health 2020). According to Saranko, Alasuutari and Sulkanen (2021), the government's call for children to move into home care declined participation of children in early childhood education significantly. ECE centres remained mainly open but there were many changes in activities. Some centres provided distance teaching and activities for children but practices varied between centres and municipalities. The Ministry of Education and Culture and Finnish Institute for

Health and Welfare provided detailed recommendations for ECE regarding the organization of teaching in May 2020 (OKM & THL, 2020a), yet, these were mainly focusing on hygiene, avoiding contacts, quarantines, testing and vaccinations.

In *Germany*, at the beginning of the pandemic, a lockdown was imposed for the entire public life, including the closure of ECE centres, schools and public playgrounds. Only children of parents working in essential positions (e.g., staff in the health system or food vendors) were admitted to emergency care. In summer of 2020, the centres were gradually reopened, but had to adhere to restrictions. The respective regulations were set by the state governments and varied depending on regional incidences. The pedagogical work e.g. was to take place in isolated groups (cohorts), parents were not allowed to enter the ECE centres. Team meetings and parent talks had to be arranged online or outside. In some states the staff had to wear masks and staff and children had to be tested regularly (Autorengruppe Corona-KiTa-Studie, 2021).

In *Israel*, three closures have been imposed on the education system for 188 days (State Comptroller, 2021). Colleges, schools, and ECE centres were initially forced to stay at home and teach remotely using computers (Donitsa-Schmidt & Ramot, 2020). Within a short time, only special education ECE centres were allowed to return but not centres in which children are integrated across the continuum of special education. There was no central technical support for the ECE leaders. The official guidelines were mainly technical, concerned the non-entry of parents into the kindergarten building, the obligation to perform antigen examination results and instruction for working in small groups – “capsules” (when it opens), and the encouragement to create an activity routine. Almost 99% of Israeli ECE centers are run in small separate organisational units with few staff members, which are not part of schools. An outgrowth of this was a variety of activities related to the kindergarten teachers’ motivation for their initiatives such as joint consultation, sharing of ideas, and moral support in the various ECE centres.

## Aim and research questions

The study aims to gain a better understanding on similarities and differences and also lessons learned on how ECE leaders confronted the difficult times during Covid-10 pandemic and the strain related to it. The focus is on exploring the challenges encountered, stress symptoms experienced and the coping resources and strategies applied by Finnish, German and Israelian ECE leaders during the pandemic. The following research questions are addressed: What were the a) demands and stressors, b) stress symptoms, c) coping strategies? ECE leaders describe during the pandemic in Finland, Germany and Israel?



## Methods and materials

In this study, we analyzed the ECE leaders' experienced stress and coping strategies in three countries. We understand that three contexts of research have similarities but at the same time differences as the education systems as well the national policies differ. The aim of our study is not to provide generalizations of national situations in ECE leadership, but to open the phenomena in similar challenging times of crises within three countries and to provide results that can be used as guidance for supporting the ECE field to develop sustainable leadership with resilience and wellbeing. As an analysis we used theory based thematic analysis and applied Lazarus and Folkman's (1984) model of stress and coping, from which we focused on three categories 1) subjective experienced demands and stressors 2) symptoms of stress and 3) coping strategies to analyze the data.

## Data collection and participants

### Finland

In Finland, the data were collected through individual online-interviews with 23 ECE center leaders in November and December 2020. Participation was voluntary and responses were received from three major cities in the country. All participants worked as leaders in the public sector ECE centres, usually being responsible for leading more than one ECE centre and on average 34 employees. The interview questions concerned issues that supported or challenged the leader's wellbeing in their work during Covid-19 pandemic.

### Germany

Semi structured qualitative interviews were conducted with 35 ECE centre leaders in 10 of 16 German states between August 2021 and January 2022. The centres varied in size (from 25 to 230 children, 3 to more than 50 employees) and in the type of provider organization (municipalities, churches or non-confessional non-profit social enterprises) and were located in bigger or smaller cities and rural areas. The interviews were conducted by phone or online, recorded and transcribed. The interview guidelines included questions concern-

ing the leaders' subjective experience of different areas of responsibility during the pandemic, such as pedagogical work, communication with the parents, team leadership, personnel development and self-management and their strategies to cope with the situation.

## Israel

Semi-structured interviews were conducted with 15 ECE leaders in January and February 2021 (managed 2-6 employees with 25-36 children in each center). The interviews were conducted by phone or through an online platform (Zoom). The questions asked addressed the feelings and emotions of the interviewees during the closures, their personal and professional experience of coping with the situation, and the techniques and ways they adopted to cope with the period.

## Analysis

To increase coherence between three national contexts, and to organize the data, discover patterns, and to make sense of a variety of ECE leaders stress-related experiences during the COVID-19, we employed a theory-driven thematic analysis that enabled us to look at each data set through similar lenses (Braun and Clarke, 2006; Miles, Huberman and Saldana 2014). Based on the focus of our joint research, we focused on three categories of Lazarus and Folkman's (1984) model of stress and coping: experienced demands and stressors, symptoms of stress and coping strategies (Table 2). That is, we focused on the subjective perspective of the leaders and analyzed the qualitative interviews, which were conducted in each country in different phases of the pandemic, to reveal

- which aspects of the situation in the pandemic were experienced as demanding and stressful by the leaders and which situational and personal resources were appraised as helpful to cope with the situation
- which symptoms of stress were reported by the leaders?
- which coping strategies were used to master the challenges.

Researchers from each country read their data through these thematic lenses and then the interpretations were discussed together in the research meetings. The analysis required several similar rounds to form a shared understanding of the results.

## Results

### Finland

*Demands and stressors:* The main demands and stressors were linked to rapid changes the pandemic created in society which reflected the ECE leader's work. Firstly, the unexpected future created psychological tensions and negative affections in the ECE center. Secondly, the unclear and changing regulations and simultaneously growing workload were major challenges. Moreover, the lack of healthcare resources created a situation where leaders were main supporters of their frightened staff but also parents especially in the beginning of the pandemic.

*Stress symptoms:* ECE leaders reported variations of negative personal feelings and symptoms of poor performance. Anxiety and anger, tiredness and lack of joy were most often mentioned. These led to poor sleep, continuous worry and feelings of powerlessness. Also, over-excitement and inability to concentrate and prioritize were reported. This affected mostly to tasks that require time and effort such as pedagogical leadership. Most of the leaders lacked psychological support but also practical advice on how to control the situation. Many leaders mentioned anger and frustration when they didn't get enough "real help" from their own supervisors.

*Coping strategies:* Strong leadership competence and working experience were coping resources that helped leaders to manage the pandemic. Most of all, colleagues who offered emotional support were seen as central coping resources in the crisis. Also the ability to accept the current situation and lead your work with an open mind to new skills helped to go through the stressful situation. ECE leaders tried to be creative and do their usual practices the way they could and that was possible during the pandemic. Leaders stressed how they rather quickly learned to organize the work in a novel way, which they perceived as motivating and helped them move forward in difficult situations.

Despite multiple stressors, leaders reported effective coping strategies to maintain their ability to function and lead the staff. Leaders emphasized taking care of their health by doing some exercise and spending time with loved ones. All activities that helped to forget the work for the moment were welcomed. Moreover, the leaders mentioned they were encouraged to lighten up the work but many experienced this as difficult because they did not know what they could have had and were allowed to drop out. Also, attitude towards the pandemic was mentioned as central for wellbeing and the leaders tried to keep up hope and accept the situation as it was.

## Germany

*Demands and stressors:* The workload for ECE leaders increased enormously during the pandemic. Often new rules were announced at a very short notice. The ECE leaders were responsible for the implementation of the instructions, had to make a lot of decisions under conditions of uncertainty and to rapidly communicate them to staff and parents. The high pressure to implement and control the measures were perceived as very demanding. In addition it changed the leaders' relationships with staff members and parents due to the new role as a controller of the measures. The leaders experienced a tension between the need for healthcare for the staff on the one hand and the need of children and parents for childcare and education on the other. Frequent staff absences due to fear of contagion or due to illness, sometimes caused by the rejection of vaccination meant additional stress to the leaders to maintain operations in the ECE centres. The staff's anxieties, dissatisfaction and conflicts challenged their leadership competencies.

*Stress symptoms:* The leaders themselves reported fear of contagion. Some experienced the feeling of continuous tension and were exhausted after the long period of the pandemic. Some reported anger and resentment when conflicts in the team could not be resolved, for example concerning the question of vaccination. In general, ECE leaders experienced less stress during the pandemic, when the team in their centre worked well together and supported each other already before the pandemic. Some leaders mentioned their own strength, resilience and problem-solving capacities. They appraised the situation as a challenge and developed feelings of mastery and pride. If they found themselves well supported by other ECE leaders, providers and the municipalities they had the feeling of not being alone, others reported feelings of being "forgotten" by the society and not being appreciated in their work.

*Coping strategies:* Most of the ECE leaders approached the tasks to be mastered and tried their best to implement the measures. They had many conversations with their staff to find solutions that made them feel well protected in their work situation. However, due to a very tight staff assessment and sometimes a lack of staff, there were strict limits on this problem-solving coping strategy. Many discussed the challenges in the team to support the staff's coping with anxieties and let them participate in the development of adapted solutions for their centres. Overall, leaders whose teams were already working well together before the pandemic were better able to cope with the challenges of the pandemic than leaders from facilities where there were already many unresolved issues before. Many ECE leaders actively sought contact with other ECE leaders to gain emotional support and confidence in action by mutual professional consulting. Also some ECE leaders actively demanded support from the ECE provider and the municipality and created a strong cooperation with

these leaders. To cope with the workload and stress, many leaders searched for emotional support by their families.

## Israel

*Demands and stressors:* The government was in a period of political instability and demonstrated dissatisfaction with the educators. In the private sector, the issue of payment for the cancellation of kindergarten activities also arose. The irregularity in the guidelines from the Ministry of Education frustrated ECE leaders. Kindergarten leaders had to deal with unfamiliar technology, lack of privacy in their homes while trying to deal with their family and children, financial apprehension when spouses had to quit work and support, frustration and pressure from parents, and a change setting of their work such as late staff meetings and damage to their and their family's sleeping habits. They were not given regular national support, and the government announcements that came out were confusing and contradictory, which intensified their frustration.

*Stress symptoms:* The first wave of the epidemic intensified the sense of loneliness of ECEC leaders. They also showed ambiguity about the guidelines from the government. They distrusted the Ministry of education because of the unstable political situation. This was accompanied by feelings of helplessness. They were frustrated and annoyed about the financial apprehension, the pressure of the parents and because they didn't feel appreciated in their work.

*Coping strategies:* In a relatively short time, ECEC leaders have strengthened themselves through a social support network and shared support talks to alleviate stress. The leaders took help from social networks such as WhatsApp and Facebook and began communicating with each other. The supervisors did not object to this and allowed the local initiatives. Family partners who are working in the relatively developed Israeli high-tech helped to cope with the technological challenge. ECE leaders developed pedagogical innovations and adapted pedagogical processes such as online instruction sets, games that can be adapted at home, and activities involving one of the family members using the Zoom platform. Sessions and processes that have been found to be successful have been shared on social networks with colleagues. At the same time, conclusions have been drawn that it is not necessary to teach by Zoom for an entire working day. When it was possible to go back and work in capsules, not all the children came to the kindergarten, which made it easier for the kindergarten teachers.

Comparisons

In table 2 we have placed the national findings of analysis in columns for comparing results from ECE leaders’ stress and coping in Finland, German and Israel according to Lazarus and Folkman’s categories 1984.

Categories	Finland	Germany	Israel
Primary appraisal: Demands and stressors	<ul style="list-style-type: none"><li>• Rapid societal changes</li><li>• Unexpected future</li><li>• Changing regulations and instructions</li><li>• Growing workload</li><li>• Negative psychological symptoms like anxiety and anger</li></ul>	<ul style="list-style-type: none"><li>• Rapidly changing new rules and their implementation</li><li>• Uncertainty</li><li>• Fear of contagion</li><li>• Pressures on high demands and responsibilities</li><li>• Anger</li><li>• Conflicts in working teams</li><li>• Absences of the employees</li></ul>	<ul style="list-style-type: none"><li>• Sense of Loneliness</li><li>• Irregular guidelines from the Ministry of Education</li><li>• Hardships dealing with the technology they were unfamiliar with</li><li>• Working from home and lack of privacy</li><li>• Late staff meetings at home</li><li>• Financial apprehension</li><li>• Frustration and pressure from parents</li><li>• Frustration and helplessness</li></ul>
Secondary Appraisal: Coping resources	<ul style="list-style-type: none"><li>• Strong leadership competence</li><li>• Working experience</li><li>• Emotional support from colleagues</li><li>• Lack of psychological support from provider</li><li>• Ability to adapt the situation</li><li>• Creativity</li></ul>	<ul style="list-style-type: none"><li>• Trusting cooperation between employees and parents</li><li>• Support from providers/ municipalities</li><li>• Other ECEC leaders</li><li>• Personal strengths and resilience</li></ul>	<ul style="list-style-type: none"><li>• Social support network</li><li>• Creativity</li></ul>
Coping strategies	<ul style="list-style-type: none"><li>• Taking care of personal health</li><li>• Lightening the workload</li><li>• Keeping up faith and hope</li></ul>	<ul style="list-style-type: none"><li>• Cooperation with working teams</li><li>• Seeking social support from other ECEC leaders and provider/ municipality</li></ul>	<ul style="list-style-type: none"><li>• Shared support conversations to ease the stress</li><li>• Developing both personal and joint innovations</li><li>• Use of ICT and social media</li></ul>

Table 2. ECE leaders’ stress and coping in Finland, German and Israel according to selected theoretical categories from Lazarus and Folkman’s (1984) model of stress and coping

In the light of the Lazarus and Folkman (1984) stress theory, the main demands and stressors challenging ECE leaders resources in all three countries were

rapid societal changes and an unexpected future with constantly changing national COVID-19 regulations. Moreover, in Germany and Israel the wellbeing of the working teams and conflicts with the parents were highlighted by leaders whereas in Finland and Germany, increasing workload was one of the main sources of stress. The feelings and sensations that emerged in the context of experienced stress in all three leadership contexts were fear, loneliness, anxiety, loss of joy at work with feelings of powerlessness and poor work performance.

The coping strategies benefitted when dealing with stress were diverse. It could be said that in the Finnish context the coping strategies were personal whereas in Germany and Israel leaders used more social coping strategies. Finnish leaders emphasized balanced personal life and personal health when in Germany the most important way to cope was cooperation in the working team and emotional support from leader colleagues. Leaders in Israel highlighted social networks and social support via using ICT and social media. In all three countries leaders saw leadership competence, working experience and creativity as important dimensions when coping with stress.

## Discussion of findings and comparison

The COVID-19 pandemic has changed the demands to fulfil leadership tasks and thus, there was an increased need for ECE leaders to develop the ability to cope with multiple stressors and create resilience (Cumming & Wong, 2019; Crevani et al. 2021). Our study aimed to gain a better understanding of how ECE leaders confronted the difficult times during COVID-19 pandemic and the strain related to it. Kristiansen, Tholin & Bøe (2020) state that there is little research on ECE leaders work related stressors and how leaders cope with these demands. Therefore the focus of our article was on exploring the challenges and stress symptoms experienced and the coping resources and strategies applied by Finnish, German and Israeli ECE leaders during the pandemic.

Our results indicate a link between leadership challenges, rapid societal changes and new regulations the pandemic created in all three countries. Also growing workload, conflicts and dissatisfaction among staff with lack of emotional support for ECE leaders were among the challenges leaders encountered (see also Kristiansen et al., 2020). Psychological stress reactions like fear, frustration and anxiety grow affect ECE leaders' wellbeing and the ability to operate. Logan et al. (2021) pointed that psychological symptoms – including anxiety and fear – are activated when people get exposed to a physical risk like

COVID-19. In Finland, the data indicated that main demands were an uncertain future and rapidly growing workload. In Germany, ECE leaders were stressed by high demands and constantly changing administrative instructions, while in Israel the main demands were distance work and loneliness. The consequences of these experiences might be that ECE's leaders can be burnt out or leave their positions (Dýrfjörð & Hreiðarsdóttir, 2022).

According to our results, resilience and the leaders' personal strengths proved to be important prerequisites to cope with the adverse situations of the pandemic. Also, Saxena and Yau (2021) state that coping resources can be considered crucial in building resilience both personally and organizationally. Moreover, our results showed that ECE leaders' personal coping resources were intertwined with the resources of the professional community. In Finland, for example, leadership competence and practical experience were resources that enabled leaders to be present to their employees and focus on the community's wellbeing. In Germany functional cooperation and a trusting atmosphere in the professional community were central coping resources of ECE leaders. In Israel, the strategy of using social media and ICT helped to go through difficult situations created by COVID-19 regulations. Wong and Cheuk (2005) state that social support can reduce stress effects.

When reflecting on our results it can be said that the leader was a role model and a coach, the one who was willing to keep up hope and find novel solutions. Also, an open mind for new ways of doing old practices can work as coping strategies which may increase motivation when surviving stressful situations at work (see also Kristensen et al., 2020).

## Conclusions

The results of our studies concerning coping resources and coping strategies have points of connection with earlier studies (Logan et al., 2021). It seems evident that communication, support of physical safety, healthcare, well-being resources and programs are essential in supporting the well-being of ECEC professionals. What is noteworthy in our results is the emphasis on the significance of emotional support from ECE leader colleagues and professional support from their own superiors. In unstable times ECE leaders' main duty – to secure the wellbeing of staff, children and the quality of ECE pedagogics – remained the same (Cumming and Wong, 2019; OMEP, 2020). In this, the pandemic called for leaders' personal resilience to be able to be present and help others in need (Nurhonen, Chydenius & Lipponen, 2022).

It appears that some ECE leaders identify stressors but have difficulty in using and finding resources and coping skills (Kristensen et al., 2020), and the downside is related to the moral injuries emerging when the vision stays, but



the focus of ECE leadership has to change, which makes leaders compromise their professional standards (Logan et al., 2021). Consequently, in the current situation it is important to rethink how to find resources and strategies to implement good leadership in a crisis and how to adapt moral and ethical standards and still be able to operate in complex situations.

In addition it would be crucial to consider to reform the preparation and training of ECE professionals and leaders (Visnjic-Jevtic et al. 2021) and to rethink what kind of training ECE leaders need. Saxena & Yau (2021) state that all educational leaders should implement four key themes: construct, create, mentor, and engage in order to strengthen the resilience of the ECEC center community.

In the future, our mission is to increase the awareness of how to protect and support ECE leaders' performance in the unknown future. We follow the argument of Visnjic-Jevtic et al. (2021) that we need to promote policies for the welfare of all children, because that would be one way to support ECEC practitioners and leaders to develop their resilience for future crises too.

## Limitations

We presented qualitative data from small samples in three countries with different systems of ECE. The data are not representative for the respective countries and were collected in different phases of the pandemic. We focused on subjective experiences of stress and related coping strategies in the historically unique situation of a worldwide pandemic. That is why our results can hardly be replicated, but exemplarily pointed out how to develop professional education, training and support for ECEC leaders in future crisis situations.

## Ethical considerations

The study was conducted responsibly through honesty and accuracy (Steneck, 2007). This means guaranteeing confidentiality and anonymity for the participants. They were well informed about the research with voluntary participation and a possibility to disengage at any phase. The participants were treated respectfully throughout the process without causing any harm to them.

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